May 2026

1 of 5

Brisbane Baylands Specific Plan

Final Environmental Impact Report

State Clearinghouse #2006022136

Volume 1. Revised Draft EIR (Fact Sheet through Section 4.6)



Prepared for
City of Brisbane

Prepared by
Metis Environmental Group & ESA

Brisbane Baylands Specific Plan

Final Environmental Impact Report

Volume 1. Revised Draft EIR
(Fact Sheet through Section 4.6)

State Clearinghouse #2006022136

Prepared for
City of Brisbane

Prepared by
Metis Environmental Group & ESA

BAYLANDS SPECIFIC PLAN DRAFT EIR FACT SHEET

PROJECT INFORMATION

1.	**Project Title:**	Baylands Specific Plan
2.	**Lead Agency:**	City of Brisbane 50 Park Place Brisbane, CA 94005
3.	**Contact Person:**	John Swiecki, AICP Community Development Director (415) 508-2120 baylands@brisbaneca.org
4.	**Project Applicant:**	Sunquest Properties, Inc.
5.	**Applicant's Representative:**	Baylands Development Inc.
6.	**Project Size and Location:**	680.1 acres within the City of Brisbane, San Mateo County, located west of the US 101 freeway, south of the San Mateo/San Francisco County line, east of Bayshore Blvd.
7.	**Regional and Local Access:**	Regional Access – US 101 Freeway Local Access – Bayshore Boulevard, Tunnel Avenue, Sierra Point Parkway
8.	**Public Services:**	Water – City of Brisbane (existing), California Water Service Company (proposed) Sewer – Bayshore Sanitary District Police – City of Brisbane Fire – North County Fire Authority Schools – Bayshore Elementary School District (PK–8), Brisbane School District (TK–8), Jefferson Union High School District (9–12)
9.	**Existing General Plan Designations:**	Baylands Planned Development (Residential Permitted) Baylands Planned Development (Residential Prohibited) Marsh/Lagoon/Bayfront Public Facilities and Parks Heavy Commercial (Beatty Subarea)
10.	**Proposed General Plan Designations:**	Baylands Planned Development (Residential Permitted) Baylands Planned Development (Residential Prohibited) Marsh/Lagoon/Bayfront Public Facilities and Parks
11.	**Existing Zoning:**	Commercial Mixed-Use (C-1), Marsh Lagoon Bayfront (MLB), Manufacturing (M-1)

12. Proposed Zoning: Baylands Specific Plan

13. Project Description: Specific Plan to accommodate development of 2,200 dwelling units and 6.5 million square feet of commercial office, with an additional 500,000 square feet of hotel use; acquisition of a water supply by establishing the California Water Service Company as the water service agency for the Baylands, Sierra Point, and Beatty subareas of the City of Brisbane. 157 acres of the site's 558.3-acre existing land area[1] will be devoted to conservation and outdoor recreation.

Proposed on-site potable and recycled water infrastructure includes a water recycling facility, water storage tanks, and pipeline system. Off-site facilities include pipelines to deliver recycled water to users in South San Francisco and minor off-site improvements to Brisbane's potable water system (e.g., meters at connections to the SFPUC regional water system).

Baylands infrastructure also includes extension of Geneva Avenue east from Bayshore Boulevard with a bridge over the Caltrain right-of-way, extension of Sierra Point Parkway north to Geneva Avenue, and realignment of Lagoon Road; a grade 6–8 middle school along with conversion of the existing Bayshore School to PK–5 elementary school; relocation of the City's existing fire station and corporation yard along with development of a new fire station and corporation yard within the Baylands; a 55-acre solar field, distributed local battery storage, and a 250-megawatt utility-scale battery storage facility, new switching substation, and an under-ground connection to and improvements at the existing PG&E Martin Substation.

14. Socioeconomic Characteristics of Specific Plan Buildout

Housing:	2,200 dwelling units
Commercial/Office:	6.5 million square feet
Hotel:	500,000 square feet (800 rooms, est.)
Population:	4,905 residents (est.)
Employment:	19,480 employees (est.)

14. Approvals being Considered by the City of Brisbane:

General Plan Land Use Element Amendment to realign the northern boundary of the Baylands Subarea east of the Caltrain right-of-way to conform to the northern boundary of the Specific Plan area.

General Plan Circulation Element Amendment to (1) realign Lagoon Avenue to provide direct access to the southbound US 101 freeway on- and off-ramps adjacent to Sierra Point Parkway within the Baylands, (2) extend Sierra Point Parkway from its current terminus at the US 101 freeway southbound on- and off-ramps within the Specific Plan area north to Geneva Avenue, (3) add proposed Baylands roadways to the General Plan circulation map, (4) designate the Geneva Avenue extension through the Baylands as a Regional Arterial; (5) add a new roadway type for "Green Local Street;" and (6) remove Industrial Way as a General Plan roadway.

[1] Approximately 26 acres of existing land area are subject to sea level rise and will experience daily inundation by the year 2100, reducing the Baylands' land area to 532.3 acres and 147.8 acres of open water within the Brisbane Lagoon and Visitacion Creek.

Baylands Specific Plan, including:

- **Change of Zone** from Commercial Mixed-Use (C-1), Marsh Lagoon Bayfront (MLB), Manufacturing (M-1) to Baylands Specific Plan
- **Amendments to Title 17, Zoning, of the Brisbane Municipal Code** to establish the land use regulations and development standards set forth in the Baylands Specific Plan as the regulatory authority governing development within the Baylands Specific Plan area.

Development Agreement specifying terms and conditions for development of the Baylands along with identifying public benefits to be provided by Baylands development.

Bayshore Boulevard Mobility Plan proposing reconfiguration of the roadway from four lanes (two in each direction) to two lanes (one in each direction), along with turn lanes, a multi-use trail, and bus turnouts.

Relocation of the existing North County Fire Authority Brisbane Fire Station No. 81, conversion of the existing station for use as a training facility, and establishment of a new station within the Baylands.

Construction of a Middle School within the Baylands and conversion of the existing Bayshore School to an Elementary School.

15. Draft EIR Review Period:

April 3, 2025, to September 2, 2025.

16. Significant Unavoidable Impacts:

Air Quality. The Baylands Specific Plan would cause a net increase in emissions of non-attainment criteria pollutants (ROG, NO_X, PM_{10}, $PM_{2.5}$) exceeding BAAQMD Regional Criteria Pollutant Significance Thresholds during construction and operations.

Greenhouse Gas Emissions. The Baylands Specific Plan would cause a net increase in total greenhouse gas (GHG) emissions.

Noise. The use of impact pile driving for construction of buildings over 5 stories in height in proximity to occupied residential and office buildings would cause unavoidable adverse effects, particularly if used for multiple buildings at the same time, until construction of such buildings is completed.

Increases in noise from Baylands-generated traffic would exceed applicable standards along 3 of the 15 analyzed roadway segments.

Operation of Specific Plan land uses would exceed ambient pre-development noise levels by more than 5 dBA.

Intentionally Blank

Revisions to the Draft EIR are indicated by a green dot (●) in the left margin of the revised paragraph or by green dots with opening and closing arrows (⬇, ⬆) when revisions span more than a page.

CONTENTS (VOLUME 1 OF 5)

VOLUME 1. REVISED DRAFT EIR

Baylands Specific Plan Draft EIR Fact Sheet FS-1
Project Information FS-1
Executive Summary ES-1
ES.1 Introduction ES-1
ES.2 Project Location ES-1
ES.3 Project Description ES-2
ES.3.1 Specific Plan and other Project Components ES-2
ES.3.2 Project Objectives ES-8
ES.4 Anticipated Discretionary Actions and Approvals ES-9
ES.4.1 Approvals Requested from the City of Brisbane ES-9
ES.4.2 Approvals and Permits Required from Responsible and Trustee Agencies ES-10
ES.5 Environmental Impacts and Mitigation Measures ES-12
ES.5.1 Significant Unavoidable Impacts ES-12
ES.5.2 Impacts Found Not to Be Significant ES-12
a. Agricultural and Forestry Resources ES-12
b. Mineral Resources ES-12
ES.5.3 Environmental Impacts ES-13
a. Land Use and Planning ES-13
b. Population and Housing ES-17
c. Aesthetic Resources ES-19
d. Biological Resources ES-27
e. Cultural Resources and Tribal Cultural Resources ES-53
f. Transportation ES-61
g. Air Quality ES-73
h. Greenhouse Gas Emissions ES-91
i. Energy Resources ES-104
j. Noise and Vibration ES-106
k. Hazards and Hazardous Materials ES-129
l. Hydrology and Water Quality ES-137
m. Geology, Soils, and Seismicity ES-143
n. Utilities, Service Systems, and Water Supply ES-148
o. Public Services ES-150
p. Recreational Resources ES-153
q. Wildland Fire ES-153
ES.6 Alternatives ES-155
ES.6.1 Description of Alternatives Analyzed in this EIR ES-155
a. No Project Alternatives ES-155
b. Land Development Alternatives ES-156
ES.6.2 Environmentally Superior Alternative ES-172

VOLUME 1. REVISED DRAFT EIR (CONTINUED)

ES.7 Areas of Controversy ES-174
ES.7.1 Issues to Be Resolved ES-174
ES.7.2 Areas of Controversy ES-174
Chapter 1 Introduction 1-1
1.1 Overview of the Baylands Specific Plan 1-1
1.1.1 Project Location 1-1
1.1.2 Proposed Baylands Development 1-2
1.2 Environmental Review Requirements and Process 1-5
1.2.1 Purpose and Intended Use of This EIR 1-5
1.2.2 Review Process for the Baylands Specific Plan EIR 1-6
a. Procedural Steps Undertaken to Date 1-6
b. Procedural Steps to Be Undertaken Following the Close of the Draft EIR Public Review Period 1-9
1.2.3 Availability and Review of the Draft EIR 1-11
1.3 Issues to Be Resolved through the CEQA and Development Review Processes 1-12
1.4 Format of the Draft EIR 1-13
1.5 Future Environmental Review of Site-Specific Development and Infrastructure Projects 1-16
1.6 Definitions of Key CEQA Terminology 1-19
1.7 Acronyms Used in This Document 1-20
1.8 References 1-28
Chapter 2 General Environmental and Planning Context 2-1
2.1 Project Location 2-1
2.2 Description of the Baylands Site 2-3
2.2.1 Location 2-3
2.2.2 Physical Setting 2-3
2.2.3 History of the Baylands 2-4
a. Filling of San Francisco Bay to Create the Baylands 2-4
b. Historic Uses of the Baylands 2-4
2.2.4 Existing Uses within the Baylands 2-11
a. Remaining Railyard Buildings: Roundhouse and the Machinery & Equipment Building 2-11
b. Brisbane Bayshore Industrial Park 2-12
c. Lagoon and Other Natural Resources 2-12
2.2.5 Existing Infrastructure, Public Services, and Facilities Serving the Baylands 2-14
a. Transportation Facilities 2-14
b. Existing Water Supply 2-15
c. Wastewater 2-15
d. Solid Waste Management 2-16
e. Police Services 2-17
f. Fire Protection 2-17
g. Public Schools 2-18
h. Public Libraries 2-19
2.2.6 Baylands Land Ownership 2-19

VOLUME 1. REVISED DRAFT EIR (CONTINUED)

2.3 Existing Land Use Regulations 2-21
2.3.1 Brisbane General Plan 2-21
a. General Plan Amendment GP-1-18, Measure JJ 2-21
b. Housing Element 2-24
2.3.2 Existing Zoning 2-24
2.4 History of the Baylands Specific Plan and Environmental Review 2-27
2.4.1 Submittal of the Brisbane Baylands Specific Plan 2-27
2.4.2 Brisbane Baylands Program EIR (SCH #2006022136) 2-27
a. Subsequent EIR: Relationship of the Baylands Specific Plan EIR to the Previous Program EIR 2-29
2.4.3 General Plan Amendment GP-1-18 and Measure JJ Approval 2-30
2.4.4 General Plan Amendment GP-1-19 2-30
a. Revisions that Clarified General Plan Provisions and Updated Factual Information in the General Plan 2-31
b. General Plan Revisions that Incorporated GP-1-18 and Measure JJ into the General Plan 2-31
c. Revisions to General Plan Level of Service (LOS) Standards for Bayshore Boulevard and Freeway Off-Ramp Intersections 2-32
2.4.5 Submittal and Modifications to the 2025 Baylands Specific Plan Project 2-33
2.5 Site Remediation and Title 27 Landfill Closure 2-37
a. Remedial Action Plan for Operable Unit-SM 2-37
2.5.2 Site Remediation 2-39
b. Remedial Action Plan for Operable Unit-2 2-43
2.5.3 Title 27 Landfill Closure 2-47
a. Title 27 of California Code of Regulations, Solid Waste 2-47
2.6 California High Speed Rail Light Maintenance Facility within the Baylands 2-62
2.7 Projected Sea Level Rise 2-62
2.8 Bay-Delta Plan Amendment 2-65
2.8.1 Bay-Delta Plan 2-65
2.9 References – Environmental and Planning Context 2-67
Chapter 3 Project Description 3-1
3.1 Project Location 3-1
3.2 Project Objectives 3-4
3.3 Project Technical, Economic, and Environmental Characteristics 3-5
3.3.1 General Plan Amendment 3-5
3.3.2 Baylands Specific Plan and Proposed Development 3-9
a. Purpose of a Specific Plan 3-9
b. Contents of the Baylands Specific Plan 3-9
c. Land Use Program 3-11
d. Open Space and Open Areas 3-29
e. Transportation 3-35
f. Habitat Conservation, Restoration, and Enhancement 3-56
g. Water Supply 3-69

VOLUME 1. REVISED DRAFT EIR (CONTINUED)

h. On-Site and Off-Site Water Infrastructure 3-70
i. Baylands Wastewater System 3-79
j. Stormwater Drainage 3-81
k. Energy Facilities 3-90
l. Telecommunications Infrastructure 3-93
m. Public Services and Facilities 3-94
n. Consistency with Sustainability Framework Principles 3-95
o. Restoration of the Historic Roundhouse 3-96
p. Site Preparation and Grading 3-102
q. Anticipated Phasing and Sequencing of Baylands Land Development, Infrastructure, and Amenities 3-108

3.3.3 Relocation of the North County Fire Authority Brisbane Fire Station No. 81 3-113
3.3.4 Bayshore Mobility Plan 3-115
a. Introduction and Background 3-115
b. Purpose of the Bayshore Mobility Plan 3-116
c. Bayshore Boulevard Design Features 3-117
3.3.5 New Middle School within the Baylands and Coversion of the Existing Bayshore School to an Elementary School 3-135
3.3.6 Development Agreement 3-135

3.4 Intended Use of This EIR 3-135
3.4.1 Required Discretionary Actions, Approvals, and Consultations 3-136
a. Approvals and Permits Required from the City of Brisbane 3-136
b. Approvals and Permits Required from Responsible and Trustee Agencies 3-137

3.5 References 3-139

Chapter 4 Environmental Setting, Impacts, and Mitigation Measures 3.5-1

4.1 Introduction to the Analysis 4.1-1
4.1.1 Structure of Environmental Analyses 4.1-1
4.1.2 Environmental Baselines Used in This EIR 4.1-6

4.2 Effects Found Not to Be Significant and Dismissed from Further Review 4.2-1
4.2.1 Agricultural and Forestry Resources 4.2-1
4.2.2 Mineral Resources 4.2-2

4.3 Land Use and Planning Policies 4.3-1
4.3.1 Introduction 4.3-1
a. Overview 4.3-1
b. Definitions 4.3-1
4.3.2 Physical Environmental Setting 4.3-2
a. Baseline 4.3-2
b. Existing Land Uses within the Baylands 4.3-3
4.3.3 Regulatory Context for Baylands Development 4.3-5
a. Federal Laws, Plans, Programs, and Regulations 4.3-5
b. State Laws, Plans, Programs, and Regulations 4.3-5
c. Regional Plans, Programs, and Regulations 4.3-7
d. City of Brisbane Plans, Ordinances, and Regulations 4.3-23
4.3.4 Relevant Specific Plan Requirements 4.3-26

VOLUME 1. REVISED DRAFT EIR (CONTINUED)

4.3.5 Significance Criteria 4.3-26
4.3.6 Project Impacts and Mitigation Measures 4.3-27
a. Impact LUP-1: Physically Divide an Existing Community 4.3-27
b. Impact LUP-2: Conflicts with Adopted Plans, Policies, or Regulations 4.3-36
4.3.7 References – Land Use and Planning Policies 4.3-84
4.4 Population and Housing 4.4-1
4.4.1 Introduction 4.4-1
a. Overview 4.4-1
b. Definitions 4.4-2
4.4.2 Physical Environmental Setting 4.4-4
a. Baseline 4.4-4
b. Regional Population, Housing, and Employment Trends 4.4-4
c. City of Brisbane Population, Housing, and Employment Trends 4.4-5
d. Existing Economic Base; Signs of Urban Decay 4.4-6
e. Brisbane Projected Growth 4.4-11
4.4.3 Regulatory Context for Baylands Development 4.4-12
a. Federal Laws Plans. Programs, and Regulations 4.4-12
b. State Laws, Plans, Programs, and Regulations 4.4-12
c. Regional Plans, Programs, and Regulations 4.4-12
d. City of Brisbane Plans, Ordinances, and Regulations 4.4-13
4.4.4 Significance Criteria 4.4-15
4.4.5 Project Impacts and Mitigation Measures 4.4-16
a. Impact POP-1: Induce Substantial Unplanned Growth 4.4-16
b. Impact POP-2: Need for Replacement Housing or Commercial/Industrial Buildings 4.4-21
c. Impact POP-3: Housing for all Economic Segments of the Community 4.4-26
d. Impact POP-4: Urban Decay 4.4-28
4.4.6 References – Population and Housing Effects 4.4-32
4.5 Aesthetic and Visual Resources 4.5-1
4.5.1 Introduction 4.5-1
a. Overview 4.5-1
b. Definitions 4.5-1
4.5.2 Physical Environmental Setting 4.5-5
a. Baseline 4.5-5
b. Visual Setting and Context 4.5-5
c. Landscape Character Units 4.5-6
d. Views within and from the Baylands 4.5-13
e. Scenic Vistas 4.5-15
f. Light and Glare 4.5-15
4.5.3 Regulatory Context for Baylands Development 4.5-16
a. Federal Laws, Plans, Programs, and Regulations 4.5-16
b. State Laws, Plans, Programs, and Regulations 4.5-16
c. City of Brisbane Plans, Ordinances, and Regulations 4.5-17

VOLUME 1. REVISED DRAFT EIR (CONTINUED)

4.5.4 Relevant Specific Plan Provisions 4.5-23
a. Architectural Design Guidelines 4.5-23
b. Nighttime Lighting 4.5-24
c. Glare 4.5-26
4.5.5 Significance Criteria 4.5-26
4.5.6 Project Impacts and Mitigation Measures 4.5-28
a. Impact AES-1: Public Views of Identified Scenic Resources 4.5-28
b. Impact AES-2: Physical Effects on Scenic Resources 4.5-54
c. Impact AES-3: Consistency with Visual Quality Policies and Programs 4.5-58
d. Impact AES-4: Night Lighting 4.5-64
e. Impact AES-5: Daytime Glare 4.5-73
4.5.7 References – Aesthetic Resources 4.5-78
4.6 Biological Resources 4.6-1
4.6.1 Introduction 4.6-1
a. Definitions 4.6-1
4.6.2 Physical Environmental Setting 4.6-4
a. Baseline 4.6-4
b. Existing On-Site Biological Resources 4.6-4
c. Existing Off-Site Biological Resources 4.6-31
4.6.3 Regulatory Context for Baylands Development 4.6-32
a. Federal Laws, Plans, Programs, and Regulations 4.6-32
b. State Laws, Plans, Programs, and Regulations 4.6-35
c. Regional Plans, Programs, and Regulations 4.6-37
d. City of Brisbane Plans, Ordinance, and Regulations 4.6-38
e. Open Space Plan for the City of Brisbane 4.6-41
f. City of Brisbane Tree Ordinance 4.6-43
4.6.4 Relevant Specific Plan Provisions 4.6-45
a. Visitacion Creek Restoration 4.6-46
b. Restoration along the North Shore of the Brisbane Lagoon 4.6-46
c. Human/Pet Interference within Restored Wetlands and Sensitive Habitats on Icehouse Hill 4.6-46
d. Bird Strike Protection 4.6-47
4.6.5 Significance Criteria 4.6-47
4.6.6 Impacts and Mitigation Measures 4.6-48
a. Impact BIO-1: Special Status Plants, Animals, and Habitats 4.6-48
b. Threshold BIO-2: Freshwater Habitat, Tidally Influenced Habitats, Waters of the United States, Waters of the State, and Areas Subject to the Jurisdiction of the State Lands Commission or Bay Conservation Development Commission 4.6-70
c. Threshold BIO-3: Fish and Wildlife Movement 4.6-84
d. Threshold BIO-4: Brisbane Tree Ordinance 4.6-95
e. Threshold BIO-5: San Bruno Mountain Habitat Conservation Plan 4.6-97
4.6.7 References – Biological Resources 4.6-99
a. Resources Cited in the Brisbane Baylands Biological Resources Technical Report 4.6-99

VOLUME 2. REVISED DRAFT EIR

4.7 Cultural Resources and Tribal Cultural Resources
4.8 Transportation
4.9 Air Quality
4.10 Greenhouse Gas Emissions
4.11 Energy Resources
4.12 Noise and Vibration
4.13 Hazards and Hazardous Materials
4.14 Hydrology and Water Quality

VOLUME 3. REVISED DRAFT EIR

4.15 Geology, Soils, and Seismicity
4.16 Utilities, Service Systems, and Water Supply
4.17 Public Services and Facilities
4.18 Parks, Open Space/Open Areas, and Recreational Resources
4.19 Wildland Fire
4.20 Significant Unavoidable Environmental Effects
4.21 Program EIR MItigation Measures
Chapter 5 Irreversible Environmental Effects
Chapter 6 Growth-Inducing Effects
Chapter 7 Cumulative Environmental Effects
Chapter 8 Alternatives
Chapter 9 Subsequent EIR Analysis and Findings
Chapter 10 EIR Preparation Staff and Resources

VOLUME 4. RESPONSES TO COMMENTS ON THE DRAFT EIR

Chapter 11 Introduction
Chapter 12 Agencies Contacted and Commenters on the Draft EIR
Chapter 13 Responses to Comments

VOLUME 5. RESPONSES TO COMMENTS ON THE DRAFT EIR

Chapter 14 Draft EIR Revisions
Chapter 15 Draft EIR Revisions: Section 4.10, Greenhouse Gas Emissions
Chapter 16 Response to Comments Addressing Proposed Maximum Building Heights and Tower Buildings; Analysis of Modified Alternative 1
Chapter 17 Mitigation Monitoring and Reporting Program

APPENDICES

A 2025 Baylands Specific Plan
B Notices of Preparation, Distribution List, and Responses to the Notices of Preparation
C Urban Decay Technical Report
D Biological Resources Technical Report
E Cultural Resources Technical Report
F Transportation Technical Reports
- F.1 Transportation Impact Assessment [Revised]
- F.2 Baylands Safe Routes to School Study
- F.3 Brisbane Baylands General Plan Compliance Study [New]

G Air Quality Technical Reports
- G.1 Air Quality Technical Report [Revised]
- G.2 Health Risk Assessment
- G.3 Mitigated Air Quality and Health Risk Calculations [Revised]

H Greenhouse Gas Emissions
- H.1 Greenhouse Gas Emissions Technical Report [Revised]
- H.2 Greenhouse Gas Emissions Reduction Plan

I Energy Resources Technical Report [Revised]
J Noise and Vibration Technical Report
K Hazardous Materials Remediation and Final Landfill Closure Plans
- K.1 Operating Unit San Mateo (OU-SM) Remedial Action Plan
- K.2 Operating Unit 2 (OU-2) Remedial Action Plan
- K.3 Former Brisbane Landfill Closure Plan and Post-Closure Maintenance Plan
- K.4 Operable Unit OU-SM Approval Record
- K.5 Operable Unit OU-2 Approval Record
- K.6 Brisbane Baylands Landfill Closure Plan Approval Record

L Sea Level Rise (SLR) Technical Report
M Geotechnical and Paleontological Resources Reports
- M.1 Geotechnical Report for the Western Portion of the Baylands
- M.2 Geotechnical Report for the Eastern Portion of the Baylands
- M.3 Paleontological Resources Report

N Police and Fire Protection Services Plans
- N.1 Police Facilities and Staffing Plan
- N.2 Fire Protection Services Plan

O Wind Analysis
P Water Supply Assessment
Q Draft EIR Comments and Public Meeting Transcript [New]

FIGURES

Figure ES-1: Regional Location ES-2
Figure ES-2: Proposed Land Use ES-4
Figure 1-1: Regional Location 1-2
Figure 2-1: Regional Location 2-1
Figure 2-2: Generalized Land Use Context, 2022 2-2
Figure 2-3: Historic Filling of San Francisco Bay to Create the Baylands 2-5
Figure 2-4a: Former Brisbane Rail Yard over Time (1915–1950) 2-7
Figure 2-4b: Specific Plan Area as Viewed Looking North from Icehouse Hill, 1905 2-8
Figure 2-4c: Former Brisbane Rail Yard over Time (1956–1995) 2-9
Figure 2-4d: View of Bayshore Railroad Yard from Bayshore Point, February 24, 1911 2-10
Figure 2-5: Baylands Terrestrial Habitats 2-13
Figure 2-6: Existing Baylands Ownership 2-20
Figure 2-7: Existing Brisbane General Plan Land Use Diagram 2-22
Figure 2-8: Existing City of Brisbane Zoning 2-26
Figure 2-9: Baylands Land Use Proposed by the Applicant in its 2023 Specific Plan 2-35
Figure 2-10: Proposed 2025 Specific Plan Land Use Analyzed in this EIR 2-36
Figure 2-11: Agency Regulatory Responsibilities for Baylands Site Remediation and Landfill Closure 2-38
Figure 2-12: Landfill Closure Plan Boundary 2-51
Figure 2-13: Proposed Development Overlying the Former Brisbane Landfill 2-52
Figure 2-14: Proposed Leachate Collection System 2-56
Figure 2-15: Landfill Gas Extraction System 2-58
Figure 2-16: Location of a 45-Acre High-Speed Rail Light Maintenance Facility in Relation to the Baylands Specific Plan Land Use Plan 2-63
Figure 3-1: Baylands Specific Plan Location 3-2
Figure 3-2: Baylands Specific Plan Area 3-3
Figure 3-3: Proposed General Plan Land Use Element Amendment 3-6
Figure 3-4a: Existing General Plan Circulation Element as Amended by GP-1-19 in January 2020 3-7
Figure 3-4b: General Plan Circulation Element as Proposed 3-8
Figure 3-5: Proposed Land Use 3-12
Figure 3-6: Proposed Maximum Permitted Building Heights 3-21
Figure 3-7: Specific Plan Districts 3-22
Figure 3-8: Bayshore District Development Plan 3-24
Figure 3-9: Roundhouse District Development Plan 3-25
Figure 3-10: Icehouse Hill Development Plan 3-26
Figure 3-11: Campus East District Development Plan 3-27
Figure 3-12: Sustainability District Development Plan 3-28
Figure 3-13: Baylands Open Space/Open Area Network 3-30
Figure 3-14: Proposed Baylands Street Network 3-39
Figure 3-15a: Geneva Avenue Cross-Sections 3-40
Figure 3-15b: Geneva Avenue Cross-Sections 3-41
Figure 3-16: Sierra Point Parkway Proposed Cross-Section 3-42
Figure 3-17: Tunnel Avenue Proposed Cross-Section 3-42
Figure 3-18: Lagoon Road Proposed Cross-Section 3-43
Figure 3-19: Sunnydale Avenue Proposed Cross-Section 3-43
Figure 3-20: Baylands Boulevard Cross Sections 3-44

Figure 3-21: Main Street Proposed Cross-Section 3-45
Figure 3-22: Campus Parkway Proposed Cross-Section 3-45
Figure 3-23: Frontage Road Proposed Cross-Section 3-46
Figure 3-24: East Campus Road Proposed Cross-Section 3-46
Figure 3-25: East Park Street and West Park Street Proposed Cross-Section 3-47
Figure 3-26: Roundhouse Circle Proposed Cross-Section 3-47
Figure 3-27: Visitacion Creek North and South Proposed Cross-Section 3-48
Figure 3-28: Local Streets Proposed Cross-Section 3-48
Figure 3-29: Green Shared Streets Proposed Cross Sections 3-49
Figure 3-30: Baylands Pedestrian Network 3-51
Figure 3-31: Baylands Bicycle and Micro-Mobility Network 3-53
Figure 3-32: Proposed Shuttle Routes and Transit Connections 3-55
Figure 3-33: Lagoon Park Illustrative Concept Diagram 3-57
Figure 3-34: Biotic Habitat Zones within and adjacent to the Brisbane Lagoon 3-58
Figure 3-35a: Existing Lagoon Edge 3-59
Figure 3-35b: Proposed Lagoon Edge Enhancement 3-59
Figure 3-36a: Visitacion Creek Illustrative Concept Diagram 3-60
Figure 3-36b: Visitacion Creek Section A-A′ 3-61
Figure 3-36c: Visitacion Creek Section B-B′ 3-62
Figure 3-36d: Visitacion Creek Section C-C′ 3-63
Figure 3-36e: Visitacion Creek Section D-D′ 3-64
Figure 3-37: Detention Area Example 3-65
Figure 3-38: Icehouse Hill Illustrative Concept Diagram 3-66
Figure 3-39: The Ecological Park Illustrative Concept Diagram 3-67
Figure 3-40: Baylands Preserve Illustrative Concept Diagram 3-68
Figure 3-41: Wildlife Connector Types 3-69
Figure 3-42: Proposed On-Site Potable Water System 3-71
Figure 3-43: Conceptual Water Recycling Facility Flow Schematic 3-74
Figure 3-44: Proposed Baylands Recycled Water System 3-76
Figure 3-45: Proposed Cal Water Service Areas in Brisbane and Recycled Water Service Areas in South San Francisco 3-77
Figure 3-46: Proposed Baylands Wastewater System 3-80
Figure 3-47: Proposed Drainage System 3-82
Figure 3-48: Proposed Stormwater Treatment System 3-86
Figure 3-49: Proposed Baylands Electrical System Improvements 3-91
Figure 3-50: Conceptual Rehabilitation of the Historic Roundhouse 3-101
Figure 3-51: Proposed Grading East of the Caltrain Right-of-Way 3-103
Figure 3-52: Proposed Grading West of the Caltrain Right-of-Way 3-104
Figure 3-53: Proposed Grading Haul Routes 3-106
Figure 3-54: Proposed Fire Station Relocation Site Plan 3-114
Figure 3-55a: Bayshore Mobility Plan – Geneva Avenue to Brisbane Technology Park 3-118
Figure 3-55b: Bayshore Mobility Plan – Brisbane Technology Park to Guadalupe Canyon Parkway 3-119
Figure 3-55c: Bayshore Mobility Plan – Valley Drive to Old County Road/Tunnel Avenue Van Waters and Rogers Road South to City Limits 3-120
Figure 3-55d: Bayshore Mobility Plan – Van Waters and Rogers Road to San Bruno Avenue 3-121
Figure 3-55e: Bayshore Mobility Plan – Cross Sections (see Figures 3-55a, 3-55c, and 3-55d 3-122
Figure 3-56: Bayshore Boulevard at Geneva Avenue and Green Shared Street 3-126

Figure 3-57: Bayshore Boulevard at Main Street and Existing Industrial Way 3-127
Figure 3-58: Bayshore Boulevard at Campus Parkway 3-128
Figure 3-59: Bayshore Boulevard at Technology Park Driveway 3-129
Figure 3-60: Bayshore Boulevard at Guadalupe Canyon Parkway 3-130
Figure 3-61: Bayshore Boulevard at Valley Drive 3-131
Figure 3-62: Bayshore Boulevard at Old County Road/Tunnel Avenue 3-132
Figure 3-63: Bayshore Boulevard at Van Waters and Rogers Road 3-133
Figure 3-64: Bayshore Boulevard at San Bruno Avenue 3-134
Figure 4.4-1: Census Tracts Comprising the Baylands Retail Market Area 4.4-10
Figure 4.4-2: Brisbane Population, Housing, and Employment Projections 4.4-11
Figure 4.4-3: Alternative Golden State Lumber Laydown Yard and Rail Extension 4.4-25
Figure 4.5-1: Landscape Character Units within or Visible to or from the Baylands 4.5-7
Figure 4.5-2: Location of Viewpoints for Visual Simulations 4.5-32
Figure 4.6-1: Baylands Terrestrial Habitats 4.6-6
Figure 4.6-2a: Delineated Potential Baylands Wetlands and Non-Wetlands Waters of the United States within the Northern Portion of the Specific Plan Area 4.6-13
Figure 4.6-2b: Delineated Potential Baylands Wetlands and Non-Wetlands Waters of the United States within the Central Portion of the Specific Plan Area 4.6-14
Figure 4.6-2c: Delineated Potential Baylands Wetlands and Non-Wetlands Waters of the United States within the Southern Portion of the Specific Plan Area 4.6-15
Figure 4.6-3: Existing Butterfly Host and Nectar Plants at Icehouse Hill 4.6-53
Figure 4.6-4: Potential Areas for Butterfly Habitat Restoration at Icehouse Hill 4.6-68
Figure 4.6-5: Illustrative Examples of Trails within Lagoon Park (Specific Plan Figure 5.3.24) 4.6-74
Figure 4.6-6: Illustrative Example of Trails within Visitacion Creek (Specific Plan Figure 5.3.32) 4.6-75
Figure 4.7-1: Baylands Historic Fill 4.7-4
Figure 4.7-2: Specific Plan Area as Viewed Looking North from Icehouse Hill, 1905 ..... 4.7-5
Figure 4.7-3: View of Bayshore Railroad Yard from Bayshore Point, February 24, 1911 ..... 4.7-9
Figure 4.7-4: Existing Roundhouse Building 4.7-11
Figure 4.7-5: Pre-European Contact Shoreline 4.7-22
Figure 4.8-1: Existing Roadway Segment Volumes 4.8-10
Figure 4.8-2: Existing Intersection Lane Configurations and Traffic Volumes 4.8-11
Figure 4.8-3: Existing Transit Service in the Vicinity of the Baylands 4.8-13
Figure 4.8-4: Transit Priority Areas (Areas within One-Half Mile of Existing and Planned Major Transit Stops 4.8-17
Figure 4.8-5: Existing Bicycle and Pedestrian Facilities 4.8-18
Figure 4.8-6: Roadway Safety Indices and Youth-Based High Injury Network: Cities of Brisbane and Daly City 4.8-23
Figure 4.8-7: Baylands Traffic Analysis Zones 4.8-64
Figure 4.8-8: Analysis of Off-Site Pedestrian and Bicycle Connections 4.8-80
Figure 4.8-9: Changes in Students' Routes to School 4.8-91
Figure 4.8-10a: Potential Hazards at School Drop-off and Pick-up Zones 4.8-92
Figure 4.8-10b: Potential Hazards at School Drop-Off and Pick-Up Zones 4.8-93
Figure 4.8-11a: Transportation Facility Improvement Summary: Bayshore District 4.8-104
Figure 4.8-11b: Transportation Facility Improvement Summary: Roundhouse and Icehouse Hill District 4.8-104
Figure 4.8-11c: Transportation Facility Improvements: Campus East District 4.8-105
Figure 4.9-1: Existing Non-Residential Sensitive Receptor Locations 4.9-15

Figure 4.9-2: Existing Sources of Toxic Air Contaminants 4.9-19
Figure 4.12-1: Typical Vibration Sources and Their Effects 4.12-7
Figure 4.12-2: Noise Monitoring Locations 4.12-12
Figure 4.12-3: San Francisco International Airport Existing Noise Contours 4.12-24
Figure 4.13-1: Agency Regulatory Responsibilities for Baylands Site Remediation and Landfill Closure 4.13-8
Figure 4.13-2: Existing Waste Conditions 4.13-19
Figure 4.13-3: Existing Groundwater Conditions at Former Brisbane Landfill 4.13-22
Figure 4.13-4: San Francisco International Airport Existing Noise Contours 4.13-83
Figure 4.13-5: Airport Safety Compatibility Zones 4.13-84
Figure 4.13-6: FAA Notification Area 4.13-85
Figure 4.13-7: Airport Imaginary Surface Areas 4.13-86
Figure 4.14-1: Existing Storm Drainage System 4.14-10
Figure 4.14-2: Visitacion Valley Groundwater Basin 4.14-12
Figure 4.14-3: Special Flood Hazard Areas 4.14-15
Figure 4.14-4: Tsunami Inundation Areas 4.14-17
Figure 4.14-5: Minimum Coastal Hazards Requirements for Subregional Shoreline Adaption Plan Vulnerability Assessments and Adaptation Strategies and Pathways 4.14-35
Figure 4.14-6: Areas Susceptible to Groundwater with 6.6 Feet of Sea Level Rise 4.14-74
Figure 4.14-7: Site-Specific Modeling of Groundwater Level Changes 4.14-75
Figure 4.15-1: Baylands Historic Fill 4.15-6
Figure 4.15-2: Regional Geologic Map 4.15-10
Figure 4.15-3: Regional Faulting And Seismicity 4.15-13
Figure 4.15-4: Young Bay Mud Thickness 4.15-17
Figure 4.17-1: Bayshore and Brisbane School District Boundaries 4.17-7
Figure 4.18-1: Candlestick Point State Recreation Area Primary Windsurfing Area (Area of Interest) 4.18-6
Figure 4.18-2: Baylands Specific Plan Proposed Open Space/Open Area Network 4.18-20
Figure 4.18-3a: Existing and With-Project Wind Speed, Westerly Winds 4.18-29
Figure 4.18-3b: Changes in Wind Speed With Project, Westerly Winds 4.18-30
Figure 4.18-4a: Existing and With-Project Wind Speed, Westerly-Northwesterly Winds 4.18-31
Figure 4.18-4b: Changes in Wind Speed With Project, Westerly-Northwesterly Winds 4.18-32
Figure 4.18-5a: Existing and With-Project Wind Speed, Northwesterly Winds 4.18-33
Figure 4.18-5b: Changes in Wind Speed With Project, Northwesterly Winds 4.18-34
Figure 4.18-6a: Existing and With-Project Wind Fluctuations, Westerly Winds 4.18-35
Figure 4.18-6b: Changes in Average Wind Fluctuation With Project, Westerly Winds 4.18-36
Figure 4.18-7a: Existing and With-Project Wind Fluctuations, Westerly-Northwesterly Winds 4.18-37
Figure 4.18-7b: Changes in Average Wind Fluctuation With Project, Westerly-Northwesterly Winds 4.18-38
Figure 4.18-8a: Existing and With-Project Wind Fluctuations, Northwesterly Winds 4.18-39
Figure 4.18-8b: Changes in Average Wind Fluctuation With Project, Northwesterly Winds 4.18-40
Figure 4.18-9: Baylands Development in Relation to the Candlestick Point State Recreation Area Primary Windsurfing Area (Area of Interest) 4.18-41
Figure 4.19-1: Fire Hazard Severity Zones 4.19-3
Figure 4.19-2: Wildland-Urban Interface 4.19-5
Figure 7-1: Cumulative Projects Locations 7-7

Figure 7-2: Residential Lands within the Specific Plan Area Subject to Severe Noise Impacts from Rail Operations 7-78
Figure 7-3: San Francisco Bay Hydrologic Region (Area Subject to the Basin Plan) 7-92
Figure 7-4: Geographic Context for Analysis of Cumulative Impacts on Windsurfing Resources within the Candlestick Point State Recreation Area 7-117
Figure 7-5: Cumulative Changes in Wind Speeds: Westerly Winds 7-119
Figure 7-6: Cumulative Changes in Wind Speeds: West-Northwesterly Winds 7-120
Figure 7-7: Cumulative Changes in Wind Speeds: Northwesterly Winds 7-121
Figure 7-8: Cumulative Changes in Wind Fluctuations: Westerly Winds 7-122
Figure 7-9: Cumulative Changes in Wind Fluctuations: Westerly-Northwesterly Winds 7-123
Figure 7-10: Cumulative Changes in Wind Fluctuations: Northwesterly Winds 7-124
Figure 9-1a: 2011 Specific Plan Land Use Plan Analyzed in the Program EIR 9-10
Figure 9-1b: 2025 Specific Plan EIR Land Use Plan Analyzed in this EIR 9-11
Figure 9-2a: Maximum Building Heights Analyzed in the Program EIR (2011 Specific Plan) 9-12
Figure 9-2b: Maximum Building Heights Analyzed in this EIR (2025 Specific Plan) 9-13

TABLES

Table ES-1a: Proposed Land Use Program by Acreage ES-6
Table ES-1b: Land Use Program by Dwelling Units and Building Square Footage ES-6
Table ES-2: Land Development Alternatives Analyzed in Addition to No Project Alternatives ES-157
Table ES-3: Summary Comparison of Impacts That Would Result from the Specific Plan, No Project-No Build, and Land Development Alternatives ES-160
Table 2-1: Comparison of Land Use Acreage between the Specific Plan Submitted by the Applicant and Baylands Development Analyzed in this EIR 2-34
Table 2-2: Sea Level Rise Projections, in Feet 2-64
Table 3-1a: Proposed Land Use Program by Acreage 3-14
Table 3-1b: Land Use Program by Dwelling Units and Building Square Footage 3-14
Table 3-1c: Baylands Land Use Program Assumed for Environmental Analysis Purposes 3-15
Table 3-1d: Breakdown of Proposed Open Space/Open Area Functions and Types 3-16
Table 3-2: Proposed Baylands Roadway Network 3-37
Table 3-3: Baylands Pedestrian Network Improvements 3-50
Table 3-4: Baylands Bicycle and Micro-Mobility Network Improvements 3-52
Table 3-5: Proposed Baylands Shuttle Service and Phasing 3-54
Table 3-6: Sustainability Goals, Performance Standards, and Strategies Described in the Specific Plan for Baylands Development to Achieve One Planet's 10 Sustainability Principles 3-96
Table 3-7: Relationship between Land Development; Open Space, Recreation, and Amenities; and Roadway Improvements Phasing 3-109
Table 3-8: Anticipated Construction Sequencing of Baylands Residential and Commercial Buildings assumed for Impact Analysis Purposes 3-110
Table 3-9: Standard Bayshore Boulevard Design Features 3-117
Table 3-10: Standard Intersection Treatments 3-125
Table 4.3-1: Consistency of the Baylands Specific Plan with the Brisbane General Plan 4.3-38
Table 4.3-2: Consistency of the Baylands Specific Plan with Applicable Regional Plans and Policies 4.3-68
Table 4.4-1: Existing City of Brisbane Population and Housing, January 1, 2024 ..... 4.4-6
Table 4.4-2: San Mateo County Employment Trends for Sectors Typically Associated with Office Space 4.4-7
Table 4.4-3: San Francisco Bay Area Life Science Market Inventory, Year–End 2022 ..... 4.4-8
Table 4.4-4: Projected San Mateo County Office and Life Science Growth, 2023–2050 ..... 4.4-9
Table 4.4-5: 2023–2031 City of Brisbane Quantified Objectives by Site 4.4-14
Table 4.4-6: City of Brisbane Inclusionary Housing Requirements for Residential Development 4.4-15
Table 4.4-7: Estimated Baylands Resident Population and On-Site Employment 4.4-18
Table 4.4-8: Industrial Building Availability 4.4-23
Table 4.4-9: Retail Demand Generated by the Baylands Market Area 4.4-31
Table 4.5-1: Outdoor Lighting Levels 4.5-3
Table 4.5-2a: Visual Simulations of Specific Plan Development: Viewpoint 1 ..... 4.5-33
Table 4.5-2b: Visual Simulations of Specific Plan Development: Viewpoint 2 ..... 4.5-34
Table 4.5-2c: Visual Simulations of Specific Plan Development: Viewpoint 3 ..... 4.5-35
Table 4.5-2d: Visual Simulations of Specific Plan Development: Viewpoint 4 ..... 4.5-36
Table 4.5-2e: Visual Simulations of Specific Plan Development: Viewpoint 5 ..... 4.5-37

Table 4.5-2f: Visual Simulations of Specific Plan Development: Viewpoint 6 ..... 4.5-38
Table 4.5-2g: Visual Simulations of Specific Plan Development: Viewpoint 7 ..... 4.5-39
Table 4.5-2h: Visual Simulations of Specific Plan Development: Viewpoint 8 ..... 4.5-40
Table 4.5-2i: Visual Simulations of Specific Plan Development: Viewpoint 9 ..... 4.5-41
Table 4.5-2j: Visual Simulations of Specific Plan Development: Viewpoint 10 ..... 4.5-42
Table 4.5-2k: Visual Simulations of Specific Plan Development: Viewpoint 11 ..... 4.5-43
Table 4.5-2l: Visual Simulations of Specific Plan Development: Viewpoint 12 ..... 4.5-44
Table 4.5-2m: Visual Simulations of Specific Plan Development: Viewpoint 13 ..... 4.5-45
Table 4.5-2n: Visual Simulations of Specific Plan Development: Viewpoint 14 ..... 4.5-46
Table 4.5-2o: Visual Simulations of Specific Plan Development: Viewpoint 15 ..... 4.5-47
Table 4.5-2p: Visual Simulations of Specific Plan Development: Viewpoint 16 ..... 4.5-48
Table 4.5-2q: Visual Simulations of Specific Plan Development: Viewpoint 17 ..... 4.5-49
Table 4.5-2r: Visual Simulations of Specific Plan Development: Viewpoint 18 ..... 4.5-50
Table 4.5-3: Specific Plan Consistency with Required Findings for Non-Residential Design Permits 4.5-61
Table 4.6-1: Wetlands and Non-Wetland Waters within the Baylands Specific Plan Area 4.6-12
Table 4.6-2: Special-Status Species with the Potential to Occur within the Specific Plan Area 4.6-20
Table 4.6-3: Wetland and Non-Wetland Waters along Visitacion Creek to Be Removed 4.6-72
Table 4.6-4: Impacted and Restored/Enhanced Wetlands and Non-Wetland Waters 4.6-72
Table 4.7-1: Historical Significance of Resources within or adjacent to the Baylands 4.7-19
Table 4.7-2: Project Compliance with the Secretary of the Interior Standards for Rehabilitation of Historic Buildings 4.7-34
Table 4.8-1: Area Roadway Characteristics 4.8-5
Table 4.8-2: Existing Regional per Capita Vehicle Miles Traveled 4.8-12
Table 4.8-3: Existing Public Transit Service Characteristics 4.8-14
Table 4.8-4: San Mateo County Safe Routes to School High Injury Roadway Network in the Vicinity of the Baylands 4.8-34
Table 4.8-5: Baylands Transportation Evaluation Scenarios 4.8-58
Table 4.8-6: Baylands Traffic Generation 4.8-62
Table 4.8-7: Baylands Trip Generation by Land Use at Buildout 4.8-63
Table 4.8-8: Land Use by Traffic Analysis Zone 4.8-65
Table 4.8-9: Transportation Demand Management Effectiveness 4.8-67
Table 4.8-10: Vehicle Miles Traveled per Capita Threshold 4.8-68
Table 4.8-11: Baylands per Capita Daily Vehicle Miles Traveled 4.8-73
Table 4.8-12: Effect of Baylands Development on Daily Regional Vehicle Miles Traveled 4.8-73
Table 4.8-13: 95th Percentile Vehicle Queues at US 101 Off-Ramps that Exceed the Ramp Storage Length and Extend to the Mainline with Mitigation Measures 4.8-94
Table 4.9-1: Summary of Bay Area Air Quality Monitoring Data (2018–2022) 4.9-5
Table 4.9-2: State and Federal Ambient Air Quality Standards and Attainment Status 4.9-8
Table 4.9-3: Air Quality Index Statistics for the Air Basin 4.9-13
Table 4.9-4: Annual Average Ambient Concentrations of Carcinogenic Toxic Air Contaminants Measured in 2022 at Air District Monitoring Station at 10 Arkansas Street, San Francisco 4.9-17
Table 4.9-5: Federal and State Ambient Air Quality Standards for Criteria Pollutants 4.9-21
Table 4.9-6: Relevant 2017 Clean Air Plan Air Quality Strategy Actions 4.9-40
Table 4.9-7: Increase in Criteria Air Pollutant Emissions During Construction and Operation 4.9-61

Table 4.9-8: Baylands Operational Emissions, Buildout of Phase 1, and the Full Specific Plan 4.9-63
Table 4.9-9: Total Vehicle Miles Traveled 4.9-64
Table 4.9-10: Exceptions to Mitigation Measure MM AQ-1d, Items 1.a, 1.b, 1.c, 1d, and 2 ..... 4.9-68
Table 4.9-11: Engine Compliance Alternatives 4.9-69
Table 4.9-12: Mitigated Net Increase in Criteria Air Pollutant Emissions During Construction and Operation 4.9-82
Table 4.9-13: Mitigated Operational Emissions, Completion of Phase 1, and Project Buildout 4.9-83
Table 4.9-14: Cancer Risk to Existing Off-Site Receptors from Baylands Construction and On-Site Operations 4.9-95
Table 4.9-15: Cancer Risk to Future On-Site Receptors from Baylands Construction and On-Site Operations 4.9-96
Table 4.9-16: Cancer Risk to Existing Off-Site and Future On-Site Receptors from Operation of the Baylands Specific Plan at Full Buildout 4.9-97
Table 4.9-17: Acute Hazard Index, Chronic Hazard Index, and Annual Average $PM_{2.5}$ Concentration 4.9-98
Table 4.9-18: Mitigated Cancer Risk to Existing Off-Site Receptors During Baylands Construction and On-Site Operations 4.9-101
Table 4.9-19: Mitigated Cancer Risk to Future On-Site Baylands Receptors from Baylands Construction and On-Site Operations 4.9-102
Table 4.9-20: Mitigated Cancer Risk to Existing Off-site and Future On-Site Receptors from Operation of the Baylands Specific Plan at Full Buildout 4.9-103
Table 4.9-21: Mitigated Acute Hazard Index, Chronic Hazard Index, and Annual Average $PM_{2.5}$ Concentration 4.9-104
Table 4.9-22: Project Consistency with Applicable Control Measures of the 2017 Clean Air Plan 4.9-113
Table 4.10-1: California Greenhouse Gas Emissions Inventory for Years 1990 and 2022 ..... 4.10-9
Table 4.10-2: Existing Greenhouse Gas Emissions Inventory for the Specific Plan Area 4.10-10
Table 4.10-3: Anticipated Annual Construction Emissions 4.10-30
Table 4.10-4: Operational Emissions by Source at the Completion of Phase 1 ..... 4.10-31
Table 4.10-5: Operational Emissions by Source at Full Specific Plan Buildout 4.10-32
Table 4.10-6: Required GHG Emissions Offsets (MTCO2e) 4.10-34
Table 4.10-7: Per Capita Vehicle Miles Traveled, Existing and at Specific Plan Buildout 4.10-51
Table 4.10-8: Effect of Baylands Development on Regional Vehicle Miles Traveled 4.10-51
Table 4.10-9: Consistency of the Baylands Specific Plan with the 2022 Scoping Plan 4.10-52
Table 4.11-1: Existing Annual State and Regional Energy Consumption, 2022 ..... 4.11-3
Table 4.11-2: Average Annual Petroleum-Based Energy Usage during Project Construction 4.11-30
Table 4.11-3: Total Annual Specific Plan Area Annual Energy Use 4.11-33
Table 4.11-4: Total Annual On-Site and Off-Site Energy Use during Project Operation at Completion of the First Increment of the Proposed On-Site Solar Energy Generation Field (assumed to be in 2037) 4.11-34
Table 4.11-5: Total Annual On-Site and Off-Site Operational Energy Use at Buildout of Phase 1 (assumed to be 2038) 4.11-35
Table 4.11-6: Total Annual On-Site and Off-Site Energy Use at Full Specific Plan Buildout (assumed to be 2042) 4.11-36
Table 4.11-7: Baylands Net On-Site Energy Consumption Analysis 4.11-40
Table 4.12-1: Typical Sound Levels Measured in the Environment 4.12-3

Table 4.12-2: Existing Noise Environment in and Adjacent to the Baylands – Long-Term Monitoring 4.12-10
Table 4.12-3: Existing Noise Environment in and Adjacent to the Baylands – Short-Term Monitoring 4.12-11
Table 4.12-4: Existing Weekday Peak Hour Roadway Traffic Noise 4.12-11
Table 4.12-5: Generalized Vibration Levels from Locomotive-Powered Passenger or Freight Trains (Vibration Decibels) 4.12-14
Table 4.12-6: Existing Vibration Levels Monitored in the Baylands Vicinity 4.12-14
Table 4.12-7: Existing Noise-Sensitive Receptors within 1,000 Feet of the Specific Plan Area 4.12-15
Table 4.12-8: Summary of Federal Highway Administration (FHWA) Noise Abatement Criteria 4.12-17
Table 4.12-9: Federal Transit Administration (FTA) Construction Noise Criteria 4.12-18
Table 4.12-10: Construction Vibration Damage Criteria 4.12-18
Table 4.12-11: State of California Community Noise Compatibility Guidelines (DNL or CNEL) 4.12-21
Table 4.12-12: Caltrans Criteria for Vibration Damage Potential 4.12-22
Table 4.12-13 Caltrans Criteria for Vibration Annoyance Potential 4.12-22
Table 4.12-14: San Francisco Land Use Compatibility Guidelines for Community Noise 4.12-25
Table 4.12-15: Brisbane Municipal Code Chapter 8.28 Noise Standards 4.12-33
Table 4.12-16: Typical Maximum Noise Levels from Construction Equipment (Reference Levels) 4.12-38
Table 4.12-17: Daytime Noise from Demolition Activities within the Western Portion of the Baylands 4.12-40
Table 4.12-18: Daytime Noise from Soil Loading within the Former Landfill Area by 10 Loaders 4.12-42
Table 4.12-19: Daytime Noise from Grading Activities Associated with Grading Activities for Phase 1 Development 4.12-42
Table 4.12-20: Hourly average Daytime Noise Levels from Haul Truck Noise Increases along Soil Haul Routes (dBA, L_{eq}) 4.12-44
Table 4.12-21: Daytime Noise from Deep Dynamic Compaction 4.12-46
Table 4.12-22: Daytime Noise from Solar Farm Construction 4.12-46
Table 4.12-23: Aggregate Daytime Construction Noise Levels for Grading Activities in the Western Portion of the Baylands and Concurrent Solar Farm Construction in the Eastern Portion 4.12-47
Table 4.12-24: Daytime Noise from Pile Driving Activities within the Western Portion of the Baylands 4.12-48
Table 4.12-25: Daytime Noise from Vertical Building Construction within the Western Portion of the Baylands 4.12-49
Table 4.12-26: Daytime Noise from Deep Dynamic Compaction within the Eastern Portion of the Baylands 4.12-50
Table 4.12-27: Daytime Noise from Pile Driving Activities within the Eastern Portion of the Baylands 4.12-51
Table 4.12-28: Daytime Noise from Building Construction in the Eastern Portion of the Baylands 4.12-52
Table 4.12-29: Daytime Noise from Construction of Roadways within the Eastern Portion of the Baylands, including the Geneva Avenue Bridge 4.12-52
Table 4.12-30: Daytime Noise from Construction of the Relocated Fire Station 4.12-53

Table 4.12-31: Daytime Noise from Construction of a New Fire Station within the Baylands....4.12-54
Table 4.12-32: Daytime Noise from WRF Pipeline Trenching Activity....4.12-55
Table 4.12-33: Daytime Noise from Roadway Construction in the Western Portion of the Baylands....4.12-56
Table 4.12-34: Daytime Noise from Trenching for Underground Utility Construction....4.12-57
Table 4.12-35: Reference Noise Levels for Stationary Noise Sources....4.12-66
Table 4.12-36: Major Water Recycling Facility Treatment Process Equipment and Available Noise Mitigation Methods....4.12-76
Table 4.12-37: Weekday Peak Hour Traffic Noise Increases along Baylands Area Roadways at the Completion of Specific Plan Phase 1 (assumed to be 2035)....4.12-80
Table 4.12-38: Weekday Peak Hour Traffic Noise Increases along Baylands Area Roadways at Specific Plan Buildout (assumed to be 2040)....4.12-81
Table 4.12-39: Vibration Levels for Construction Activity....4.12-90
Table 4.13-1: Environmental Records Database Results in Vicinity of the Specific Plan Area....4.13-29
Table 4.13-2: Hazardous Materials Sites within and adjacent to the Baylands Specific Plan Area and Listed Pursuant to Government Code Section 65962.5....4.13-31
Table 4.13-3: Evaluation of Proposed Baylands Middle School Location in Relation to CCR Title 5, Section 14010 Environmental Safety Criteria....4.13-76
Table 4.14-1: Sea Level Rise Projections, in Feet....4.14-25
Table 4.14-2: Sources of Specific Plan Pollutants in Urban Runoff....4.14-49
Table 4.14-3: Typical Best Management Practices Sequencing and Options....4.14-53
Table 4.15-1: Nearby Active Faults....4.15-13
Table 4.16-1: Water Use Supplied by the City of Brisbane to the Area Proposed to Be Served by Cal Water (acre-feet per year)....4.16-6
Table 4.16-2: Existing and Projected Potable Water Demand for the Portions of Brisbane Proposed to Be Served by Cal Water....4.16-7
Table 4.16-3: Landfills and Processing Facilities Receiving Solid Waste from the City of Brisbane....4.16-15
Table 4.16-4: Projected Future Potable Water Demand for the Cal Water/South San Francisco District and Proposed Service Area Expansion....4.16-41
Table 4.16-5: Projected Normal Year Water Supply and Demand....4.16-42
Table 4.16-6: Projected Single Dry Year Water Supply and Demand with Implementation of the Bay-Delta Plan Amendment....4.16-43
Table 4.16-7: Projected Multiple Dry Years Water Supply and Demand with Implementation of the Bay-Delta Plan Amendment....4.16-44
Table 4.16-8: Summary of Baylands Water, Wastewater, Energy, and Telecommunications Utility Facilities Addressed in Impact UTL-2 and as Part of Overall Baylands Development....4.16-50
Table 4.16-9: Daily Construction Waste Generation Estimates....4.16-53
Table 4.16-10: Baylands Projected Weekly Solid Waste Generation....4.16-54
Table 4.17-1: Brisbane Police Department Calls for Service and Average Response Times, 2022....4.17-3
Table 4.17-2: Enrollment Data for Schools Serving Brisbane....4.17-6
Table 4.17-3: Baylands Specific Plan Student Generation....4.17-25
Table 4.18-1: Existing Public Parks and Recreational Facilities Serving Brisbane....4.18-4
Table 4.18-2: Baylands Specific Plan Open Space/Open Area and Park Areas....4.18-21
Table 4.18-3: Proposed Timing of Baylands Open Space/Area and Park Improvements....4.18-24

Table 4.18-4: Phasing of Park Acreage per 1,000 Population....4.18-25
Table 4.21-1: Program EIR Land Use and Planning Policy Mitigation Measures....4.21-2
Table 4.21-2: Program EIR Aesthetic and Visual Resources Mitigation Measures....4.21-4
Table 4.21-3: Program EIR Biological Resources Mitigation Measures....4.21-12
Table 4.21-4: Program EIR Cultural Resources and Tribal Cultural Resources Mitigation Measures....4.21-46
Table 4.21-5: Program EIR Transportation Mitigation Measures....4.21-53
Table 4.21-6: Program EIR Air Quality Mitigation Measures....4.21-62
Table 4.21-7: Program EIR Energy Resources Mitigation Measures....4.21-70
Table 4.21-8: Program EIR Noise and Vibration Mitigation Measures....4.21-72
Table 4.21-9: ~~Comparison of~~ Program EIR ~~and Baylands Development EIR~~ Hazards and Hazardous Materials ~~Significance Conclusions~~ Mitigation Measures....4.21-85
Table 4.21-10: Program EIR Hydrology and Water Quality Mitigation Measures....4.21-95
Table 4.21-11: Program EIR Geology, Soils, and Seismicity Mitigation Measures....4.21-103
Table 4.21-12: Program EIR Utilities, Service Systems, and Water Supply Mitigation Measures....4.21-107
Table 4.21-13: Program EIR Public Services and Facilities Measures....4.21-108
Table 6-1: Baylands Specific Plan Supportable Retail Square Footage by Type....6-4
Table 6-2: Water Use Currently Supplied by the City of Brisbane to the Area Proposed to Be Served by Cal Water (million gallons per year)....6-5
Table 6-3: Projected Normal Year Water Supply and Demand with and without the Proposed Cal Water Service Area Expansion (million gallons per year)....6-5
Table 6-4: Projected Single Dry Year Water Supply and Demand with and without the Proposed Cal Water Service Area Expansion....6-6
Table 6-5: Projected Multiple Dry Year Water Supply and Demand with and without the Proposed Cal Water Service Area Expansion....6-7
Table 7-1: Household and Employment Projections used in Cumulative Impact Analyses....7-6
Table 7-2: Cumulative Projects List....7-8
Table 7-3: Geographic Context and Methodology for Analysis of Cumulative Land Use and Planning Policy Impacts....7-20
Table 7-4: Geographic Context and Methodology for Analysis of Cumulative Population and Housing Impacts....7-25
Table 7-5: Summary of Cumulative Project Retail Space and Retail Demand Generators within the Baylands Retail Market Area....7-29
Table 7-6: Baylands and Cumulative Retail Market Area Demand Capture Rate....7-29
Table 7-7: Geographic Context and Methodology for Analysis of Cumulative Aesthetics and Visual Resource Impacts....7-33
Table 7-8: Geographic Context and Methodology for Analysis of Cumulative Biological Resources Impacts....7-38
Table 7-9: Projected Land Use Growth within San Francisco and San Mateo County Wetland Areas (in acres)....7-41
Table 7-10: Geographic Context and Methodology for Analysis of Cumulative Cultural Resources and Tribal Cultural Resources Impacts....7-44
Table 7-11: Geographic Context and Methodology for Analysis of Cumulative Transportation Impacts....7-47
Table 7-12: Effect of the Baylands Specific Plan on Regional Vehicle Miles Traveled....7-50
Table 7-13: Geographic Context and Methodology for Analysis of Cumulative Air Quality Impacts....7-52

Table 7-14: Net Projected Change in Regional Mobile and Area Source Emissions (Tons per Year) 7-54
Table 7-15: Cumulative Incremental Increase in Lifetime Cancer Risk, Chronic Hazard Index, and Annual-Average $PM_{2.5}$ Concentration for Construction and Operations throughout Baylands Development 7-60
Table 7-16: Cumulative Incremental Increase in Lifetime Cancer Risk, Chronic Hazard Index, and Annual-Average $PM_{2.5}$ Concentration for Receptors at Baylands Buildout 7-61
Table 7-17: Geographic Context and Methodology for Analysis of Cumulative Energy Impacts 7-66
Table 7-18: Geographic Context and Methodology for Analysis of Cumulative Noise and Vibration Impacts 7-69
Table 7-19: Weekday Peak-Hour Traffic Noise Increases along Roadways in the Baylands Vicinity for Cumulative 2040 Plus Specific Plan Buildout 7-73
Table 7-20: Weekday Peak-Hour Traffic Noise Contribution of the Baylands Specific Plan to Cumulative Traffic Impacts 7-74
Table 7-21: Geographic Context for Analysis of Cumulative Hazards and Hazardous Materials Impacts 7-83
Table 7-22: Geographic Context and Methodology for Analysis of Cumulative Hydrology and Water Quality Impacts 7-91
Table 7-23: Geographic Context and Methodology for Analysis of Cumulative Biological Resources Impacts 7-101
Table 7-24: Geographic Context and Methodology for Analysis of Cumulative Utilities, Service Systems, and Water Supply Impacts 7-106
Table 7-25: Cumulative Water Supply and Demand (in million gallons per year) 7-108
Table 7-26: Geographic Context and Methodology for Analysis of Cumulative Public Services and Facilities Impacts 7-112
Table 7-27: Household and Employment Projections for City of Brisbane Buildout, Including Cumulative Projects 2–4 7-113
Table 7-28: Geographic Context and Methodology for Analysis of Cumulative Recreational Resources Impacts 7-117
Table 8-1: Alternatives Considered but Rejected 8-5
Table 8-2: Effect of the No Project-No Build Alternative on Brisbane's Ability to Provide Housing for All Economic Segments of the Community 8-15
Table 8-3: Evaluation of the No Project-No Build Alternative in Relation to Project Objectives 8-19
Table 8-4: Evaluation of the No Project-General Plan Buildout in Relation to Project Objectives 8-25
Table 8-5: Alternatives Analyzed in Addition to No Project Alternatives 8-26
Table 8-6: Summary Comparison of Impacts That Would Result from the Specific Plan and Alternatives 8-30
Table 8-7: Evaluation of Alternative 1, Proposed Density Development Around an Operating 45-Acre LMF in Relation to Project Objectives 8-58
Table 8-8: Evaluation of Alternative 2, Proposed Density, Balanced Commercial Development in Relation to Project Objectives 8-73
Table 8-9: Evaluation of Alternative 3, Proposed Density, Lower Maximum Building Height Alternative in Relation to Project Objectives 8-89
Table 8-10: Evaluation of Alternative 4, Reduced Commercial Development in Relation to Project Objectives 8-105

Table 8-11: Evaluation of Alternative 5, Reduced Density Development Around an Operating 45-Acre LMF in Relation to Project Objectives 8-122
Table 8-12: Evaluation of Alternative 6, Reduced Density, Balanced Commercial Development in Relation to Project Objectives 8-138
Table 8-13: Extent to Which Alternative 7, Reduced Density, Lower Maximum Building Height Development, Would Achieve Project Objectives 8-154
Table 8-14: Advantages and Disadvantages of EIR Alternatives....8-155
Table 9-1: Comparison of Development Proposed by the 2011 Specific Plan, GP-1-18/Measure JJ, and the 2025 Specific Plan 9-6
Table 9-2: Comparison of the Projects Analyzed in the Baylands Program EIR and Specific Plan EIR 9-15
Table 9-3: Program EIR and Subsequent EIR Land Use and Planning Policy Significance Conclusions 9-18
Table 9-4: Program EIR and Subsequent EIR Population and Housing Significance Conclusions 9-20
Table 9-5: Program EIR and Subsequent EIR Aesthetic and Visual Resources Significance Conclusions 9-23
Table 9-6: Program EIR and Subsequent EIR Biological Resources Significance Conclusions 9-26
Table 9-7: Program EIR and Subsequent EIR Cultural Resources and Tribal Cultural Resources Significance Conclusions 9-31
Table 9-8: Program EIR and Subsequent EIR Transportation Significance Conclusions 9-33
Table 9-9: Program EIR and Subsequent EIR Air Quality Significance Conclusions....9-38
Table 9-10: Program EIR and Subsequent EIR Greenhouse Gas Emissions Significance Conclusions 9-42
Table 9-11: Program EIR and Subsequent EIR Energy Resources Significance Conclusions 9-45
Table 9-12: Program EIR and Subsequent EIR Noise and Vibration Significance Conclusions 9-47
Table 9-13: Program EIR and Subsequent EIR Hazards and Hazardous Materials Significance Conclusions 9-52
Table 9-14: Program EIR and Subsequent EIR Hydrology and Water Quality Significance Conclusions 9-56
Table 9-15: Program EIR and Subsequent EIR Geology, Soils, and Seismicity Significance Conclusions 9-61
Table 9-16: Program EIR and Subsequent EIR Utilities, Service Systems, and Water Supply Significance Conclusions....9-67
Table 9-17: Program EIR and Subsequent EIR Public Services and Facilities Significance Conclusions 9-71
Table 9-18: Program EIR and Subsequent EIR Recreational Resources Significance Conclusions 9-73
Table 9-19: Program EIR and Subsequent EIR Wildland Fire Significance Conclusions 9-74

Intentionally Blank

EXECUTIVE SUMMARY

ES.1 INTRODUCTION

In accordance with California Environmental Quality Act ("CEQA") Guidelines Section 15123, this chapter provides a summary of:

(1) The Baylands Specific Plan ("Specific Plan") and other project components;

(2) Project objectives;

(3) The physical environmental impacts that would result from Baylands Specific Plan development, including their significance, mitigation measures to avoid or reduce significant impacts, and the significance of impacts after mitigation measures are implemented;

(4) City of Brisbane ("City") and other agency approvals needed to implement the Specific Plan, areas of controversy/issues to be resolved; and

(5) Alternatives analyzed in this environmental impact report ("EIR").

The City of Brisbane is the public agency that has the principal responsibility for approving Baylands development and is therefore the CEQA lead agency for the 2025 Baylands Specific Plan project.

ES.2 PROJECT LOCATION

The Baylands Specific Plan area ("Specific Plan area," "Baylands," "Baylands site," or "site") encompasses approximately 680.1 acres (558.3 acres of existing land area[2] and 121.8 acres of lagoon) within the City of Brisbane in northeast San Mateo County. The Baylands is located along the west side of San Francisco Bay adjacent to US Highway 101 ("US 101"), immediately south of the City and County of San Francisco (see **Figure ES-1**).

[2] Approximately 26 acres of existing land area are subject to sea level rise and will experience daily inundation by the year 2100, reducing the Baylands' land area to 532.3 acres.

Figure ES-1: Regional Location



SOURCE: Metis Environmental Group, 2024

ES.3 PROJECT DESCRIPTION

ES.3.1 SPECIFIC PLAN AND OTHER PROJECT COMPONENTS

The Baylands Specific Plan project consists of the following components:

- **General Plan Amendment**
  - Modify the Land Use Element to:
    - Adjust the northerly boundary of the Baylands Subarea to reflect the northern Specific Plan boundary area east of the Caltrain right-of-way.
    - Change the land use designation for the portion of the Baylands Specific Plan currently within the Beatty Subarea from Heavy Commercial to Baylands Planned Development, Residential Prohibited.

- Modify the Circulation Element to:
  - Realign Lagoon Avenue to provide direct access to the southbound US 101 freeway on- and off-ramps adjacent to the current terminus of Sierra Point Parkway;
  - Extend Sierra Point Parkway from its current terminus at the southbound US 101 freeway ramps north to Geneva Avenue;
  - Reflect proposed Baylands roadways on the Circulation Element Figure C-3, *Proposed Circulation Improvements*;
  - Designate the Geneva Avenue extension through the Baylands as a Regional Arterial; and
  - Add "Green Shared Street" as a roadway type.

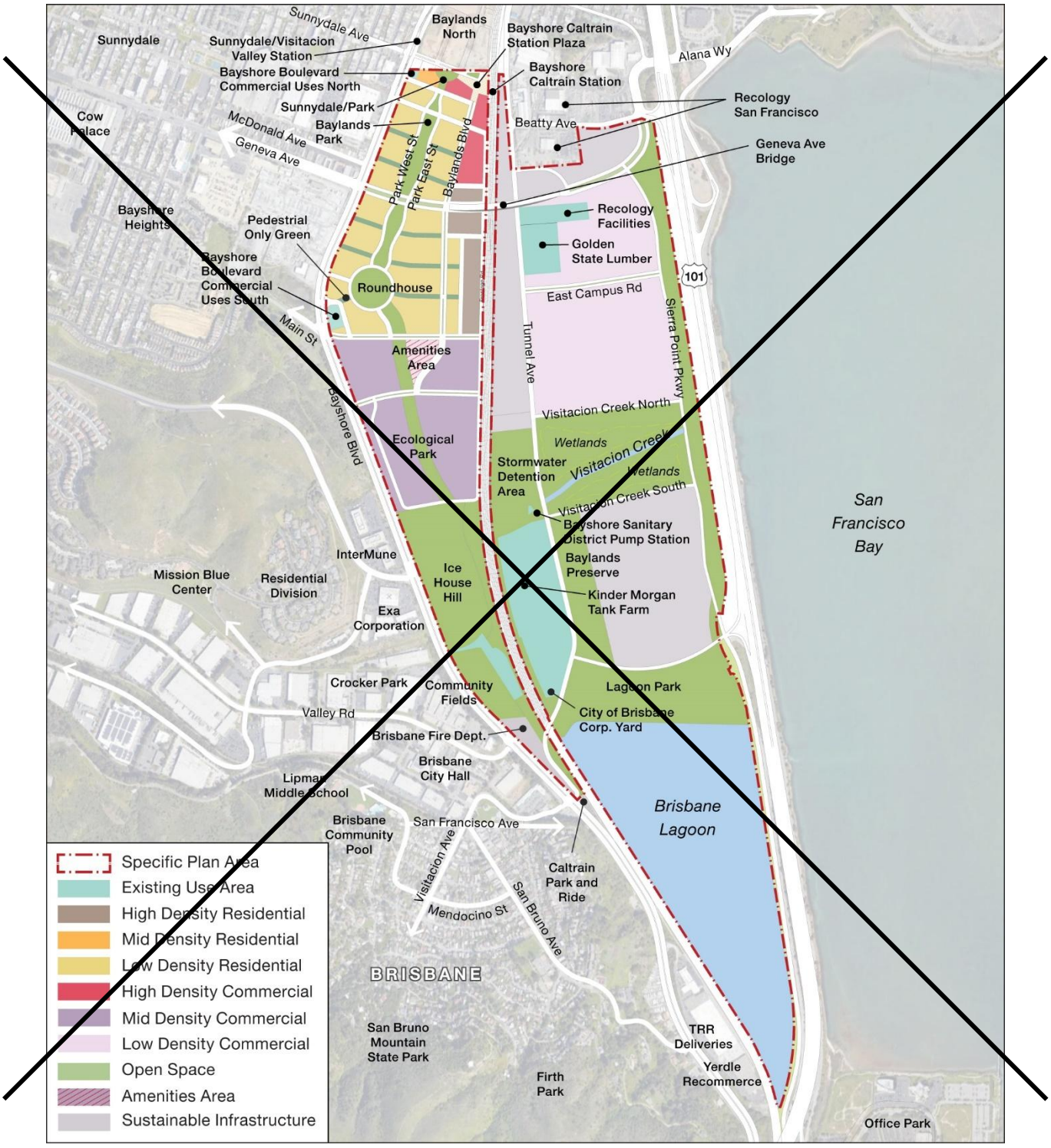
- **Specific Plan**

  The applicant, Sunquest Properties Inc. ("Sunquest") and its development manager, Baylands Development Inc. ("BDI"), collectively referred to as the "applicant," are proposing the Specific Plan.

  - The Specific Plan provides for development of 2,200 residential units clustered in the northwestern portion of the site in proximity to the Bayshore Caltrain station; 6.5 million square feet of commercial, office, retail, conference, life science, and office campus uses; 500,000 square feet of hotel use (approximately 800 rooms); a grade 6–8 middle school; and open space/open area, parks, and trails (see **Figure ES-2**, **Table ES-1a**, and **Table ES-1b**).
  - The Specific Plan also includes extensive water, recycled water, sewer, drainage, electrical, and other utilities improvements.
  - Approximately 157 acres of the site's 532.3-acre Year 2100 land area (29.5 percent) would be devoted to conservation and outdoor recreation.
  - The land use character in the northern portion of the Baylands would be transit-oriented with the highest intensity development, including residential uses combined with a mix of retail, commercial, a major office cluster, hotels, and entertainment uses. The primary focus in the west central portion of the site around the historic Roundhouse, which is to be restored for adaptive reuse, would be on lower density housing, a middle school, and campus-style office development. Lower density commercial office and infrastructure uses would be provided within the eastern portion of the site.

Figure ES-2: Proposed Land Use





SOURCE: The Baylands Specific Plan, 2025.

Table ES-1a: Proposed Land Use Program by Acreage

Land Use	Area West of the Caltrain Right-of-Way (in acres)[a]	Area East of the Caltrain Right-of-Way (in acres)[a]	Specific Plan Total
Land Area			
Residential	52.8	0.0	**52.8**
Commercial	48.8	78.3	**127.1**
Amenities Area	2.6	0.0	**2.6**
Existing Use Areas[b]	5.8[c]	32.5[d]	**38.3**
Open Space/Open Area	59.4	97.6	**157.0**
Sustainable Infrastructure	0.0	90.8	**90.8**
Roadway Rights-of-Way	37.4	26.3	**63.7**
Subtotal	*206.8*	*325.5*	***532.3***
Water			
Brisbane Lagoon	0.0	121.8	**121.8**
Existing land area that will be inundated on a daily basis due to Sea Level Rise by 2100	0.0	26.0	**26.0**
Subtotal	*0.0*	*147.8*	*147.8*
TOTAL	**206.8**	**473.3**	**680.1**

SOURCES: The Baylands Specific Plan, 2025; City of Brisbane 2024.

NOTES:

a. Acreages are based on Year 2100 land area following approximately 83 inches of sea level rise.
b. Represents lands not owned by the applicant.
c. Includes Machinery & Equipment building (2.2 acres) and existing fire station site (3.6 acres).
d. Includes Recology Facilities (3.6 acres), Golden State Lumber (5.3 acres), Bayshore Sanitation Pump Station (0.1 acres), and Kinder Morgan Tank Farm/City Corporation Yard site (23.5 acres).

Table ES-1b: Land Use Program by Dwelling Units and Building Square Footage

	Maximum Permitted		
	Dwelling Units	**Commercial Building Area (in square feet)**	**Hotel Building Area (in square feet)**
West of the Caltrain Right-of-Way	2,200	4,000,000	500,000
East of the Caltrain Right-of-Way	—	2,500,000	—
TOTAL	**2,200**	**6,500,000**	**500,000**

NOTES: The Specific Plan permits a portion of the maximum permitted 6.5 million square feet of commercial use to be located within areas designated residential in the form of:

- "**Active Ground Floor**" (AGF) uses including retail, restaurants, commercial services, offices, and public/semi-public uses permitted along specified street frontages within Low, Mid, and High-Density Residential areas. Active Ground Floor commercial uses are limited to 25,000 square feet of space within the Bayshore District.
- An unspecified amount of commercial and public/semipublic uses are permitted as "**Residential Flex Space**" (RFS) on the ground floor of residential units within Low-Density Residential areas where AGF is not allowed or required.

- **Bayshore Mobility Plan.** The primary purpose of this plan, which is being proposed by the City of Brisbane, is to enhance mobility for Brisbane residents and businesses by implementing a "road diet" along Bayshore Boulevard. The Mobility Plan proposes reducing the number of travel lanes along Bayshore Boulevard from four lanes (two in each direction) to two lanes (one in each direction) south of Geneva Avenue, along with providing a median, turn pockets, and a multi-use pathway and bicycle facilities along the corridor within the City of Brisbane.
- **Establish a second school for the Bayshore School District.** The Bayshore School District's Bayshore School currently serves grades pre-kindergarten (PK) through grade 8. To accommodate new students from the Baylands, the Bayshore School District would establish a new grade 6–8 middle school within the Baylands and convert the existing grade PK–8 Bayshore School to a grade PK–5 elementary school.
- **Establish the California Water Service Company (Cal Water) as the water agency for the Baylands, Sierra Point, and Beatty areas within the City of Brisbane.** By establishing Cal Water as the water agency for the Baylands, Sierra Point, and Beatty areas, an adequate water supply would become available for buildout of the Baylands Specific Plan, the Sierra Point and Beatty areas, and the balance of the City of Brisbane. In exchange for the provision of potable water supply by Cal Water, the proposed Baylands water recycling facility, which would be owned and operated by Cal Water, would provide up to 0.43 million gallons per day of recycled water for irrigation purposes ~~to~~ for Cal Water ~~for~~ to use within its South San Francisco District as well as within the Sierra Point subarea of Brisbane.
- **Relocate Brisbane's existing Fire Station No. 81 and establish a second fire station within the Baylands.** Brisbane's existing Fire Station No. 81 would be relocated from its existing site at 3445 Bayshore Boulevard to a new 2-story, 10,000-square-foot facility at 140 Valley Drive. The existing Fire Station No. 81 site would be used for firefighter training once the new station is operational. The relocated Station No. 81 would house the existing Engine Company No. 81 and temporarily house a new ladder truck company until such time as a new fire station within the Baylands would be established. When completed, the new Baylands station would house the ladder truck company and a squad.[3]

[3] "Squad" refers to a specialized company whose primary focus may be suppression but carry specialized equipment and are trained to perform hazmat, rescue, and other special functions.

ES.3.2 PROJECT OBJECTIVES

Objectives of the 2025 Specific Plan project, including its underlying purpose, are presented below, pursuant to CEQA Guidelines Section 15124(b), which requires an EIR to include a "statement of objectives sought by the proposed project." As noted in CEQA Guidelines Section 15124(b), a "clearly written statement of objectives will help the lead agency develop a reasonable range of alternatives to evaluate in the EIR and will aid the decision makers in preparing findings."

The **underlying purpose of the Baylands Specific Plan** and the development it permits is to provide for the productive reuse of this brownfield site in a manner that eliminates ongoing ecological damage and ensures the safety of all who will use the Baylands.

Project objectives for the Baylands are to:

- Implement the City's Housing Element by providing a mix of housing types, sizes, and densities that contributes to local and regional housing needs for all economic segments of the community, as well as for families and individuals of all ages and physical abilities.
- Implement the Brisbane General Plan, including General Plan Amendments GP-1-18 (Measure JJ) and GP-1-19.
- Preserve and enhance the site's natural resources and historic features within a system of permanent open space that:
    - Restores, and enhances wetlands and natural habitats within the Baylands;
    - Promotes visual connectivity between the Baylands, San Bruno Mountain, and San Francisco Bay;
    - Adapts to climate change and sea level rise; and
    - Provides a range of recreational opportunities and open space experiences for Baylands residents and workers, as well as for the larger Brisbane community.
- Enhance Brisbane's economic vitality by ensuring that Baylands development will be revenue positive for the City.
- Establish the Baylands as a leading model of sustainable development consistent with the principles of the City's Sustainability Framework for the Baylands.
- Attract office-based employment to the Baylands that provides a broad range of high-paying jobs as well as training and advancement opportunities for the community's young adults.
- Enable residents, workers, and visitors to be less dependent on cars.

ES.4 ANTICIPATED DISCRETIONARY ACTIONS AND APPROVALS

ES.4.1 APPROVALS REQUESTED FROM THE CITY OF BRISBANE

Baylands development would require several approvals from the City of Brisbane, including:

- **General Plan Land Use Element Amendment** to:
    - Adjust the northerly boundary of the Baylands Subarea to reflect the northern boundary of the Specific Plan area east of the Caltrain right-of-way and thereby place the entirety of the Specific Plan area within the Baylands Subarea.
- **General Plan Circulation Element Amendment** to:
    - Realign Lagoon Avenue to provide direct access to the southbound US 101 freeway on- and off-ramps adjacent to the current terminus of Sierra Point Parkway;
    - Extend Sierra Point Parkway from its current terminus at the US 101 freeway on- and off-ramps north to Geneva Avenue;
    - Add Baylands roadways to the circulation map; and
    - Add a new roadway type, "Green Local Street."
- **Approval of the Baylands Specific Plan**, along with:
    - **Change of Zone** from Commercial Mixed-Use (C-1), Marsh Lagoon Bayfront (MLB), Manufacturing (M-1) to Baylands Specific Plan.
    - **Amendments to Title 17, Zoning, of the Brisbane Municipal Code** to establish the land use regulations and development standards set forth in the Baylands Specific Plan as the regulatory authority governing development within the Baylands Specific Plan area.
    - **Development Agreement** with the City of Brisbane specifying terms and conditions for Baylands development.

ES.4.2 APPROVALS AND PERMITS REQUIRED FROM RESPONSIBLE AND TRUSTEE AGENCIES

In addition to City approvals, Baylands development would require permits, authorizations, or other approvals from the following state, regional and local public agencies other than the City of Brisbane.

- City of Brisbane and California Water Service Company (Cal Water) agreement to provide water service for the Baylands, Sierra Point, and Beatty Subareas would require approvals from the following state, regional and local public agencies.
    - Approval by the San Mateo County Local Agency Formation Commission to identify Cal Water rather than the City of Brisbane as the water service agency for the Baylands and Sierra Point Subareas.
    - Approval by the California and San Francisco Public Utilities Commissions for Cal Water to expand its service area to include the Baylands and Sierra Point areas.
    - Approval by the Regional Water Quality Control Board and the San Francisco Public Utilities Commissions of a discharge permit for the Baylands Recycled Water Facility.
    - Water supply permit amendment from the State Water Resources Control Board, Division of Drinking Water Santa Clara District.
- Agreements to coordinate and implement roadway and other transportation improvements and services within and adjacent to the Baylands Specific Plan area between the City of Brisbane and the City and County of San Francisco, San Francisco County Transportation Authority, San Mateo Congestion Management Agency, San Mateo County Transit District, Caltrans, and the City of Daly City.
- Approvals of requests by developers of the Baylands for habitat, recreational improvements, and/or roadway bridge improvements within:
    - The 100-foot shoreline band along Visitacion Creek and the Brisbane Lagoon (Bay Conservation and Development Commission [BCDC]); and
    - Filled and unfilled tidelands and submerged lands sold into private ownership by the State Lands Commission that remain submerged (State Lands Commission).
- Lease(s) for any habitat or recreational improvements within the Guadalupe Canal (State Lands Commission) within those portions of the Baylands subject to State Lands Commission jurisdiction.

- Approval of requests by developers of the Baylands for infilling of existing rip rap lining the Brisbane Lagoon (BCDC, Regional Water Quality Control Board [RWQCB], State Lands Commission, US Army Corps of Engineers).
- Water quality certification, NPDES permit, and waste discharge requirement compliance for future Baylands development (RWQCB).
- Incidental Take Permit, if necessary, for Baylands development affecting special-status species (CDFW).
- Streambed Alteration Agreement (CDFW) and Section 404 permit (Corps of Engineers) for activities in or around Visitacion Creek as part of landfill closure requirements of the RWQCB.
- Bay Trail Review (Association of Bay Area Governments) requested by future developers of the Baylands.
- Air quality permits (BAAQMD) requested by future developers of and specific uses within the Baylands requiring such permits.
- Approval for construction of the Geneva Avenue bridge crossing over the existing Caltrain right-of-way (California Public Utilities Commission).
- Approval for construction of an electric powered conveyor system over the existing Caltrain right-of-way to move soil from the eastern to the western portion of the Baylands in lieu of soil movement via truck (California Public Utilities Commission).
- Approval of utility-scale battery storage facility requested by developers of the Baylands (California Independent System Operator).
- Approval for development of an electrical substation, along with electrical facilities undergrounding of existing overhead electrical lines within the Baylands, construction of new underground electrical facilities to serve new development, connections of facilities to the existing Pacific Gas and Electric (PG&E) Martin Substation, and improvements within the Martin Substation (California Public Utilities Commission) as would be requested by PG&E.
- Encroachment permits for construction activities that may need to occur within the California Department of Transportation right-of-way (Caltrans).
- Encroachment permits should any construction be required within the right-of-way owned by the Peninsula Corridor Joint Powers Board (Caltrain).
- Required approvals for location, design, and construction of a middle school to serve Baylands students (State of California and Bayshore School District).

ES.5 ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

ES.5.1 SIGNIFICANT UNAVOIDABLE IMPACTS

This EIR identifies the following Significant Unavoidable impacts that would result from implementation of the proposed Specific Plan.

- Impact AQ-1: Emissions of Criteria Air Pollutants for which the Basin is in Nonattainment
- ~~Impact GHG-1: Specific Plan Area Greenhouse Gas Emissions~~
- Impact NOI-1: Temporary Increase in Ambient Noise Levels during Construction
- Impact NOI-2: Permanent Increase in Ambient Noise Levels from Stationary Sources
- Impact NOI-3: Permanent Increase in Ambient Noise Levels along Roadways

ES.5.2 IMPACTS FOUND NOT TO BE SIGNIFICANT

The analyses undertaken during preparation of this EIR determined that no impacts would result in relation to the following.

a. Agricultural and Forestry Resources

The Baylands does not contain any Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, nor does such land exist within the City of Brisbane. In addition, no forestry resources occur on or in the vicinity of the Baylands or within the City of Brisbane.

The Baylands and adjacent lands are designated as "Urban and Built-up Land" according to the California Department of Conservation, California Important Farmland Finder map system (2016). There are no lands within or adjacent to the Baylands that would meet the definition of timberland or could qualify for establishment of a timberland preserve.

The Baylands site is not designated or zoned for agricultural or forestry use by the City of Brisbane, nor is the site subject to a Williamson Act contract.

b. Mineral Resources

Neither the City's General Plan nor the State of California have identified the Brisbane Baylands or any surrounding land as a potential location for extraction or management of mineral resources of state-wide, regional, or local significance. Therefore, no impacts on mineral resources would result from the Baylands Specific Plan.

ES.5.3 ENVIRONMENTAL IMPACTS

a. Land Use and Planning

Impact LUP-1: Physically Divide an Existing Community

Less than Significant with Mitigation Incorporated – Construction

Less than Significant – Operations

Hauling soil from the eastern to the western portion of the Baylands along Tunnel Avenue and other two-lane roadways would result in traffic delays and reduced connectivity, particularly if queueing of haul trucks spills out onto public roadways adjacent to sites being graded. Construction activities within roadway rights-of-way would be required to meet applicable requirements for issuance of encroachment permits that would minimize disruptions and ensure traffic safety.

The planned realignment of Lagoon Road would result in temporary partial or complete closures of Lagoon Road and/or Sierra Point Parkway, which would be reduced to less than significant through required construction management plans and implementation of EIR mitigation measures. No new physical barriers to mobility would be constructed, nor would existing connectivity be substantially diminished as the result of construction traffic. The Specific Plan would enhance mobility by extending Geneva Avenue to the US 101 freeway providing and providing safe turning movements for Brisbane residents and businesses onto and from Bayshore Boulevard along with enhanced pedestrian and bicycle facilities.

Implementation of Mitigation Measures MM LUP-1a and MM LUP-1b would maintain connectivity (one through lane in each direction) along Lagoon Road between Tunnel Avenue and Sierra Point Parkway, as well as Sierra Point Parkway between the US 101 southbound and northbound on- and off-ramps at all times throughout Baylands construction, thereby reducing construction impacts to less than significant. In addition, Mitigation Measure AQ-1f would require installation of a conveyor system to move soils from the eastern to the western portion of the Baylands in lieu of truck hauling.

Program EIR Mitigation Measures

MM LUP-1a: Construction Management Plans (Program EIR Mitigation Measure 4.N-12). In conjunction with all construction permits, site-specific development projects shall develop, submit for City review and approval, and implement Construction Management Plans that specify measures that would reduce impacts on motor

vehicle, bicycle, pedestrian, and transit circulation. Construction Management Plans shall include, but not necessarily be limited to, the following:

- Location of construction staging areas for materials, equipment, and vehicles.
- Notification procedures for adjacent property owners and public safety personnel regarding timing of major deliveries, detours, and lane closures.
- Identification of haul routes for movement of construction vehicles that would minimize impacts on vehicular and pedestrian traffic, circulation, and safety; and provision for monitoring surface streets used for haul routes so that any damage and debris attributable to the haul trucks can be identified and corrected by the project applicant.
- Provisions for removal of trash generated by construction activity.
- A process for responding to, and tracking, complaints pertaining to construction activity, including identifying an on-site complaint manager.

Additional Mitigation Measures

MM LUP-1b: Maintain Connectivity along Area Roadways during Construction. The Construction Management Plan required by Mitigation Measure MM LUP-1a for City approval in compliance with Brisbane Municipal Code Chapter 12.04 shall include provisions to meet the following performance standards:

- Access to the following facilities shall remain open all times throughout Baylands construction:
  - Recology solid waste management facilities;
  - Golden State Lumber Company;
  - Kinder Morgan tank farm;
  - City of Brisbane Corporation Yard; and
  - Bayshore Sanitary District pump station.
- Turning movements at existing intersections shall be maintained at all times during construction. If existing crosswalks and bus stops cannot feasibly be available for use at all times during construction, appropriate alternative facilities shall be provided.
- Site grading and each site-specific development project shall provide sufficient construction staging in appropriate locations such that construction staging, including construction vehicles or materials, will

not block bicycle; pedestrian facilities, or transit facilities; roadway travel lanes; or parking garage access.

- The identification of haul routes for movement of construction vehicles shall be designed to minimize impacts on vehicular and pedestrian traffic, circulation, and safety through use of arterials or designated truck routes, avoiding travel on local or collector roadways through residential neighborhoods, such as Blanken Avenue, and provision of traffic control measures at construction driveways as required through Brisbane Municipal Code Chapter 12.04.
- Identify the routes that construction vehicles will use for the delivery of construction materials (e.g., lumber, tiles, piping, windows) to access the site, including any needed traffic controls and detours.
- Allow hauling or transport of oversize loads between 9:00 a.m. and 3:00 p.m. only, Monday through Friday, unless approved otherwise by the City Engineer.
- Require all construction-related parking and staging of vehicles to be kept out of the adjacent public roadways and instead be kept on site.

Impact LUP-2: Conflict with Adopted Plans, Policies, or Regulations

Less than Significant with Mitigation Incorporated

~~t~~The Baylands Specific Plan would be inconsistent with the following General Plan Policies and Programs:

- **General Plan Policy LU.11 and Program BL.3b** in relation to views of San Francisco Bay, which causes a significant Aesthetics and Visual Resources Impact. Mitigation Measures MM AES-1a and MM AES-1b would reduce the impact to less than significant and therefore achieve consistency with this policy and program.
- **Policy 176** in relation to noise from pile driving operations required for constructing buildings (Impact NOI-1). Mitigation Measures MM NOI-1a through MM NOI-1e would minimize impacts associated with pile driving by requiring alternative methods for construction of pile foundations where geologic conditions permit.

The Specific Plan would also be inconsistent with the Metropolitan Transportation Commission's (MTC) Transit-Oriented Communities Policy (Resolution No. 4530) because it would permit (1) residential development types with an average density below 25 units per acre and not require sufficient affordable housing within ½ mile of the Bayshore Caltrain station, and (2) lower density housing to exceed the maximum parking space standards included in

Resolution No. 4530, and not requiring a minimum average floor area ration of 2.0 within ½ mile of the Bayshore Caltrain station.

These inconsistencies would exacerbate the Specific Plan's significant air quality and GHG emissions impacts.

Mitigation Measures

MM LUP-2: Consistency with General Plan Policy C.41 and the Metropolitan Transportation Commission's Transit-Oriented Communities Policy (Resolution No. 4530). The Specific Plan shall be revised to include the following requirements:

- **Residential Development Intensity.** Residential development within one-half mile of the Caltrain Bayshore Station shall average a minimum of 25 dwelling units per acre ~~as measured on a block-by-block basis~~.
- **Housing Affordability.** A minimum of 15 percent of dwelling units within one-half mile of the Caltrain Bayshore Station shall be deed-restricted affordable to low-income households.
- **Maximum Parking Ratios.** The maximum per unit parking ratio for Multi-Family Low, Townhome, and Duplex/Single Family housing types shall be reduced from 1.25 to 1.0 spaces per unit.
- **Commercial Office Development Intensity.** Commercial office development within one-half mile of the Caltrain Bayshore Station shall have an average minimum FAR of 2.0 ~~as measured on a block-by-block basis~~.
- **Bicycle Parking.** A minimum of one secure bicycle parking space per multi-family dwelling unit.

The Specific Plan shall also be revised to include a system to track the density and intensity of site-specific residential and commercial development projects along with mechanisms to ensure consistency with:

- General Plan policies setting the permitted amount of residential, commercial, and hotel developments; and
- MTC's Transit-Oriented Communities Policy (Resolution No. 4530).

b. Population and Housing

Impact POP-1: Inducement of Substantial Unplanned Growth

Less than Significant

Baylands development would be consistent with the Brisbane General Plan (1,800 to 2,200 dwelling units, 6.5 million square feet of commercial use, and an additional 500,000 square feet of hotel use). Thus, direct population and employment growth associated with the Baylands Specific Plan would constitute *planned* rather than *unplanned* growth.

Although the Baylands Specific Plan would remove water supply as an obstacle to growth within the City of Brisbane, the additional water supply available to the City would be used to accommodate General Plan buildout. In addition, recycled water would be delivered to existing uses within South San Francisco and the resulting expanded potable water supply would be used to reduce projected dry year deficits for projected future development. Thus, the resulting growth would be considered to be *planned* rather than *unplanned* growth. Thus, the impact is less than significant.

Impact POP-2: Need for Replacement Housing or Commercial/Industrial Buildings

Less than Significant

Physical environmental impacts related to displacement of housing and business will be less than significant for the following reasons:

- There is no existing housing within the Baylands.
- All off-site infrastructure associated with Baylands development will be located within existing roadway rights-of-way.
- Although approximately 231,400 square feet of existing industrial businesses within the Baylands and the existing business at 140 Valley Drive would be displaced as of November 2022 by Baylands grading and development, there is more than 2.6 million square feet of vacant industrial space within Brisbane and adjacent communities and more than 6.3 million square feet of vacant industrial space within San Francisco and San Mateo counties. As a result, displacement of industrial businesses from the Baylands would not necessitate new construction of replacement industrial development for which significant physical environmental impacts would occur.
- Operational impacts of businesses relocating from the Baylands would continue to be generated at their new locations rather than within the Baylands. Impacts of the 231,400 square feet of existing industrial businesses within the Baylands and at 140 Valley Drive that would relocate are small in relation to the environmental baseline for San Francisco and San Mateo counties and would be spread out into various different locations.

- Existing grades and roadway access to business adjacent to or completely surrounded by the Specific Plan area would be maintained at all times through Baylands development such that there would be no displacement of these existing businesses and replacement development is not required.
- Baylands development would displace Golden State Lumber's laydown area and its ability to receive and ship lumber by rail, adversely affecting its business operations, the resulting adverse effects would be economic and therefore does not constitute a physical environmental effect as defined by CEQA. Such adverse economic effects would be addressed through the Baylands' planning review process.

Impact POP-3: Housing for All Economic Segments of the Community

Less than Significant

The Specific Plan provides sufficient land for housing at appropriate densities to meet Housing Element-quantified objectives for the production of housing to meet the needs of all economic segments of the community as outlined in the City's certified 2023–2031 Housing Element. The Baylands Specific Plan would therefore have a less than significant impact related to directly or indirectly inhibiting the City's ability to provide housing for all economic segments of the community.

Impact POP-4: Urban Decay

Less than Significant

Baylands development would not result in urban decay and impacts would be less than significant for the following reasons:

- Development of the Specific Plan will occur in phases and be driven by market conditions and tenant demand. To the extent that demand for Baylands office/life science buildings is less robust than expected, then construction would slow down to better align with demand. This would mean that development timing of later phases would be pushed further out into the future.

  The existing inventory of space in Brisbane and South San Francisco is relatively new, with many buildings less than 20 to 25 years old. Additionally, the market has a highly concentrated ownership pattern, with large, experienced companies controlling most of the space. This suggests that these landlords have the wherewithal to successfully maintain, market, and re-tenant large vacancies should tenant movement to the Baylands occur.
- Baylands residents, employees, and hotel guests would generate approximately $265.8 million more in retail sales at full buildout than retail sales at Baylands businesses. Thus, even if Baylands development would divert some sales away from existing retailers,

Specific Plan development would generate substantially greater new retail sales to backfill any diverted sales.

c. Aesthetic Resources

Impact AES-1: Adverse Effects on a Scenic Vista

Less than Significant with Mitigation Incorporated

Baylands development would impede scenic views of San Francisco Bay, Brisbane Lagoon, and San Bruno Mountain from several public viewpoints due to the concentration of development within the western portion of the site and the number of taller (20+ story) buildings proposed along the Caltrain right-of-way.

Mitigation Measures MM AES-1a and MM AES-1b would reduce impacts resulting from the proposed 20+ story towers along the west side of the Caltrain right-of-way, which partially block views of the Bay and San Bruno Mountain. These measures would limit the height of buildings within the western portion of the Baylands 12 stories (or 150 feet) for commercial buildings and 8 stories (or 100 feet) for residential buildings. Similarly, the significant visual impacts associated with the proposed buildings up to 100 feet in height east of the Caltrain right-of-way would be reduced with implementation of Mitigation Measure MM AES-1a, as development would be limited to 6 stories (80 feet) in height. The reduction in building height would allow the public to view more of San Bruno Mountain and its ridgelines, the San Francisco Bay, and the Brisbane Lagoon. Further, Mitigation Measure MM AES-1c would reduce significant impacts by providing view corridors for the public to view scenic resources between Baylands buildings. These view corridors would break up solid masses of buildings such that public views of scenic resources would not be substantially or completely blocked.

Program EIR Mitigation Measures

MM AES-1a: Maintain Views of Scenic Resources (Program EIR Mitigation Measure 4.A-1a). Development within 350 feet of the eastern boundary of the Baylands Specific Plan area (US Highway 101) shall be designed to avoid blockage of views of the Bay shoreline by limiting the height of buildings within 350 feet of US Highway 101 to a maximum height of 80 feet based on the grading plan included in the Brisbane Baylands Infrastructure Plan (January 2023).

Additional Mitigation Measures

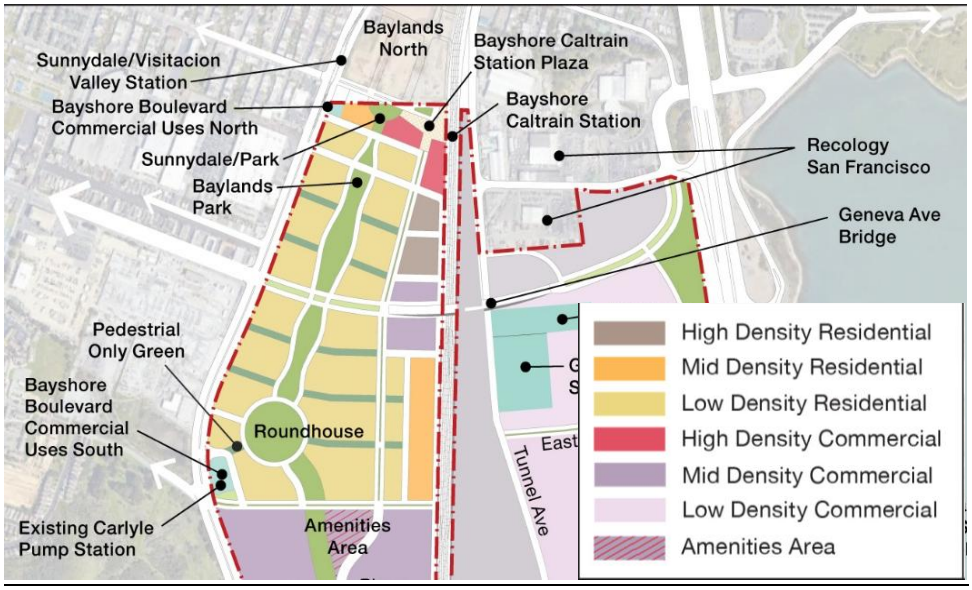
MM AES-1b: Additional Provisions to Maintain Views of Scenic Resources. To further reduce loss of scenic views of San Francisco Bay and San Bruno Mountain, ~~building heights within the area west of the Caltrain right-of-way shall be limited to no more than:~~ a maximum of four tower buildings in excess of 150 feet and no

greater than 270 feet in height (two commercial and two residential) shall be permitted.

- ~~12 stories (150 feet) for office buildings~~
- ~~8 stories (100 feet) for residential buildings~~

The Specific Plan shall be revised within the area west of the Caltrain right-of-way, north of Main Street to include four high-density blocks (two commercial and two residential) within which tower buildings no greater in height than 270 feet may be permitted as illustrated in Modified Specific Plan Figure 2.1, below.

Specific Plan Figure 2.1 Modified per Revised Mitigation Measure MM AES-1b



MM AES-1c: ~~**View Corridors**~~**Building Separation and Façade Breaks.** ~~The Specific Plan shall be revised to incorporate objective development standards intended to break up views of solid masses of buildings from Bayshore Boulevard and the US 101 freeway by providing for view corridors either through the Baylands or to internal open space areas/open areas such that the public would be able to view scenic resources including the San Bruno Mountain and its adjacent ridgelines, San Francisco Bay, the Brisbane Lagoon, and internal open space/open areas in between Baylands buildings.~~ Building breaks shall be provided along the Bayshore Boulevard and Sierra Point Parkway frontages to limit perceived building length along high visibility corridors. These building breaks shall provide a minimum 30-foot-wide break between building masses for residential and commercial buildings along these frontages. Building breaks shall be provided at grade and be open to sky. A minimum of 50 percent of the building

break area shall be landscaped. Building breaks may be provided via street, passageway, setback, or courtyard with a minimum depth of 40 feet.

These building breaks shall be provided such that:

- Continuous residential frontage, including individual and multiple abutting buildings, shall be a maximum of 250 feet in length.
- Commercial buildings shall be a maximum of 300 feet in length.
- Tower buildings shall be oriented so as to not place the longer façade of the building parallel to the Caltrain right-of-way.
- Vertical façade breaks shall be provided on all tower façades greater than 60 feet in length. Specific Plan design standards shall also provide for changes in building façade materials, colors, textures, and/or patterns.

Tower buildings shall be limited to one per High Density Residential and High Density Commercial block. Towers (residential floor plates that are more than 110 feet from ground level and commercial floor plates that are more than 150 feet from ground level) shall be subject to the following standards:

- Minimum setback increased from 3 feet for floor plated below 110 feet in height from ground level to 25 feet except along Frontage Road
- Maximum average floor plate size of 12,000 square feet
- Maximum diagonal dimension of 190 feet as measured along the longest dimension possible between two points on the floorplate

Impact AES-2: Physical Effects on Scenic Resources

Less than Significant with Mitigation Incorporated

Due to the lack of a designated (or eligible) scenic highway within view of the Baylands, development permitted by the proposed Specific Plan would not damage scenic resources within a state scenic highway corridor. Impacts would, therefore, be less than significant.

The Specific Plan provides for both preservation of and improvements to existing scenic resources within the site, including Icehouse Hill, Brisbane Lagoon, and Visitacion Creek. Habitat areas and wetlands within Visitacion Creek, on Icehouse Hill, and along the edges of Brisbane Lagoon would be restored and enhanced. Trails on Icehouse Hill would preserve habitat areas. While manufactured slopes would typically be no more than 6 to 10 feet high, newly constructed trails would be seen as long "ribbons" of bare ground. The combination of Mitigation Measure MM AES-2 Mitigation Measures MM BIO-1a through MM BIO-1c would

ensure that Icehouse Hill trails would minimize site grading, removal of vegetation and resulting visual impacts.

Mitigation Measures

MM AES-2: Design and Restoration of Manufactured Slopes on Icehouse Hill. Trails on Icehouse Hill shall be limited to the minimum necessary width for safe two-way travel (typically 36-inches wide with 60-inch wide passing areas approximately every 1,000 feet along the trail). Manufactured slopes constructed for trails on Icehouse Hill shall be revegetated with non-irrigated, non-invasive vegetation that is visually and biologically compatible with adjacent existing natural vegetation. Such revegetation shall use plant material of varying heights to create an undulating appearance.

Where manufactured slopes over 10 feet in height cannot be avoided, slopes shall be contoured or undulated to produce a naturalized appearance, unless such slope design would conflict with geotechnical recommendations approved by the City Engineer, and/or require higher slopes that would disturb sensitive vegetation.

Impact AES-3: Consistency with Visual Quality Policies and Programs

Less than Significant with Mitigation Incorporated

Specific Plan development would urbanize the Baylands with substantially greater development intensity and buildings that are taller, larger, and more abundant and closely spaced, including a row of 20+ story towers along the Caltrain rail line that would be the tallest buildings within Brisbane and adjacent developed areas. Baylands development would also impede scenic views of San Francisco Bay, Brisbane Lagoon, and San Bruno Mountain from several public viewpoints and present a solid mass of buildings, particularly at the intersection of Geneva Avenue and Bayshore Boulevard.

As documented in the discussion of Impact AES-1 and documented in **Table 4.5-2**, Baylands development would impede scenic views of San Francisco Bay, Brisbane Lagoon, and San Bruno Mountain from several public viewpoints and present a solid mass of buildings, particularly at the intersection of Geneva Avenue and Bayshore Boulevard. In the absence of specific screening requirements in the Specific Plan for facilities within the Sustainable Infrastructure area along the north side of Geneva Avenue, Specific Plan development could present a cluttered or unkept appearance at the entrance to the Baylands and City of Brisbane. Specific Plan design guidelines would permit development inconsistent with the standards of Municipal Code Section 17.42.040.

Mitigation Measures MM AES-1a through MM AES-1c, along with MM AES-3, would achieve consistency with visual quality-related policies and programs set forth in the Brisbane General Plan and Municipal Code, thereby attaining a complementary visual relationship between Baylands development and:

- Existing and planned development surrounding the Baylands;
- The area's overall topography;
- Brisbane Lagoon;
- San Bruno Mountain;
- San Francisco Bay; and
- Entrances to Central Brisbane.

This would be accomplished by reducing the height of the tallest buildings within the Baylands and providing view corridors for the public to view scenic resources and open space/open areas between buildings within the Baylands.

Mitigation Measure MM AES-3 would mitigate impacts related to a lack of screening of infrastructure facilities along the north side of Geneva Avenue by providing landscaping along this important roadway entry to the City, thereby attaining a complementary visual relationship between the Specific Plan and surrounding development as well as the area's overall topography.

Mitigation Measures

MM AES-3: **Visual screening of infrastructure along the north Side of Geneva Avenue.** The design of infrastructure facilities and westbound right-of-way along Geneva Avenue between the US 101 freeway and the Geneva Avenue bridge shall be provided with a combination of berms, decorative walls, and landscaping to screen views of infrastructure facilities along the north side of the roadway in accordance with the required findings for a design permit set forth in Brisbane Municipal Code Chapter 17.42.

Impact AES-4: Night Lighting

Less than Significant with Mitigation Incorporated

Specific Plan development would generate nighttime lighting over a broad area that is currently largely dark at night. Specific Plan Section 3.8 sets performance standards for Baylands to avoid light trespass.

Because Specific Plan Section 3.8 prohibits some but not all sources from having light emitted above 90 degrees, nighttime lighting would be permitted to be projected above the horizontal

plane from the bottom of the lamp, which would be inconsistent with Municipal Code Chapter 15.88 and contribute to sky glow. In addition, the Specific Plan does not provide limitations on the amount of outdoor lighting consistent with Municipal Code Section 15.88 and would therefore contribute to sky glow.

Mitigation Measure MM AES-4a requires that Baylands development comply with the dark night sky performance standards set forth in Threshold AES-4. Mitigation Measure MM AES-4b ensures compliance with Municipal Code Chapter 15.88, Dark Sky Ordinance, and additional requirements to reduce the adverse effects of nighttime lighting on the area's dark night sky. Together, these measures ensure compliance through a requirement for preparation and review of a photometric analysis and lighting plan for site-specific development projects prior to issuance of building permits.

Program EIR Mitigation Measures

MM AES-4a: Outdoor Lighting Standards (Program EIR Mitigation Measure 4.A-4a). All development within the Baylands site shall comply with the following lighting design standards in order to minimize Baylands development lighting:

- A master plan for street and parking lot lighting shall be approved by the City prior to final approval of design plans for roadways within the Brisbane portion of the Specific Plan area.
    - All streets within the Specific Plan area shall have uniform lighting standards with regard to style, colors, and materials in order to ensure consistency with design.
    - Parking lot lighting shall be of the same source of illumination as street lighting so as to ensure uniformity of night lighting color.
    - Due to their high energy efficiency, long life, and spectral characteristics, Narrow-Spectrum Amber LEDs shall be the preferred illumination source throughout the Brisbane portion of the Specific Plan area.
- A photometric analysis and lighting plan shall be prepared for each development project to demonstrate compliance with applicable nighttime lighting standards, requirements, and mitigation measures. The photometric analysis shall include an assessment of potential lighting impacts based on the height, location, light fixtures, direction, illumination intensity, and hours of operation. The lighting plan shall be submitted to the Community Development Department and City Engineer for final approval prior to approval of a building permit.

When reviewing illumination plans, the City will review the following factors to determine the level of illumination required.

- ***Purpose:*** The function and activities for the planned area;
- ***Safety:*** The level of comfort and security needed to be provided;
- ***Aesthetics:*** The overall appearance of proposed lighting with respect to the Baylands and surrounding community; and
- ***Impacts:*** The extent to which proposed lighting minimizes impacts on adjacent land uses, maintains the area's dark night sky, and conserves energy.

Additional Mitigation Measures

MM AES-4b: Sky Glow Prevention. Baylands development shall comply with the provisions of Brisbane Municipal Code Chapter 15.88 and the following additional requirements.

1. No site-specific development project within the Specific Plan area may be permitted to provide nighttime lighting that exceeds:
   a. 1.75 lumens per square foot of developed lot area within a residential parcel;
   b. 3.5 lumens per square foot of hardscape area within a commercial, amenities, public facility, or sustainable infrastructure parcel; or
   c. 0.35 lumens per square foot of trail or hardscape area within a park or open space area.
2. Luminaires emitting more than 1,000 lumens shall be fully shielded and emit no more than 5 percent of their total lumen output above 80 degrees from the bottom of the lamp.
3. The maximum luminous or illuminated surface area of any individual sign shall not exceed 100 square feet.
4. External illumination of monument and other signage shall be mounted above the sign and directed downward.

Impact AES-5: Daytime Glare

Less than Significant with Mitigation Incorporated

Baylands development would create new sources of substantial daytime glare, particularly in the early morning and late afternoon hours by requiring reflective building materials on building roofs as well as permitting reflective materials on building façades, thematic elements,

site and building identification signage, and public art installations. Glare generated by such reflective surfaces could be exacerbated if curved surfaces are provided.

Above-ground infrastructure could also include highly reflective stainless-steel and other metal piping and cladding on structures. Glare resulting from Baylands development could produce nuisance effects within residential areas; classrooms; and parks, trails, and playgrounds, as well as adversely affect motorists along US Highway 101, Geneva Avenue, and Bayshore Boulevard by impairing vision.

Implementation of Mitigation Measures MM AES-5a and MM AES-5b would minimize the reflectivity and area of reflective materials on building façades and other surfaces. Mitigation Measures MM AES-5a and MM AES-5b would also prevent building designs and materials that generate excess glare and heat generation at ground level, as well as minimize glare from above-ground infrastructure, signage, and outdoor public art installations. This impact would therefore be less than significant with mitigation incorporated.

Program EIR Mitigation Measures

MM AES-5a: Prevent Daytime Glare (Program EIR Mitigation Measure 4.A-4b). All building exteriors within the Baylands Specific Plan area shall be composed of textured and other non-reflective materials, including high-performance tinted non-mirrored glass. Any reflective materials on building exteriors that have a light reflectivity factor greater than 30 percent shall be positioned so as to not reflect daytime glare onto the US 101 freeway or onto existing residential communities in Brisbane and Visitacion Valley. Mirrored glass shall be prohibited.

Additional Mitigation Measures

MM AES-5b: Additional Daytime Glare Protection. In addition to the requirements of Mitigation Measure MM AES-5a, Specific Plan area development shall comply with the following design standards to minimize hazard and nuisance glare:

- Reflective materials on building exteriors, including roofs, that have a light reflectivity factor greater than 30 percent shall be limited to less than 25 percent of any given wall surface, and shall not be placed on roofs.
- Concave surfaces that can serve to concentrate reflective light shall be avoided.
- Reflective façade materials that slope back from the ground surface at less than a 90° angle and can reflect high angle sunlight along the ground surface shall be avoided.
- Stainless steel and other metal surfaces on buildings, above-ground infrastructure, signage, and outdoor public art installations shall use bare

or non-polished metal or be shaded or screened to avoid the generation of glare.

- Auxiliary structures, such as but not limited to gazebos, external ticket booths, bus shelters, and other free-standing structures, shall limit avoid transparent or highly reflective surfaces (e.g., glass, plexiglass).

d. Biological Resources

Impact BIO-1: Special Status Plants, Animals, and Habitats

Less than Significant with Mitigation Incorporated

The Baylands Specific Plan area and surrounding areas support habitat for special-status wildlife species and rare plants that would be impacted as part of Specific Plan development.

Rare Plants. The construction of trails on Icehouse Hill and an anticipated post-construction increase in recreation-related activities including equestrian uses would result in adverse effects on special status plants on Icehouse Hill.

Butterflies. The construction of trails and recreational facilities at Icehouse Hill, and planned management activities in this area have the potential to cause direct or indirect adverse effects on Callippe silverspot butterfly or Bay checkerspot butterfly host plants. Project activities, including general site clearing and grubbing in preparation for construction, have the potential to encounter large marble butterfly adults or larvae on weedy mustard plants that grow sporadically throughout the Specific Plan area. The butterfly does not have protected status; however, a recent petition to federally list the large marble butterfly could be adopted.

Nesting Birds. Grading or ground disturbance activities associated with site development have the potential to encounter protected nesting birds, particularly between February 1 to August 31. Construction activities within the Specific Plan area have the potential to impact nesting birds. Night lighting would not exceed the performance standards established in Section 4.5, Aesthetic and Visual Resources, and therefore would not have a significant direct or indirect impact on wildlife resources.

Mammals. Sensitive bats may be encountered during the demolition and deconstruction of on-site buildings or during tree and vegetation removal. The injury of sensitive bats or destruction of active maternity roosts constitute a significant impact.

Mitigation Measures MM BIO-1a, MM BIO-1b, and MM BIO-1c ensure that construction of trail and recreational improvements at Icehouse Hill, as well as habitat enhancement and management activities in this area, would survey for and avoid special-status plants, retain existing butterfly habitat, and maintain quality patches of nectar and host plants to support potential populations of Callippe silverspot and Bay checkerspot butterflies. Mitigation

Measure MM BIO-1d establishes appropriate surveys for nesting birds, buffer areas around active nests, and time restrictions for construction activities within buffer areas, thereby protecting nesting birds. Mitigation Measure MM BIO-1e would avoid direct mortality of roosting special-status bats and disturbance of maternity roosts or winter hibernacula. Mitigation Measures MM BIO-1f and MM BIO-1g provide performance standards for special-status plants and rare butterflies. Mitigation Measure BIO-1h would require focused surveys for the large marble butterfly to determine its presence and distribution in the Specific Plan area and avoid and mitigate impacts to this species should it gain federal or state listing.

Program EIR Mitigation Measures

MM BIO-1a: Special Status Plant Surveys at Icehouse Hill (Program EIR Mitigation Measure 4.C-1a). Prior to construction, or any other Baylands development-related ground disturbance activities on Icehouse Hill, the applicant shall conduct pre-construction presence/absence surveys for special-status plants. All biological surveys must be performed by a qualified biologist or botanist with demonstrated expertise in the subject matter and whose work is subject to City staff and/or city-contracted peer review. Survey results shall be submitted to the City for review and approval prior to the commencement of any ground-disturbing activities. The Baylands developer shall pay or reimburse the City for all costs associated with survey results and city-contracted peer review.

Initial surveys at Icehouse Hill shall be carried out in conjunction with surveys for endangered butterfly host plants described in EIR Appendix D, *Biological Resources Technical Report*. Surveys would be implemented to determine if a special-status plant species has colonized the site in the interim between the determination of baseline conditions for this EIR, and project initiation, as well as to provide site-specific direction for final trail routing and design to avoid sensitive plant species (see MM BIO-1b, Special-Status Plant Avoidance at Icehouse Hill, and MM BIO-1c, Rare Butterfly Surveys and Habitat Protection at Icehouse Hill.

Surveys shall be conducted in accordance with CNPS and CDFW rare plant survey guidelines and shall be conducted during the flowering period when each species is most readily identifiable.

In order to capture variability of special-status plant species distribution, three special-status plant surveys shall be conducted at two-week intervals during the appropriate flowering period (April to June), before commencement of any development activities on Icehouse Hill.

Any special-status plant populations shall be mapped in the field. If the presence of any special-status plant species is confirmed, a copy of the survey results shall

be forwarded to the CDFW, and Mitigation Measure BIO-1b shall be implemented.

Whether or not special-status plants are identified during surveys, the additional mitigation identified in MM BIO-1c, Rare Butterfly Surveys and Habitat Protection at Icehouse Hill, shall be implemented to avoid special-status plants and butterfly host plants. Any special-status species plant or wildlife species detected during surveys shall be reported to the California Natural Diversity Database at the following link: https://www.wildlife.ca.gov/Data/CNDDB/Submitting-Data.

MM BIO-1b: Special-Status Plant Avoidance at Icehouse Hill (Program EIR Mitigation Measure 4.C-1b). Documented plant occurrences on Icehouse Hill shall be avoided by establishing a buffer zone of no less than 25 feet prior to Specific Plan trail construction, or other ground-disturbing activities having the potential to disturb or result in mortality of special-status plant populations. This buffer zone, whose specific width shall be determined based on site-specific analysis of proposed construction techniques and their potential for dust creation, shall be demarcated using flagging, orange fencing, or any other visual barrier between plant populations and the active disturbance footprint. Buffer distances may be increased if hydrology features would be altered as a result of trail construction.

If the City determines that disturbance or mortality is unavoidable, special-status plants shall be restored onsite in either the annual grassland or coastal scrub habitat located on Icehouse Hill. Restoration would be at a 1:1 ratio consistent with typical CDFW requirements in areas that are to remain as post-development open space, as is Icehouse Hill. The 1:1 replacement ratio shall be met at the end of five years and may therefore require initial plantings at a greater than 1:1 ratio, as determined by a qualified botanist with demonstrated expertise in the subject matter and whose work is subject to City staff and/or city-contracted peer review. If feasible, special-status plants and/or seeds shall be salvaged from on-site plants and used for any replacement plantings.

To reduce impacts from off-trail use, and increased horse use, trail head signage shall be required to educate the public regarding sensitive resources and restoration that would be affected by off-trail use. Mitigation areas shall be fenced or marked for three years. Trail use rules shall be developed prior to construction, and in addition to limiting use to identified trails, may include other requirements to limit the possibility that sensitive species would be impacted.

The project would comply with the NPDES Construction General Permit to avoid indirect impacts to special status plant species that could occur if slope

drainage or surface hydrology is modified as a result of trail construction ~~Mitigation Measure 4.C1-g shall also be applied~~.

Prior to issuance of project approvals, and in coordination with state and federal permitting requirements, a five-year restoration mitigation and monitoring program shall be developed and implemented for any planting areas established to mitigate impacts to special-status species plants. Restoration success criteria shall include:

1) Establishment of mitigation site(s) at or near the location of impacts where plant restoration will occur.
2) A qualified botanist shall identify an appropriate plant palette and restoration methodology compatible with the specific impacted special status species. Mitigation sites could include existing annual grassland or coastal scrub habitat areas on Icehouse Hill, depending on site conditions and locations of special status plants found.
3) No loss in total number of individual plants in a special status plant population found on Project Site shall be verified at the end of the five-year monitoring period established in coordination with state and federal agencies with jurisdiction over these resources.

The Baylands developer shall pay or reimburse the City for all costs associated with the restoration documentation and five-year monitoring report and city-contracted peer review.

MM BIO-1c: Rare Butterfly Surveys and Habitat Protection at Icehouse Hill (Program EIR Mitigation Measure 4.C-1c). Prior to any trail-related construction, vegetation management, development, or any other ground disturbing activities taking place on Icehouse Hill, pre-construction surveys for butterfly larval host plants (*Plantago erecta*, *Viola pedunculata*, *Lupinus albifrons*, *L. formosus*, and *L. versicolor*) shall be conducted by a qualified invertebrate biologist with demonstrated experience working with the species to ensure avoidance of such host plants whose work is subject to City staff and/or city-contracted peer review. Required surveys may be conducted in conjunction with the rare plant surveys required under MM BIO-1a, Special-Status Plant Surveys at Icehouse Hill. The timing for these preconstruction surveys is further specified below. Survey results shall be submitted to the City for review and approval prior to the commencement of any ground-disturbing activities. The Baylands developer shall pay or reimburse the City for all costs associated with survey results and city-contracted peer review.

All populations of butterfly host plants located on Icehouse Hill shall be mapped and trails shall be designed to avoid them, whether or not they are being used by butterflies at the time of the initial surveys.

All populations of butterfly host plants located on Icehouse Hill shall be inspected by a qualified invertebrate biologist, at an appropriate time of year, to determine whether or not they are being used by endangered butterflies for reproduction. If it is determined that they are being used for reproductive purposes by endangered butterflies, the specific project applicant shall contact the USFWS to identify the appropriate consultation process prior to proceeding further with any activities on Icehouse Hill. Consultation may indicate that an Incidental Take Permit is required pursuant to the FESA.

If populations of Callippe silverspot or Mission blue butterflies are determined to be reproducing on Icehouse Hill, the property owner shall prepare and implement a Butterfly Protection Plan in coordination with the USFWS and the habitat managers for the San Bruno Mountain Habitat Conservation Plan prior to any ground-disturbing activities on or adjacent to Icehouse Hill. The plan shall include, but not be limited to, the following elements:

i. Pre-construction surveys shall be conducted during the period of identification for larval host plants and butterfly larvae in the flowering and/or breeding season immediately prior to trail construction or any other work scheduled to occur on Icehouse Hill.

ii. Trail construction on Icehouse Hill shall avoid populations of larval butterfly host plants.

iii. All trails, or alternately, sensitive habitats, shall be fenced to minimize the establishment of "informal" trails through habitats supporting special-status plants.

iv. Dogs shall be allowed on Icehouse Hill trails on leash only.

v. Interpretative signage shall be posted at trailheads explaining the presence of endangered butterflies and/or their habitat and the importance of preserving Icehouse Hill as habitat for endangered species.

Grassland habitat on Icehouse Hill shall be restored and enhanced to maintain and expand healthy populations of butterfly host plants according to the following performance standards:

- No net loss of existing butterfly host plants or damage to existing butterfly habitat or host plants from the trail and other recreational improvements, with habitat monitoring provided in years 1, 3, and 5.

- Reintroduced nectar and host plants for the Callippe silverspot, Bay checkerspot, and Mission blue butterflies achieve 50 percent cover in designated Habitat Management Areas within five years.
- Non-native invasive species such as French broom and fennel shall kept to a minimum within management areas.

MM BIO-1d: Nesting Bird Protection (Program EIR Mitigation Measure 4.C-1d). The following steps shall be taken to avoid direct losses of nests, eggs, and nestlings and indirect impacts to common and special–status avian species.

- Vegetation removal including removal of trees and shrubs as part of site development shall be confined to the nonbreeding season, except as provided for below. Grading or ground disturbance activities associated with site development including site remediation activities shall occur after pre-construction protocol burrowing owl surveys are conducted as described below and in the 2012 CDFW Staff Report on Burrowing Owls. Surveys shall be performed by a qualified biologist with demonstrated expertise performing nesting bird surveys whose work is subject to City staff and/or city-contracted peer review. Survey results shall be submitted to the City for review and approval prior to the commencement of any ground-disturbing activities. The Baylands developer shall pay or reimburse the City for all costs associated with survey reports and city-contracted peer review.
- *General Bird Surveys and Monitoring*. If removal of trees and shrubs or disturbance to trees and shrubs (i.e., tree removal, tree trimming) or grading is proposed to occur between January 1 and September 15, a qualified avian biologist shall survey any habitat proposed to be modified during the nesting season (i.e., January 1 through September 15) to determine if active bird nests are present. Surveys shall occur not more than 14 days prior to tree removal or trimming. Surveys shall include all trees in line-of-sight and within 500 feet of construction for raptors, and all vegetation (including bare ground within 250 feet) for all other species. If active nests are found, tree removal and/or tree trimming shall be conducted only after the young have left the nest and the nest is no longer in use. Confirmation that the nest is no longer in use shall be provided by a qualified biologist familiar with the species.

  If the qualified avian biologist identifies active nests, a no disturbance buffer of 150 feet shall be established and monitored by a qualified avian biologist, with authority to stop work in the event construction activities

encroach within the disturbance buffer thus ensuring that impacts to nesting birds would not occur.

Survey and monitoring reports shall be submitted to City staff for review: preconstruction survey reports shall be submitted prior to initiating construction activities; monitoring reports shall be submitted weekly until activities associated with nest habitat removal or disturbance activities are completed.

- *Burrowing Owl.* At all times of year, prior to initiating grading or ground disturbance activities associated with remediation activities required prior to site development, the following shall occur:

  - ~~Not less than 45 days prior to site grading, a qualified biologist shall survey the site to determine the presence of active burrowing owl nests. If active nests are found, passive relocation of the individuals would be accomplished according to the CDFW standards in effect at the time of the survey including the 2012 CDFW Staff Report on Burrowing Owls.~~

  - ~~Results of the burrowing owl survey will be forwarded to CDFW.~~

  - ~~Should the results of the survey include positive findings for occupied burrows, the location and condition of the burrows shall be reported to the CDFW, and an on-site mitigation plan shall be prepared for review and approval by the CDFW. Onsite mitigation shall include construction of artificial burrows at a ratio of not less than 1:1 with the burrows located away from areas permitted for use by dogs and hikers. Following construction of the artificial burrows, the existing owls shall be passively removed from their burrows using one-way trap doors. The artificial burrows shall be monitored for a period of five years to confirm occupation by the species. Monitoring reports shall be forwarded to the CDFW to document compliance with this mitigation measure.~~

  1. *Burrowing owl habitat assessment and surveys*. A qualified biologist (i.e., individual with a minimum of two years of burrowing owl survey experience that includes positive detections) shall conduct a habitat assessment and surveys for burrowing owl prior to construction. Focused surveys shall be conducted if warranted based on the habitat assessment. The habitat assessment and surveys shall follow the Department of Fish and Game Staff Report on Burrowing Owl Mitigation (2012) methodology (https://wildlife.ca.gov/Conservation/Survey-Protocols#377281284-birds) and the qualified biologist shall prepare a report documenting

the survey results. The habitat assessment and surveys shall encompass the project site and a sufficient buffer zone to detect burrowing owl nearby that may be impacted, up to 500 meters (1,640 feet) around the project site pursuant to the above methodology.

2. *Burrowing owl avoidance*. The applicant shall immediately notify CDFW if burrowing owl are detected and shall implement a construction avoidance buffer around any detected burrowing owl pursuant to the buffer distances outlined in the Department of Fish and Game Staff Report on Burrowing Owl Mitigation (2012), which vary from 50 meters to 500 meters (164 feet to 1,640 feet).

3. *Biological monitoring*. Any detected burrowing owl shall be monitored by the qualified biologist to ensure they are not disturbed during construction activities, unless otherwise approved in writing by CDFW. Burrowing owls shall be allowed to leave on their own volition and shall not be disturbed without approval from CDFW.

MM BIO-1e: Special-Status Bat Roost Protection (Program EIR Mitigation Measure 4.C-4g). Applicants for demolition, grading or site-specific development projects pursuant to an approved specific plan within the Baylands shall take the following measures to avoid direct mortality of roosting special-status bats and disturbance of maternity roosts or winter hibernacula:

- All biological surveys must be performed by a qualified biologist with demonstrated expertise in bat biology whose work is subject to City staff and/or city-contracted peer review. Survey results shall be submitted to the City for review and approval prior to the commencement of any ground-disturbing activities. The Baylands developer shall pay or reimburse the City for all costs associated with survey reports and city-contracted peer review.
- A bat biologist familiar with Bay Area species shall conduct surveys of all potential bat habitat, including areas suitable for maternity roosts and/or winter hibernacula within a site proposed for development prior to initiation of construction activities, including initial grading. Surveys shall be conducted within one year prior to construction to capture current bat habitats at the site, as presence of bats could vary yearly and survey results several years before impacts occur could be inaccurate. Potentially suitable habitat shall be located visually. Bat emergence counts shall be made at dusk as the bats depart from any suitable habitat. In addition, an acoustic detector shall be used to determine any areas of

bat activity. At least four nighttime emergence counts shall be undertaken on nights that are warm enough for bats to be active, or as otherwise deemed adequate by a qualified bat biologist to determine species absence. The bat biologist shall determine the type of each active roost (i.e., maternity, winter hibernacula, day or night).

- Removal or trimming of trees or demolition of buildings showing evidence of bat activity shall occur during the period least likely to affect the bats as determined by a qualified bat biologist (generally between February 15 and October 15 for maternity roosts and between August 15 and April 15 for winter hibernacula). If active day or night (non-maternity) roosts are found, the bat biologist shall take action to allow individual bats to depart prior to tree removal or building demolition.
- The following steps shall be taken during the removal of active or suspected bat roosts:

    1. The qualified biologist shall be present during tree and structure disturbance or removal if active non-maternity or hibernation bat roosts or potential roosting habitat are present. Trees and structures with active non-maternity or hibernation roosts or potential habitat shall be disturbed or removed only under clear weather conditions when precipitation is not forecast for three days and when nighttime temperatures are at least 50°F, and when wind speeds are less than 15 mph.
    2. Trimming or removal of trees with active (non-maternity or hibernation) or potentially active roost sites shall follow a two-step removal process:
    3. On the first day of tree removal and under supervision of the qualified biologist, branches and limbs not containing cavities or fissures in which bats could roost, shall be cut only using hand tools (e.g., chainsaws).
    4. On the following day and under the supervision of a qualified biologist, the remainder of the tree may be removed, either using hand tools or other equipment (e.g., excavator or backhoe).
    5. All felled trees shall remain on the ground for at least 24 hours prior to chipping, off-site removal, or other processing to allow any bats to escape, or be inspected once felled by the qualified biologist to ensure no bats remain within the tree and/or branches.
    6. Disturbance to or removal of structures containing or suspected to contain active bat roosts (non-maternity or hibernation) or potentially

active bat roosts shall be done in the evening and after bats have emerged from the roost to forage. Structures shall be partially dismantled to significantly change the roost conditions, causing bats to abandon and not return to the roost. Removal will be completed the subsequent day.

7. During construction, a no-disturbance buffer shall be created around active bat roosts being used for maternity or hibernation purposes at a distance to be determined in coordination with the CDFW.

Additional Mitigation Measures

MM BIO-1f: Performance Standards for Special-Status Plant Mitigation at Icehouse Hill. If direct or indirect impacts to special-status plants are unavoidable, rare plant populations shall be restored on-site in either the annual grassland or coastal scrub habitat on Icehouse Hill. Restoration would be at a 1:1 ratio based on the number of affected plants and/or acreage of the plant population, whichever is deemed most appropriate by a qualified botanist in coordination with the city. The special-status plant mitigation must be performed by a qualified biologist with demonstrated expertise in special-status plants whose work is subject to City staff and/or city-contracted peer review. The 1:1 replacement ratio shall be met at the end of five years and may therefore require initial plantings at a greater than 1:1 ratio, as determined by a qualified botanist. Any special-status plants and/or seeds shall be salvaged from on-site plants and used for any replacement plantings.

To reduce impacts from off-trail use, and increased horse use, trail head signage shall be required to educate the public regarding sensitive resources and restoration that would be affected by off-trail use. Mitigation areas shall be fenced or marked for a minimum of three years. Trail use rules shall be developed prior to construction, and in addition to limiting use to identified trails, may include other requirements to limit the possibility that rare plants would be impacted.

Prior to City approval of any site-specific development projects that affect special-status plants, a five-year restoration mitigation and monitoring program shall be developed and implemented for any planting areas established to mitigate impacts to such species. Restoration success criteria shall include:

1. Establishment of mitigation site(s) at or near the location of impacts where plant restoration will occur.
2. A qualified botanist shall identify an appropriate plant palette and restoration methodology compatible with the specific impacted special-

status species. Mitigation sites could include existing annual grassland or coastal scrub habitat areas on Icehouse Hill, depending on site conditions and locations of special-status plants found.

3. Regular maintenance shall be performed twice annually or more frequently as needed to identify and resolve risks to mitigation sites. Site weeding shall be performed as necessary to reduce competition from non-native vegetation.

4. No loss in total number of individual plants in a special-status plant population found on the Baylands shall be verified at the end of the five-year monitoring period established in coordination with state and federal agencies with jurisdiction over these resources, as applicable. The mitigation plan shall provide contingency measures to restore and manage rare plant populations, including plant salvage, replanting, and continued monitoring and management, if the above standard is not met within five years.

The Baylands developer shall pay or reimburse the City for all costs associated with the 5-year monitoring plan and city-contracted peer review.

MM BIO-1g: Rare Butterfly Surveys and Habitat Protection Performance Standards. The Butterfly Protection Plan identified in Mitigation Measure BIO-1c shall be included in site development plans for Icehouse Hill to be submitted to the City for review and approval prior to City approval of any ground disturbing activities within Icehouse Hill. The Plan shall include, but not be limited to, the following elements and specific performance standards to minimize impacts to listed butterfly species and their host plants and restored habitat and thereby facilitate reintroduction of listed butterfly species on Icehouse Hill as proposed by the Specific Plan:

i. Trail configurations and any non-pedestrian path uses (i.e., observation areas, educational areas, overlooks, nature play areas, gardens, and relocation of the Mission Blue Nursery), shall be sited to avoid butterfly host and nectar plants, whether or not they are being used by rare butterflies at the time of the pre-construction surveys.

ii. Trail construction may be constructed through butterfly host plant restoration areas as conceptually illustrated in Figure 4.6-4.

iii. Establishment of seasonal restrictions or a period during which horses would be permitted to occur on Icehouse Hill associated with passive recreation areas shall be implemented in a manner that coordinates best

with the use pattern of special status butterflies, under consultation with a Lepidopterist.

iv. Identification of habitat management areas for the enhancement/ restoration of quality patches of nectar and host plants to contribute to the survival and/or the reintroduction of listed butterfly species (i.e., Callippe silverspot, Bay checkerspot, and Mission blue butterflies) on Icehouse Hill.

v. Identification of restoration activities that protect and support the survival of listed butterfly species, including, but not necessarily limited to, the restoration and enhancement of native grassland habitat on Icehouse Hill to maintain and expand healthy populations of butterfly host plants and stabilize soils; development of a scrub encroachment and invasive species management plan; development of a planting palette designed by a qualified botanist using plant species that are known to support special-status butterflies, including Callippe silverspot, Bay checkerspot, and Mission blue butterfly host plants; ensuring that non-native Italian thistle (*Carduus pycnocephalus*) will not be removed from Icehouse Hill until alternate butterfly nectar plant sources have become established; and identification of potential sources of nectar and host propagules or seeds to enhance plant populations.

vi. Identification of operational actions to protect and support the survival of listed butterfly species, including, but not necessarily limited to, the fencing of trails or sensitive habitats and/or the creation of buffer areas to minimize the establishment of "informal" trails through habitats supporting butterfly host or nectar plants; providing signage that dogs shall be allowed on Icehouse Hill trails on leash only; providing interpretative signage posted at trailheads explaining the presence of endangered butterflies and/or their habitat and the importance of preserving Icehouse Hill as habitat for listed butterfly species; and development of a grazing management program, which would include seasonal restrictions on horse grazing on Icehouse Hill to allow grazing only between November and April, or as otherwise determined appropriate by a qualified biologist, and ongoing monitoring and modifications to grazing regimes.

vii. Annual monitoring surveys shall be conducted for five years after completion of restoration to assess habitat conditions and determine whether populations of Callippe silverspot, Bay checkerspot, or Mission blue butterflies are present and/or reproducing on Icehouse Hill.

- **MM BIO-1h: Large Marble Butterfly Surveys and Habitat Protection.** (Required only if the species gains legal protection status). Focused surveys for the large marble butterfly shall be performed by a qualified biologist whose work is subject to City staff and/or city-contracted peer review during the butterfly flight season (March-June) prior to construction, vegetation management, or other ground disturbing activities. Survey findings shall be coordinated with the U.S. Fish and Wildlife Service. The implementation of Mitigation Measures MM BIO-1c (Rare Butterfly Surveys and Habitat Protection at Icehouse Hill) and MM BIO-1g (Rare Butterfly Surveys and Habitat Protection Performance Standards) would be applied to mitigate impacts to the large marble butterfly, which would consist of habitat avoidance and native vegetation plantings to support large marble butterfly populations. The Baylands developer shall pay or reimburse the City for all costs associated with [technical studies] and city-contracted peer review.

Impact BIO-2: Freshwater Habitat, Tidally Influenced Habitats, Waters of the United States, Waters of the State, and Areas Subject to the Jurisdiction of the State Lands Commission or Bay Conservation Development Commission

Less than Significant with Mitigation Incorporated

The Specific Plan proposes restoration of habitat along the north shore of Brisbane Lagoon and Visitacion Creek, as illustrated in **Figure 3-19** and **Figure 3-22** that would provide in-kind replacement of wetlands and non-wetland waters.[4] Even with in-kind replacement, there would be a temporal loss of wetlands between the time the landfill is capped and before wetland features are recreated. A significant impact would occur.

- Specific Plan requirements for physical barriers, such as cyclone fencing or equivalent screening, to be maintained along with educational signage for trails within and adjacent to areas of wetlands and non-wetland waters, would reduce or minimize impacts associated with human encroachment. In addition, trails within the wetland portions of Visitacion Creek and Lagoon Park would be provided on raised platforms, resulting in minimal effects on habitat areas. Thus, impacts associated with human encroachment would be less than significant.

Program EIR Mitigation Measures

- **MM BIO-2a: Avoid or Minimize Adverse Effects on Sensitive Natural Communities and Wetland Areas (Program EIR Mitigation Measure 4.C-2a).** The applicant shall avoid or minimize adverse effects on sensitive natural communities and restored

[4] While the Specific Plan's intention is to enhance Visitacion Creek and along the north shore of the lagoon to replace habitat lost due to site grading and development, resource agencies may not accept enhancement or mitigation actions located within the landfill footprint as mitigation and could require additional off-site mitigation.

wetland mitigation areas. After site grading has concluded, measures shall be implemented to avoid impacts to sensitive natural communities or restored habitat areas, including the installation of silt fencing, straw wattles, or other appropriate erosion and sediment control methods or devices to prevent runoff and construction debris from entering these areas. Such measures shall also be employed where pre-construction grading and post-remediation development requires work adjacent to sensitive natural communities, either prior to or after restoration of those areas occurs. Avoidance and minimization measures shall be overseen by a qualified biologist whose work is subject to City staff and/or city-contracted peer review. Where construction activities occur in the vicinity of sensitive natural communities on-site, the following shall be implemented to ensure no loss of restored mitigation sites:

- Fencing shall be erected adjacent to the areas where construction is occurring to avoid unintended impacts to sensitive natural areas that occur just outside the construction area and shall be constructed in a manner that will not impede wildlife access to wetland areas. Construction workers will be educated about local resources and instructed to avoid sensitive habitats during construction including limiting any human intrusion into natural areas.
- If work in the vicinity of natural communities cannot be avoided, work within these areas shall be conducted during the dry season, typically between May 1 and October 15, and shall occur under permit authority of the California Department of Fish and Wildlife, the Corps of Engineers, and the Regional Water Quality Control Board pursuant to the Clean Water Act Section 404 requirements for avoidance, mitigation and monitoring. Mitigation Measures MM BIO-2b, MM BIO-2c, and MM BIO-2d shall also apply if work cannot be avoided in or directly adjacent to sensitive natural areas or restored habitats.

The Baylands developer shall pay or reimburse the City for all costs associated with monitoring reports and city-contracted peer review.

MM BIO-2b: Maintain Water Quality and Control Erosion and Sedimentation during Construction (Program EIR Mitigation Measure 4.C-2b). The measures described below shall be employed to avoid degradation of natural communities or sensitive natural communities by maintaining water quality and controlling erosion and sedimentation during construction as required by compliance with the National Pollutant Discharge Elimination System (NPDES) General Permit for Construction Activities to address impacts on water quality. Avoidance and minimization measures shall be overseen by a qualified biologist whose work is

subject to City staff and/or city-contracted peer review. In addition, measures shall include, but not be limited to, the following:

- Installing silt fencing between aquatic sensitive natural communities and Project-related activities;
- Locating fueling stations away from potentially jurisdictional areas and features; and
- ~~Isolating construction work areas from any identified jurisdictional features.~~Where jurisdictional features can be avoided, incorporating design elements to ensure avoidance. Where avoidance is not feasible, compensatory mitigation shall be implemented in accordance with Mitigation Measures MM BIO-2d and MM BIO-2e.

The Baylands developer shall pay or reimburse the City for all costs associated with monitoring reports and city-contracted peer review.

MM BIO-2c: Water Quality Protection Measures near Aquatic Sites (Program EIR Mitigation Measure 4.C-1g). Construction and operation of proposed uses and open space areas along Visitacion Creek or adjacent to the northern lagoon edge shall include implementation of erosion control and water pollution control measures consistent with Stormwater Pollution Prevention Program (SWPPP) requirements, and implementation of an ongoing maintenance plan to ensure no reduction in water and environmental quality within the Creek and lagoon.

Project applicants shall provide the City with proof that appropriate stormwater permits have been obtained pursuant to the City of Brisbane's NPDES stormwater discharge permit, the San Francisco Regional MS4 Permit. This shall include construction site inspection and control programs at all construction sites, with follow-up and enforcement consistent with each Permittee's respective Enforcement Response Plan, to prevent construction site discharges of pollutants and impacts on beneficial uses of receiving waters. The goal of Provision C.3 of the MS4 Permit is for the Permittee, such as the City of Brisbane, to use their planning authorities to include appropriate source control, site design, and stormwater treatment measures in new development and redevelopment projects to address both soluble and insoluble stormwater runoff pollutant discharges and prevent increases in runoff flows from new development and redevelopment projects. This goal is to be accomplished primarily through the implementation of low impact development techniques.

Project applicants shall comply with local municipal requirements and the local stormwater program as mandated under the Municipal Stormwater Permit, including, at minimum, the following measures:

- Plan the development to fit the topography, soils, drainage pattern and natural vegetation of the Baylands.
- Delineate clearing limits, easements, setbacks, sensitive or critical areas, trees, drainage courses, and buffer zones to prevent excessive or unnecessary disturbances and exposure.
- Phase grading operations to reduce disturbed areas and time of exposure.
- Avoid excavation and grading during wet weather.
- Limit on-site construction routes and stabilize construction entrance(s) and exit(s).
- Any increase in impervious surface area shall include establishment of vegetated swales, permeable pavement materials, preserve vegetation, re-plant with native vegetation and appropriate measures should be evaluated and implemented where appropriate.
- Whenever practicable, native vegetation buffer areas shall be provided as part of a project to control pollutants from entering the Bay, and vegetation shall be substituted for rock riprap, concrete, or other hard surface shoreline and bank erosion control methods where appropriate and practicable.
- Construct diversion dikes and drainage swales to channel runoff around the site and away from bodies of water.
- Use berms and drainage ditches to divert runoff around exposed areas.
- Place diversion ditches across the top of cut slopes.
- No use of fertilizers or pesticides.

Applicants shall prepare a maintenance program for approval by the City that includes maintenance of water quality pollution-control features such as swales, sediment traps or other passive applications of pollution-prevention measures required as part of NPDES permitting. The maintenance program shall address the management of open space adjacent to the Brisbane lagoon and Visitacion Creek and, at minimum, shall include the following requirements, to be performed to the satisfaction of the City:

- Identify the entity responsible for ongoing maintenance of the lagoon perimeter and recreational facilities within the perimeter area (e.g.,

property owners' association, landscape maintenance district), along with provisions permitting the City to enforce maintenance requirements and recoup costs for such enforcement.

- Provide trash receptacles at appropriate locations and regular litter removal.
- Maintain all improvements within the lagoon perimeter in a safe and working condition.
- Identify a funding mechanism to ensure site maintenance and implementation of environmental quality monitoring at the creek and lagoon as part of the open space interpretive center. Monitoring parameters shall include water quality monitoring that, at a minimum, tests the first draw of stormwater from the new rainy season, and may include, but not be limited to vegetation monitoring, and passive observation and recording of fish species present.

MM BIO2d: Compensatory Mitigation, Monitoring, and Reporting for Impacts to Wetlands and Non-Wetland Waters and Sensitive Natural Communities (Program EIR Mitigation Measure 4.C-2c). Where disturbance to sensitive natural communities including jurisdictional wetlands and non-wetland waters cannot be avoided, compensation shall be provided for temporary impacts and permanent loss to ensure that there is no overall loss of sensitive natural communities as a result of Baylands development. Onsite, in-kind replacement of sensitive natural communities including coastal scrub, willow scrub, tidal marsh, freshwater emergent wetlands, and lined manmade drainages that have developed bed and bank characteristics shall be a condition of development. Compensation shall be detailed on an impact-specific basis and shall include development of an onsite Wetland Mitigation and Monitoring Plan, which shall be developed prior to Project Site development or in coordination with permit applications and/or conditions. Alternately, offsite mitigation may be pursued through an approved mitigation bank, although this option may result in a higher ratio for compensation. At a minimum, such plans shall include:

- Baseline information, including a summary of findings for the most recent wetland delineation conducted at the Project Site;
- Anticipated habitat enhancements to be achieved through compensatory actions, including mitigation site location (onsite enhancement or offsite habitat creation) and hydrology;

- Performance and success criteria for wetland creation or enhancement including, but not limited to, the following:
    - At least 90 percent survival of installed plants for each of the first three years following planting.
    - Performance criteria for vegetation percent cover in Years 1-4 as follows: at least 10 percent cover of installed plants in Year 1; at least 20 percent cover in Year 2; at least 30 percent cover in Year 3; at least 40 percent cover in Year 4; and at least 50 percent cover in Year 5.
    - Performance criteria for hydrology in Years 1-5 as follows: 14 or more consecutive days of flooding, ponding, or a water table 12 inches or less below the soil surface during the growing season at a minimum frequency of three of the five monitoring years; OR establishment of a prevalence of wetland obligate plant species.
    - Invasive plant species that threaten the success of created or enhanced wetlands should not contribute relative cover greater than 35 percent in Year 1, 20 percent in Years 2 and 3, 15 percent in Year 4, and 10 percent in Year 5.
    - If necessary, supplemental water shall be provided by a water truck for the first two years following installation. Any supplemental water must be removed or turned off for a minimum of two consecutive years prior to the end of the monitoring period, and the wetland must meet all other criteria during this period. At the end of the five-year monitoring period, the wetland must be self-sufficient and capable of persistence without supplemental water.
    - At least 75 percent cover by hydrophytic vegetation at the end of the five-year monitoring period. In addition, wetland hydrology and hydric soils must be present and defined as follows:
        - *Hydrophytic vegetation* – A plant community occurring in areas where the frequency and duration of inundation or soil saturation produce permanently or periodically saturated soils of sufficient duration to exert a controlling influence on the plant species present.
        - *Wetland hydrology* – Identified by indicators such as sediment deposits, water stains on vegetation, and oxidized rhizospheres along living roots in the upper 12 inches of the soil, or satisfaction of the hydrology performance criteria listed above.

- *Hydric soils* – Soils that are saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions, which are often characterized by features such as redox concentrations, which form by the reduction, translocation, and/or oxidation of iron and manganese oxides. Hydric soils may lack hydric indicators for a number of reasons. In such cases, the same standard used to determine wetland hydrology when indicators are lacking can be used.

- Five years after any wetland creation, a wetland delineation shall be performed to determine whether created wetlands are developing according to the success criteria outlined in the project permits. If they are not, remedial measures such as re-planting and or re-design and construction of the created wetland shall be taken to ensure that the Project's mitigation obligations are met.
- Monitoring and reporting requirements. If permanent and temporary impacts on jurisdictional waters cannot be compensated onsite through the restoration or enhancement of wetland features incorporated within proposed open space areas, the specific project applicant shall provide additional compensatory mitigation for these habitat losses. Potential options include the creation of additional wetland acreage onsite, the purchase of mitigation bank credits, or the purchase, implementation, and maintenance in perpetuity of offsite mitigation as approved by the City and state and federal permitting agencies. Offsite compensatory mitigation would be required to fulfill the performance standards described above.

<u>The Wetland Mitigation and Monitoring Plan shall be prepared by a qualified biologist whose work is subject to City staff and/or city-contracted peer review. The Baylands developer shall pay or reimburse the City for all costs associated with Wetland Mitigation and Monitoring Plan and city-contracted peer review.</u>

Additional Mitigation Measures

MM BIO-2e: Design and Reporting Performance Standards for Sensitive Natural Community Restoration Areas. The wetland mitigation and monitoring plan described in Mitigation Measures MM BIO-2d shall additionally include design-level plans detailing the restoration of Visitacion Creek and the north shore of

Brisbane Lagoon. The plan shall also include long-term monitoring requirements. Additional elements to include in the plan are as follows:

- The location of restored/enhanced habitats that provide at least a 1:1 in-kind replacement ratio by acreage and habitat type.
- An assessment of existing and proposed wetland and non-wetland waters habitat functions and values, including a discussion of sensitive habitats, soils, hydrology, and existing or potential sensitive species that are or would be supported by existing or proposed habitats demonstrating no net loss of habitat functions and values.
- Planting specifications for habitat areas (e.g., tidal, intertidal, and freshwater marsh).
- A strategy for invasive species management in mitigation areas.
- Location and design of recreational improvements, including buffer areas required to protect mitigation areas from encroachment by visitors or pets, including specific planting/management plan.
- Site monitoring and management responsibilities to be carried out over a minimum of 5 years based on identified performance standards and success criteria.
- Contingency measures, including the need for additional planting, watering, and/or maintenance, and an extension of monitoring requirements if standards are not met within the initial 5-year performance period.

MM BIO-2f: Performance Standards to Minimize Temporal Habitat Losses. To facilitate natural revegetation near restored aquatic sites, final grading for Visitacion Creek and Lagoon Park shall be completed within 2 years of initial site disturbance, or as otherwise determined by the city.

Impact BIO-3: Fish and Wildlife Movement

Less than Significant with Mitigation Incorporated

There is limited potential for terrestrial wildlife movement through the Baylands Specific Plan area given the area's existing physical barriers to wildlife movement including major roads and highways, industry, railroad tracks, pipelines, and fences. However, wildlife would move along Visitacion Creek and within the freshwater marshes in the western portion of the site. Maintaining and enhancing this movement would be ensured through development and implementation of a Project-wide Open Space Plan (Mitigation Measure MM BIO-3a), Marsh Wildlife and Habitat Protection Plan (Mitigation Measure MM BIO-3b), and a pet safe policy

that would apply during construction and operations (Mitigation Measure MM BIO-3c). Habitat enhancements proposed for Icehouse Hill along with recreational improvements consistent with Mitigation Measure MM BIO-1c would also provide for movement of butterflies between Icehouse Hill and the San Bruno Mountain Conservation Area.

Development of commercial and residential buildings, as well as additional night lighting, would increase bird strike hazards to avian movement through the Baylands. This is a significant impact.

Mitigation Measures MM-BIO-3a and MM-BIO-3b provide long-term open space planning and marsh protection planning for the Baylands. In addition, Mitigation Measure MM BIO-3c would establish a wildlife-safe pet policy that would apply during construction and operations to minimize impacts of pets on habitat areas.

Implementation of Mitigation Measures MM BIO-1a through MM BIO-1c would be reduce impacts to butterfly movement to less than significant, and in the long-term, restoration on Icehouse Hill would improve habitat for the Callippe silverspot butterfly and perhaps other listed butterfly species by providing a link to restored habitat in the Baylands (e.g., Icehouse Hill) and sensitive species resources on San Bruno Mountain.

Mitigation Measures MM BIO-3e and MM BIO-3f provide design requirements that would provide effective bird-safe building treatments to buildings to avoid or reduce bird mortality. Impacts would therefore be less than significant with mitigation incorporated. Mitigation Measures MM BIO-3d and AES-4 address the potential for nighttime lighting of buildings, which would reduce the potential for nighttime bird collisions. Thus, Impact BIO-3 would be less than significant with mitigation incorporated.

Program EIR Mitigation Measures

MM BIO-3a: Wildlife-Safe Pet Policy during Construction and Operations (Program EIR Mitigation Measure 4.C-4a). All development on the Baylands shall be required to have a no-pets policy for construction workers. All development within the Baylands that includes a residential component shall also include a pet policy that requires residents to adhere to the measures of this policy to prevent impacts on wildlife from domestic animals. The policy shall become a part of the Covenants, Conditions, and Restrictions (CC&Rs) attached to each property deed for for-sale residential properties and enforced through the homeowner's association or other entity specified in the CC&Rs and made part of leases for residential rental properties and commercial leases within the Baylands. The pet policy shall limit the number of animals per residence and require adult cats, dogs, and rabbits to be spayed or neutered. Cats and dogs shall be required to be kept inside the residences and allowed outside residences only if on a leash and under the tenant's control and supervision, except within areas specifically

designed as dog parks. To provide effective predator control, feral animal trapping may be necessary.

~~MM BIO-3b: Use of Wildlife-Friendly Lighting (Program EIR Mitigation Measure 4.C-4d).~~ ~~During design of any building greater than 100 feet tall, the applicant and architect shall consult with a qualified biologist experienced in building/lighting design issues (as approved by the City of Brisbane Planning Department) to identify lighting related measures to minimize the effects of the building's lighting on birds. Such measures, which may include the following and/or other measures, shall be incorporated into the building's design and operation.~~

- ~~Use strobe or flashing lights in place of continuously burning lights for obstruction lighting. Use flashing white lights rather than continuous light, red light, or rotating beams.~~
- ~~Install shields onto light sources not necessary for air traffic to direct light towards the ground.~~
- ~~Extinguish all exterior lighting (i.e., rooftop floods, perimeter spots) not required for public safety.~~
- ~~When interior or exterior lights must be left on at night, the operator of the buildings shall examine and adopt alternatives to bright, all-night, floor-wide lighting, which may include:~~
  - ~~Installing motion-sensitive lighting.~~
  - ~~Using desk lamps and task lighting.~~
  - ~~Reprogramming timers.~~
  - ~~Use of lower-intensity lighting.~~
  - ~~Windows or window treatments that reduce transmission of light out of the building will be implemented to the extent feasible.~~
  - ~~Educational materials will be provided to building occupants encouraging them to minimize light transmission from windows, especially during peak spring and fall migratory periods, by turning off unnecessary lighting and/or closing drapes and blinds at night.~~
  - ~~A report of the lighting alternatives considered and adopted shall be provided to the City of Brisbane Planning Department for review and approval prior to construction.~~
  - ~~The City of Brisbane Planning Department shall ensure that lighting-related measures to reduce the risk of bird collisions have been~~

~~incorporated into the design of such buildings to the extent practicable.~~

~~MM BIO-3c: Bird-Safe Building Design (Program EIR Mitigation Measure 4.C-4c).~~ ~~During design of any building greater than 100 feet tall, the applicant and architect shall consult with a qualified biologist experienced with urban building bird strikes design issues (as approved by the City of Brisbane Planning Department) to identify measures related to the external appearance of the building to minimize the risk of bird strikes. Such measures, which may include the following and/or other measures, shall be incorporated into the building's design:~~

- ~~Use non-reflective tinted glass.~~
- ~~Use window films to make windows visible to birds from the outside.~~
- ~~Use external surfaces/designs that break up reflective surfaces.~~
- ~~Place bird attractants, such as bird feeders and baths, at least three feet and preferably 30 feet or more from windows in order to reduce collision mortality.~~
- ~~A report of the design measures considered and adopted shall be provided to the City of Brisbane Planning Department for review and approval prior to construction. The City of Brisbane Planning Department shall ensure that building design related measures to reduce the risk of bird collisions have been incorporated to the extent practicable.~~

Additional Mitigation Measures

MM BIO-3~~d~~b: ~~Additional~~ Bird-Safe Building Design Requirements. All buildings shall be constructed to achieve a performance standard of a Threat Factor of 30 or less on each façade up to 100 feet above grade (American Bird Conservancy, no date).[5] The following requirements shall apply to meet this performance standard for the portions of all buildings up to 100 feet in height above grade, other than the Roundhouse, which is exempt from this requirement due to its historic character, need to maintain historic façade materials, and lack of reflective surfaces.

- No more than 5 percent of any building façade up to 40 feet above grade, as well as any façade within 24 feet ~~above~~ of any green roof, shall exceed a Threat Factor of 30.

[5] "Threat Factor" is defined by the American Bird Conservancy as a relative measure of a building material's visibility, which enables the bird to see and avoid the building surface and, as a result, reduce bird collisions. A Threat Factor of 30 suggests that bird collisions would be reduced by least 50 percent. Lower Threat Factors would reduce bird collisions by greater amounts. The American Bird Conservancy's inventory of estimated threat factors for building façades can be found at https://abcbirds.org/glass-collisions/products-database/.

- The exterior wall envelope and any exterior fenestration on the portion of buildings between 41 feet and 100 feet above grade shall be constructed with bird friendly materials and shall not exceed a Threat Factor of 30 on any given façade. Other materials may be used to the extent they do not exceed an aggregate of 10 square feet within any 10-by-10-foot-square area of exterior wall below 100 feet above grade.
- No glazed corners or fly-through conditions shall exceed a Threat Factor of 30.
- For Threat Factors equal to or less than 30, the building shall be exempt from the building façade requirements.

During design of any building, the Project or Permit Applicant shall engage a qualified biologist (as approved by the City of Brisbane Planning Department) who is experienced with urban bird-safe building design methods to identify and approve building design treatments/elements that reflect the most current practice in bird strike protection for those portions of buildings up to 100 feet in height above grade and achieve the performance standards described above. The qualified biologist's work is subject to City staff and/or city-contracted peer review. Building designs shall also be approved by the City of Brisbane Building Department. The Baylands developer shall pay or reimburse the City for all costs associated with building design treatments/elements and city-contracted peer review.

Building design treatments/elements that must be reviewed and incorporated into the building design to the extent needed to achieve the identified performance standard of a Threat Level of 30 or less may include, but are not necessarily limited to, the following:

- *Glazing Treatments:* Glazing treatments shall be used to create a transparent (rather than reflective) surface that is visible to birds. Examples of bird-friendly glazing treatments include, but are not necessarily limited to, the following:
  - Use of glass or a glass coating that reflects ultraviolet light
  - Use of dichroic or translucent glass; dichroic glass achieves the appearance of changing colors by transmitting and reflecting light, while translucent glass is porous and opaque
  - Use of fritted or frosted glass or angled glass
  - Use of panned glass with fenestration patterns
  - Use of non-reflective, tinted glass

- Art treatment of glass

- *Building and Fenestration Strategies (Architectural Features):* Architectural features shall be used to block the uninterrupted view of glass from birds and/or to provide a physical obstacle to bird strikes. Examples of building and fenestration strategies that would reduce the potential for bird-strikes include, but are not necessarily limited to, the following:
  - Use of architectural features that block the view of glass from birds, including screens, overhangs, louvers, and awnings
  - Use of netting that is stretched several inches over windows or entry ways to prevent birds from hitting the glass
  - Use of external surfaces/designs that break up reflective surfaces (e.g., well-articulated building facades and/or fenestration broken up with mullions or other treatments)
  - Avoid the use of transparent building corners
  - Place bird attractants, such as bird feeders and baths, at least 3 feet and preferably 30 feet or more from windows in order to reduce collision mortality

- *Design and Operation of Nighttime Lighting:* Each site-specific development project shall comply with Threshold AES-4 and Mitigation Measure MM AES-4b, which provide night sky performance standards (e.g., light trespass restrictions). Examples of nighttime lighting design and operation that would comply with Threshold AES-4 and Mitigation Measure MM AES-4b and reduce the potential for bird-strikes caused by light trespass, over-illumination, light clutter, or skyglow include, but are not necessarily limited to, the following:
  - Low profile, low intensity lighting directed downward
  - Shielded fixtures for outdoor lighting
  - Motion sensor lighting and automatic shut offs for interior lights in unoccupied spaces
  - Interior blinds that automatically close at night to block light transmission
  - Motion sensor lighting and automatic shut offs for exterior lights where not required for public safety
  - Minimize vanity lighting

- Strobe or flashing lights in place of continuously burning lights for obstruction lighting. Use flashing white lights rather than continuous light, red light, or rotating beams.
- Outdoor lighting and colors of lighting that would increase the visibility of buildings to birds without substantially increasing energy consumption or decreasing public safety.
- Install shields onto light sources not necessary for air traffic to direct light toward the ground.
- Extinguish all exterior lighting (i.e., rooftop floods, perimeter spots) not required for public safety.
- When interior or exterior lights must be left on at night, the operator of the buildings shall examine and adopt alternatives to bright, all-night, floor-wide lighting, which may include:
  - Installing motion-sensitive lighting.
  - Using desk lamps and task lighting.
  - Reprogramming timers.
  - Using lower-intensity lighting.
  - To the extent feasible, providing windows or window treatments that reduce transmission of light out of the building.
  - Providing educational materials to building occupants encouraging them to minimize light transmission from windows, especially during peak spring and fall migratory periods, by turning off unnecessary lighting and/or closing drapes and blinds at night.

Impact BIO-4: Brisbane Tree Ordinance

Less than Significant

Specific Plan development would result in the removal of nearly all trees within the Baylands. The Program EIR (Impact 4.C-5) found that site development would result in the removal of protected trees. In its analysis, the Program EIR concluded that reliance upon the City's tree ordinance, which requires a permit for tree removal and tree replacement at a minimum ratio of 1:1, would result in a less than significant impact with no mitigation required. Relocation of the City's existing fire station would also require removal of some existing trees at the relocation site. Such removed trees would be replaced at a 1:1 ratio to the extent possible given operational requirements for the relocated fire station.

Impact BIO-5: San Bruno Mountain Habitat Conservation Plan

Less than Significant with Mitigation Incorporated

Restoration of Icehouse Hill would promote the goals of the Habitat Conservation Plan to conserve and restore listed butterflies by restoring Icehouse Hill in a manner that supports native plants, and particularly host and nectar plants for listed butterfly species. Specific Plan implementation, in combination with Mitigation Measure BIO-1c would not conflict with the provisions of the San Bruno Mountain Habitat Conservation Plan and would likely result in a potentially beneficial impact on achieving the Habitat Conservation Plan's goals relative to listed butterfly species.

The Specific Plan would relocate Mission Blue Nursery to Icehouse Hill. Should there be a delay between the time the nursery would need to vacate its existing site and the time the new site on Icehouse Hill would be operational, this delay could lead to a temporary disruption in the nursery's ability to continue providing native plants for ecological restoration projects within the Habitat Conservation Plan area, which would hinder the mission of the conservation plan. Mitigation is provided to ensure that the Nursery is not required to vacate its existing facility until the relocation site on Icehouse Hill is ready to commence operation.

Mitigation Measures

MM BIO-5: Relocation of Misson Blue Nursery. The relocation of Mission Blue Nursery to its new location on Icehouse Hill shall be undertaken such that the Nursery is not required to vacate its existing facility until the relocation site on Icehouse Hill is ready to commence operation.

e. Cultural Resources and Tribal Cultural Resources

Impact CUL-1: Substantial Adverse Change in the Significance of a Historic Building or Structure

Less than Significant with Mitigation Incorporated

The Specific Plan provides a five-stage plan for restoration and adaptive reuse of the historic Roundhouse, implementation of which would comply with the Secretary of the Interior's Standards for Rehabilitation. While the Roundhouse restoration plan recommends initial safety measures, including fencing the site, installing security measures to prevent unwanted access, mitigating imminent hazards, and removal of pests and plants, be initiated prior to Specific Plan approval, should these measures not be undertaken, continued deterioration of the historic Roundhouse structure would occur inconsistent with the General Plan and Program EIR mitigation measures. In addition, damage to the Roundhouse that might occur during this process could adversely affect the building's historic integrity. Finally, introduction of visually

incompatible construction immediately adjacent to the building could result in a loss of integrity impacting the historic significance of the building. A significant impact requiring mitigation would thus result.

Baylands development would not have a direct or indirect impact on the Machinery & Equipment Building or the Bayshore/Crocker Tunnel as historical resources. Mitigation Measure MM CUL-1a would prevent continuing deterioration of the Roundhouse consistent with Program EIR mitigation measures adopted for the Baylands. Mitigation Measure MM CUL-1b provides a protocol for addressing any damage that may occur to the Roundhouse during restoration activities.

Program EIR Mitigation Measures

MM CUL-1a: Design Guidelines (Program EIR Mitigation Measure 4.D-1b). All Baylands development within 50 feet of the Roundhouse or the Machinery & Equipment building shall be designed to ensure their architectural compatibility with the historic Roundhouse, and to ensure that new buildings do not overwhelm or unnecessarily contrast with these historic buildings. To this end, the reconstructed Roundhouse shall be located no closer than 30 feet from the park boundary, and all development projects shall incorporate a minimum 50-foot structural setback and appropriate heights, ~~volumes,~~ and materials for any proposed new buildings in the immediate vicinity to ensure compatibility with the Roundhouse building. Appropriate heights of new construction adjacent to the Roundhouse would be the same as (about 25 feet), or slightly greater than (i.e., up to 15 feet greater than), the existing height of the building. Appropriate materials for new construction in the immediate vicinity of either building would be brick cladding. ~~Appropriate volumes for new development that would face the Roundhouse should mirror the curve of the existing structure.~~ New development fronting Roundhouse Circle shall mirror the curve of Roundhouse Circle.

All non-residential development projects within 50 feet of the Roundhouse building shall be subject to City design permit review and approval prior to development to ensure consistency with the guidelines. A qualified historic preservation professional who meets or exceeds the Secretary of the Interior's Professional Qualification Standards for architectural history who has been approved by the City shall provide input on the design of new nonresidential buildings. The developer shall pay or reimburse the City for all costs associated with city-contracted peer review.

Additional Mitigation Measures

- **MM CUL-1b: Timing for Implementation of Initial Safety and Stabilization Measures.** The initial Safety and Security Phase measures outlined in the Baylands Roundhouse Stabilization and Restoration Plan shall be undertaken and completed within three months of Specific Plan approval. Initial Stabilization Phase measures, including "mothballing"[6] of the Roundhouse to prevent further damage and deterioration, shall be undertaken no later than six months following completion of Safety and Security Phase measures outlined in the Baylands Roundhouse Stabilization and Restoration Plan (Draft EIR Appendix E.2). A historic preservation professional who meets or exceeds the Secretary of the Interior's Professional Qualification Standards for architectural history whose work is subject to City staff and/or city-contracted peer review shall review the Initial Safety and Security Phase and Initial Stabilization Phase measures. The Baylands developer shall pay or reimburse the City for all costs associated with Initial Safety and Security Phase, Initial Stabilization Phase, and city-contracted peer review.

- **MM CUL-1c: Protocols to Address Potential Damage to the Roundhouse during its Stabilization and Restoration.** In the event the Roundhouse building is damaged during any phase of implementing the Stabilization and Restoration Plan, all work shall be halted immediately, and the damage shall be assessed by a historic preservation professional who meets or exceeds the Secretary of the Interior's Professional Qualification Standards for architectural history, whose work is subject to City staff and/or city-contracted peer review. This professional shall review the damage and make recommendations for the continuation of Roundhouse stabilization and restoration. Such recommendations shall be submitted to the Brisbane Community Development Director for review and approval. The historic preservation professional's recommendations, as approved by the Community Development Director, shall then be implemented. The Baylands developer shall pay or reimburse the City for all costs associated with the recommendations report and city-contracted peer review.

[6] Mothballing is proposed in the Roundhouse restoration and reuse plan as part of initial stabilization and will include protecting the structure from further moisture penetration, plant and pest infestation, and stabilizing the structural components against some magnitude of wind and seismic forces.

Impact CUL-2: Substantial Adverse Change in the Significance of an Archaeological Resource

Less than Significant with Mitigation Incorporated

The Baylands Specific Plan area and surrounding areas have a high sensitivity for buried pre-contact cultural deposits in native soils and a high sensitivity for surficial or shallow historic-era cultural deposits, particularly west of the Caltrain ROW. Pre-contact sensitivity at the surface is also high along the northern and eastern edge of the Specific Plan area, which was on the edge of the marshland prior to the placement of artificial fill. Thus, excavations into native soils beneath the artificial fill within the Specific Plan have the potential to disturb buried resources. Should excavations for Baylands development extend into native soils, significant impacts to archaeological historical resources could result. Mitigation measures require that, prior to Project construction, an Archaeological Testing Plan be established to clarify the depth of fill and the sensitivity of the construction site for archaeological resources, and to determine if P-38-005131 has a subsurface component within that site. Mitigation measures have also been included that require a cultural resources awareness training be provided for all construction personnel involved in ground-disturbing work and that archaeological monitoring be conducted in all areas identified as sensitive as a result of the archaeological testing.

Program EIR Mitigation Measures

MM CUL-2a: Inadvertent Discovery of Cultural Resources (Program EIR Mitigation Measure 4.D-2). If any previously unidentified archaeological resources are discovered during ground-disturbing activities associated with development on the Baylands, all work within 100 feet of the resources shall be halted. The City, in consultation with a City-approved qualified consulting archaeologist, shall assess the significance of the find according to CEQA Guidelines Section 15064.5. Prehistoric materials subject to this measure might include obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or toolmaking debris; culturally darkened soil ("midden") containing heat-affected rocks, artifacts, or shellfish remains; stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); and battered stone tools, such as hammerstones and pitted stones. Historic-era materials subject to this measure might include in-situ (in place) stone, concrete, or adobe footings and walls; filled wells or privies; and in-situ deposits of metal, glass, and/or ceramic refuse.

If any find is determined to be a historical resource or a unique archaeological resource, the City and the consulting archaeologist shall meet to determine the appropriate avoidance measures or other appropriate mitigation. The City shall make the final determination. All archaeological resources recovered shall be subject to scientific analysis, professional museum curation, and documentation according to current professional standards.

Preservation in place, i.e., avoidance, is the preferred method of mitigation for impacts to cultural resources and shall be required unless there are other equally effective methods. Preservation in place would include planning construction to avoid archaeological sites; deeding archaeological sites into a conservation easement, park, or green space; or capping/covering archaeological sites with a layer of soil before building. Other methods to be considered shall include archeological testing, archeological monitoring, and/or an archeological data recovery program that would include sample excavation, artifact collection, site documentation, and historical research. All archaeological work shall be completed in accordance with an Archaeological Resources Treatment Plan prepared by the City-approved qualifying archaeological consultant whose work is subject to City staff and/or city-contracted peer review. Work may commence upon completion of treatment, as approved by the City.

The Baylands developer shall pay or reimburse the City for all costs associated with the Archaeological Resources Treatment Plan and city-contracted peer review.

Additional Mitigation Measures

MM CUL-2b: Cultural Resources Awareness Training. Before any ground-disturbing and/or construction activities other than installation of pile foundations that might disturb native soils beneath the artificial fill within the Baylands, an archaeologist that meets or is under the supervision of an archaeologist that meets the Secretary of the Interior's Professional Qualifications Standards (SOI PQS) for Archeology shall conduct a training program for all construction and field personnel involved in Specific Plan-related ground disturbance prior to such personnel conducting any on-site activities. The training shall outline the general archaeological sensitivity of the area and the procedures to follow if an archaeological resource and/or human remains are inadvertently discovered during Specific Plan-related activities, specifically, procedures developed pursuant to MM CUL-2d below. The training may be in the form of an in-person meeting, recorded presentation, or a combination of the two and the work is subject to City staff and/or city-contracted peer review. The Baylands developer shall pay or reimburse the City for all costs associated with the training program and city-contracted peer review.

MM CUL-2c: Archaeological Testing, Evaluation, and Treatment. For all ground-disturbing activities requiring a grading permit or infrastructure construction plan under the Specific Plan that may disturb native soils, such as grading, excavation for below-grade parking structures, and utility trenching, the Project or Permit applicant shall retain a Secretary of the Interior-qualified archaeologist whose

work is subject to City staff and/or city-contracted peer review to prepare an Archaeological Impact Assessment to determine if archaeological testing is needed to determine the depth of fill and/or archaeological sensitivity of the permitted work area. The Baylands developer shall pay or reimburse the City for all costs associated with the Archaeological Impact Assessment and city-contracted peer review.

This Archaeological Impact Assessment of the proposed work will be conducted based on, at minimum, the 30% design plans for the work activity and must be completed before the grading permit or infrastructure construction plan is approved. Previous geotechnical studies, other information about the history of the Baylands, as well as any future subsurface reports, can be used to determine if there is sufficient information to determine the potential for the activity to impact archaeological resources and determine if additional subsurface work is needed. The Archaeological Impact Assessment will be presented to the City of Brisbane Director of the Community Development Department, or the Director's designee, and will include a determination as to if archaeological testing or other cultural resources mitigation specific to the site assessed is needed. The Archaeological Impact Assessment will also be submitted to the Northwest Information Center.

- If the retained archaeologist determines that the proposed work may impact intact soils, subsurface testing must be completed to the extent possible prior to the issuance of grading permit or infrastructure construction plan. All testing, evaluation, monitoring, and treatment (as warranted) shall be completed by a Secretary of the Interior-qualified archaeologist. A Native American representative registered with the Native American Heritage Commission that is traditionally and culturally affiliated with the geographic area as described in Public Resources Code Section 21080.3 will be offered the opportunity to collaborate with the archaeologist in the testing, evaluation, and treatment.
- Testing shall be completed according to an established *Archaeological Testing Plan*, which will be prepared and submitted to the Director of the City of Brisbane Community Development Department, or the Director's designee, for review and approval. The *Archaeological Testing Plan* shall include, at a minimum, the identification of the property types of the expected archaeological resource(s) that could be affected by the to-be-permitted ground-disturbing activity; testing methods to be used (hand excavation, coring, and/or mechanical trenching); and the locations recommended for testing. The purpose of testing shall be to determine

the presence or absence of archaeological resources and completed as feasible, determined by the Secretary of the Interior-qualified archaeologist.

- As part of the *Archaeological Testing Plan*, a Health and Safety Plan (HASP) will be prepared by the qualified archaeologist in consultation with the project proponent or permittee. The qualified archaeologist leading the archaeological testing effort shall be Hazardous Waste Operations and Emergency Response-certified, if required, and will be responsible for implementing the HASP, including distributing the plan to field personnel and conducting a safety meeting prior to the commencement of field studies, to protect construction workers, the public, and the environment. All personnel on site will be required to follow the protocol detailed in the HASP.
- Following testing, archaeological monitoring during construction may be recommended by the archaeologist, if deemed necessary. Archaeological monitoring shall be conducted according to an established *Archaeological Monitoring Plan*, which will be prepared and submitted to the Director of the City of Brisbane Community Development Department, or the Director's designee, for review and approval. The Archaeological Monitoring Plan shall include, at a minimum, where monitoring will be completed and under what circumstances based on soil types, geology, distance to known sites, and other factors; person(s) responsible for conducting monitoring activities, including an archaeological monitor and a tribal monitor; schedule for submittal of monitoring logs/reports; and protocol for notifications in case of encountering cultural resources, as well as methods of dealing with the encountered resources. During the course of the monitoring, the archaeological monitor and tribal monitor may adjust the frequency—from continuous to intermittent—of the monitoring based on the conditions and professional judgment regarding the potential to impact resources.
- If any archaeological resources are encountered during testing and/or monitoring, the Project or Permit Applicant shall ensure that all resources are evaluated by a Secretary of the Interior-qualified archaeologist based on California Register of Historical Resources criteria and consistent with the approved plans. If the resource is determined to be significant by the City of Brisbane, in consultation with the Secretary of the Interior-qualified archaeologist, and, if applicable, the tribal monitor, the Project or Permit Applicant, in consultation with the Director of the City of Brisbane Community Development Department, or the Director's designee shall determine whether preservation in place is feasible.

Consistent with Public Resources Code section 21083.2(b) and CEQA Guidelines Section 15126.4(b)(3), this may be accomplished through planning construction to avoid the resource; incorporating the resource within open space; or capping and covering the resource.

- If a significant archaeological resource(s) is in the Project Area, and cannot be avoided, the Project or Permit Applicant, a Secretary of the Interior-qualified archaeologist, the Director of the City of Brisbane Community Development Department, or the Director's designee, and a Native American representative registered with the Native American Heritage Commission that is traditionally and culturally affiliated with the geographic area as described in Public Resources Code Section 21080.3 shall determine treatment measures to minimize or mitigate any potential impacts to the resource pursuant to PRC Section 21083.2 and CEQA Guidelines Section 15126.4. This shall include documentation of the resource and may include data recovery, if deemed appropriate by the City of Brisbane, in consultation with the Secretary of the Interior-qualified archaeologist, and, if applicable, the tribal monitor, or other actions such as treating the resource with culturally appropriate dignity and protecting the cultural character and integrity of the resource.
- If deemed appropriate, data recovery shall be completed according to an established *Archaeological Resources Treatment Plan*, which will be prepared and submitted to the Director of the City of Brisbane Community Development Department, or the Director's designee, for review and approval. The *Archaeological Resources Treatment Plan* shall include, at a minimum, the scope of work; the environmental setting; research questions and goals; a detailed field strategy to address research goals; analytical methods; disposition of artifacts; security approaches and protocols; and reporting requirements. Data recovery may include, but is not limited to, backhoe trenching, shovel test units, hand auguring, and hand excavation.
- Components of the *Archaeological Testing Plan*, *Archaeological Monitoring Plan*, and *Archaeological Resources Treatment Plan* may be combined, as deemed appropriate by the Secretary of the Interior-qualified archaeologist. All documentation shall be submitted to the Northwest Information Center, the Native American Heritage Commission Sacred Land Files, and the Director of the Community Development Department or the Director's designee.

MM-CUL-2d: Site-Specific Mitigation for P-38-005131. For each Archaeological Impact Assessment completed for ~~MM CR-3~~ MM CUL-2c, *Archaeological Testing*,

Evaluation, and Treatment, the Secretary of Interior-qualified archaeologist whose work is subject to City staff and/or city-contracted peer review shall determine if intact deposits associated with P-38-005131 may be impacted within the permitted work area. This assessment will be included in the Archaeological Impact Assessment. The Baylands developer shall pay or reimburse the City for all costs associated with the Archaeological Impact Assessment and city-contracted peer review.

Impact CUL-3: Substantial Adverse Change in the Significance of a Tribal Cultural Resource

No Impact

Six Tribal nations were offered the opportunity for consultation regarding the potential presence of Tribal Cultural Resources within the Baylands and appropriate mitigation for any resources that might be present. No Tribes responded and thus no potential Tribal Cultural Resources were identified.

Impact CUL-4: Disturb Human Remains

Less than Significant

Specific Plan development would comply with Health and Safety Code Section 7050.5 and 7052.5 and Public Resources Code Section 5097.98, which would protect any previously unidentified human remains, including those interred outside of formal cemeteries.

f. Transportation

Impact TRA-1: Vehicle Miles Traveled

Less than Significant – Construction

Although Baylands construction activities would generate vehicle miles traveled, such travel would be temporary and not of a scale that would change regional VMT characteristics. Construction activities within public rights-of-way would be subject to Brisbane's, South San Francisco's, Daly City's, and Caltrans' encroachment permit requirements within their respective rights-of-way. Consequently, any work in public rights of way would reduce roadway disruptions, provide for safe travel, and require compliance with the Manual on Uniform Traffic Control Devices (MUTCD). Construction activities would maintain two-way traffic on all two-way streets at all times; however, flaggers with radios would be positioned at each end of a one-lane construction detour, if needed at times, to maintain two-way traffic. Consequently, work in public rights-of-way would not cause roadway disruptions to a degree that would substantially increase vehicle miles travelled.

Less than Significant – Operations

Per capita VMT by Baylands residents and employees would be more than 30 percent below the existing regional baseline VMT for both Baylands residents and employees (see **Table 4.8-10**). As indicated in **Table 4.8-12**, Baylands development would result in an 80,000-mile daily decrease in regional (nine-County Bay Area) VMT under cumulative Year 2040 conditions (105,000 miles with construction of Candlestick interchange improvements).

Impact TRA-2: Facilitate Transit, Bicycle, and Pedestrian Travel Modes

Less than Significant with Mitigation Incorporated

While the Specific Plan proposes a comprehensive internal bicycle and pedestrian system, it also includes several inadequate connections to offsite facilities which would require vehicular travel for trips that might otherwise be made by bicycle or walking. In addition, the proposed 4-lane roadway cross-section for the Geneva Avenue bridge would eliminate proposed dedicated bus rapid transit lanes on the bridge and require rapid transit buses to merge with vehicular traffic when crossing the bridge, which would discourage use of transit and slow emergency response across the bridge. Relocation of Fire Station No. 81 would preclude use of the existing pedestrian crosswalk and bus stop.

Mitigation Measures are proposed to eliminate inadequate bicycle and pedestrian connections and require a 6-lane bridge section that would accommodate bus rapid transit and minimize the potential for traffic safety conflicts at its western end. Mitigation Measures also require the continued availability of a bus stop and crosswalk adjacent to the relocated fire station during and after construction, along with safe ingress and egress of fire apparatus as well as safe traffic, bus, and pedestrian movement.

Program EIR Mitigation Measures

No Program EIR Mitigation Measures are being carried forward.

Additional Mitigation Measures

MM TRA-2a: Eliminate Inadequate Pedestrian and Bicycle Connections. Prior to or concurrent with approval of the Baylands Specific Plan, the following modifications shall be made to the Baylands Specific Plan to ensure provision of adequate pedestrian and bicycle connections and provide continuous bus rapid transit lanes across the Geneva Avenue extension:

- Sidewalks shall be provided on the east side of Bayshore Boulevard along the Specific Plan frontage consistent with the Bayshore Mobility Plan as approved by the Brisbane City Engineer.

- Connections between the portions of the Bay Trail to be provided within the Baylands and the existing Bay Trail segments north of the Baylands shall be designed and constructed to be ADA compliant as approved by the Brisbane City Engineer.
- Provide off-site improvements shown on **Figure 4.8-8** to provide a safe and accessible pedestrian and bicycle network to local and regional destinations to ensure that the project does not create a situation where there is inadequate mixing for people walking or bicycling with vehicles to off-site destinations.
- The Bay Trail shall be connected through a protected path of travel along Sierra Point Parkway (either a two-way shared use pathway or protected Class IV bicycle facilities if the right-of-way for a shared use path to Bay Trail standards is infeasible), connecting to the proposed Bay Trail extension on the north side of Sierra Point Parkway at Marina Boulevard. Similar improvements shall be provided on the northern end of the Bay Trail within the Baylands.
- Off-site improvements shall comply with the Supplemental Design Guidelines presented in Appendix E to EIR Appendix F.1 and shall be constructed in coordination with the on-site facilities that these are connecting.

MM TRA-2b: Provide for Continuous Bus Rapid Transit Lanes along the Geneva Avenue Extension through the Baylands. A six-lane roadway section shall be provided along the Geneva Avenue extension as called for in the Bi-County Transportation Study, including the bridge over the Caltrain right-of-way unless the Bi-County Study is updated to call for a narrower roadway section. The six-lane roadway section shall consist~~ing~~ of two vehicular travel lanes and one bus rapid transit lane in each direction~~. The roadway cross-section for the Geneva Avenue extension shall be~~ consistent with the approved 2013 Project Study Report or as approved by the Brisbane City Engineer.

Recognizing the regional nature of the Geneva Avenue bridge, the Specific Plan shall be modified to add "fair share contributions from developments participating in Bi-County Transportation Program funding" to the potential funding sources for the bridge.

MM TRA-2c: Improvements within the Roadway Right-of-Way at 140 Valley Drive. Relocation and reconstruction of existing facilities in the public right of way and/or placement of new facilities (including but not limited to traffic control devices to ensure safe ingress and egress of fire apparatus) shall be determined by and constructed as approved by the City Engineer.

Impact TRA-3: Hazards to Vehicles, Bicyclists, or Pedestrians

Less than Significant with Mitigation Incorporated

Specific Plan development would conform to the requirements of the City's encroachment permit process and the California Manual on Uniform Traffic Control Devices regulations, which establish traffic operations and management rules during construction for working safely and causing the least possible interference with people walking, bicycling, driving, or taking transit near the construction area.

A significant impact would result due to:

- Closely spaced intersections along Bayshore Boulevard at Industrial Way and Main Street, as well as along Main Street at Industrial Way.
- An inadequate 4-lane cross-section proposed for the Geneva Avenue bridge.
- Roadway cross-sections for Roundhouse Circle, East Park Boulevard, and West Park Boulevard that do not meet City standards for fire access.
- A substantial increase in students walking or bicycling on a daily basis along Geneva Avenue and Bayshore Boulevard, both of which are identified by San Mateo County as High Injury Network roadways. Students would also travel along a 500-foot section of Main Street without sidewalks.
- Potential for vehicle queueing at the Baylands middle school picking up and dropping off students to conflict with and create hazards for safe vehicular, bicycle, and pedestrian travel.
- Queues of vehicles from Baylands and cumulative development waiting to exit the freeway at southbound US 101 freeway offramps routinely extending back onto the U.S. 101 mainline.

Implementation of Mitigation Measures MM TRA-3a through MM TRA-3o, including the improvements summarized in **Figure 4.8-11a** through **Figure 4.8-11c**, along with implementation of the Bayshore Mobility Plan described in Section 3.3 and the Safe Routes to School Program described in Section 3.4 would ensure that Specific Plan development would adhere to applicable design standards and minimize Specific Plan-related transportation hazards.

Compliance with Brisbane's design standards and Baylands Supplemental Roadway Design Guidelines presented in Appendix F.1 would ensure that new facilities meet relevant standards and support the provision of adequate sight lines, protection for roadway users, and accommodation of loading activities.

Program EIR Mitigation Measures

MM TRA-3a: Construction Management Plans (Program EIR Mitigation Measure 4.N-12). In conjunction with all construction permits, site-specific development and infrastructure projects subject to City of Brisbane approval shall develop, submit for City review and approval, and implement Construction Management Plans that specify measures that would reduce impacts on motor vehicle, bicycle, pedestrian, and transit circulation. The Construction Management Plans shall include but not necessarily be limited to the following:

- Location of construction staging areas for materials, equipment, and vehicles.
- Notification procedures for adjacent property owners and public safety personnel regarding when major deliveries, detours, and lane closures will occur.
- Identification of haul routes for movement of construction vehicles that would minimize impacts on vehicular and pedestrian traffic, circulation, and safety; and provision for monitoring surface streets used for haul routes so that any damage and debris attributable to the haul trucks can be identified and corrected by the project applicant.
- Provisions for removal of trash generated by construction activity.
- A process for responding to, and tracking, complaints pertaining to construction activity, including identification of an on-site complaint manager.

MM TRA-3b: Closely Spaced Intersections on Geneva Avenue (Program EIR Mitigation Measure 4.N-1g). Approval of any tentative map providing for spacing of less than 1,200 feet between full-access intersections along the Geneva Avenue extension shall require that the interactions of green and red signal timing at any one intersection along the Geneva Avenue extension shall not affect operations at any other intersection along the extension, by backing traffic waiting for a green signal at one intersection along the Geneva Avenue extension into another intersection along the extension. Should full-access intersections along the Geneva Avenue extension with spacing of less than 1,200 feet be proposed, a microsimulation of all proposed intersections along the extension (e.g., Synchro, VISSUM) shall be undertaken to analyze interactions of green and red signal timing and demonstrate that operations at any one intersection along the Geneva Avenue extension would not affect operations at any other intersection along the extension.

MM TRA-3c: Loading Areas (Program EIR Mitigation Measure 4.N-17). Each site-specific development and infrastructure projects shall provide sufficient loading and unloading areas in appropriate locations such that loading and unloading activities, including vehicle queuing, will not block roadway or on-site parking area travel lanes, or bicycle or pedestrian facilities.

Additional Mitigation Measures

MM TRA-3d: City Design Standards and Supplemental Roadway Design Guidelines for the Brisbane Baylands. Baylands roadways shall comply with the City's design standards and the supplemental roadway design guidelines set forth in EIR Appendix F.1, as determined by the City Engineer.

MM TRA-3e: Site Distance at Intersections and Driveways. Roadway improvement plans and proposed site-specific development and infrastructure projects shall also demonstrate adequate sight distance to meet the City's design standards at roadway intersections, driveways, and parking and loading areas prior to receiving construction permits.

MM TRA-3f: Bayshore Boulevard Improvements. Specific Plan development shall be responsible for the following improvements along Bayshore Boulevard to reduce hazardous conditions.

- Implement the Bayshore Mobility Plan (EIR Appendix F.1) or pay a fair share fee in lieu of improvements. At a minimum, Baylands development shall provide the following improvements along Bayshore Boulevard:
    - Allow right-turn access only for all unsignalized local and green streets that intersect Bayshore Boulevard, with features described in the Supplemental Roadway Design Guidelines (EIR Appendix F.1) and the Bayshore Mobility Plan (EIR Appendix F.1) and to ensure that speed differential does not result in hazardous conditions through adequate lane geometry and sight distances. Alternatively, left-turn access could be approved by the City Engineer following submittal and City review of substantial evidence that such access would not result in vehicle queues blocking through lanes, unsafe turning movements, inadequate sight distance, excessive speeds on local and green streets, or unsafe attempts by pedestrians to cross Bayshore Boulevard or bicyclists to make unsafe left turns.
    - Eliminate or convert the intersection of Bayshore Boulevard and Industrial Way from a traffic signal to a side-street stop-controlled intersection that allows right-turn in and out only, with the primary

vehicular access to the southern portion of the Roundhouse District provided through Main Street.

Provide side-street stop-controlled intersection and prohibit westbound left turns at the intersection of Main Street at the driveway east of Bayshore Boulevard adjacent to development block C2, which is shown as a traffic signal in the specific plan. Alternatively, the project applicant shall prepare a traffic study, including signal warrants and operational analysis that demonstrates the configuration of closely two spaced signalized intersections on Main Street would have adequate stacking distances to prevent peak hour vehicle queues to extend from one intersection to another.

- The above measures shall be constructed in coordination construction of new or modified intersections along and Bayshore Boulevard frontage improvements.

MM TRA-3g: Geneva Avenue Improvements. Modify the cross-section of the Geneva Avenue bridge to provide six through lanes (four lanes for vehicular travel and two lanes for bus rapid transit as required by MM TRA-2b. In addition to the features described in the Specific Plan, Specific Plan development shall provide the following improvements:

- Modify the design of the western touchdown of the Geneva Avenue bridge to eliminate conflicting movements between bridge traffic and frontage roads, or between vehicles and bicycles by removing the eastbound frontage road or through a frontage road design that conforms to City design standards and the Supplemental Design Guidelines presented in Appendix F.1 for approval by the City Engineer.
- Redesign the roadway to provide adequate separation for bicyclists (minimum 2 feet for roadways with 35 miles per hour speed limits) to match NACTO standards.
- Specific Plan development shall contribute fair share payments for Candlestick Interchange improvements.

Construct the above measures in coordination with construction of the Geneva Avenue extension, which would require the addition of BRT lanes to the Geneva Avenue bridge over Caltrain and the construction of the Geneva Avenue bridge in coordination with the Phase 1 development.

MM TRA-3h: Green Streets. In addition to the features described in the Specific Plan, Specific Plan development shall provide the following to reduce hazardous conditions:

- Implement the design standards in the Supplemental Design Guidelines in (EIR Appendix F.1) to slow median vehicle speeds to 15 mph or slower and reduce the potential for conflicts between roadway users while ensuring adequate emergency access.
- Provide driveways on at least two block faces for each development block on green streets to reduce the concentration of vehicles on any one green street. Alternatively, the project applicant could demonstrate through a traffic study using the trip generation information presented in this study that traffic volumes on the green street would not exceed 1,000 vehicles per day.
- Establish and maintain a monitoring program for traffic volumes and speeds on green streets to ensure that daily vehicle volumes average 1,000 vehicles or less and that median vehicle speeds are 15 miles per hour or less as approved by the City Engineer. Should the monitoring program find that average daily vehicle volumes more than 1,000 vehicles or that median vehicle speeds exceed 15 miles per hour, additional features consistent with the Supplemental Roadway Design Guidelines to slow traffic speeds and reduce the potential for cut through traffic shall be implemented as approved by the City Engineer at the Baylands' expense.

Construct the above measures features in coordination with construction of the green streets.

MM TRA-3i: Main Street and Campus Parkway Intersections at Bayshore Boulevard. In addition to the features described in the Specific Plan, Specific Plan development shall provide protected intersection features at the signalized intersections of Bayshore Boulevard with Main Street and Campus Parkway consistent with those presented in the Supplemental Roadway Design Guidelines (EIR Appendix F.1).

MM TRA-3j: Roundhouse Circle and East and West Park Boulevard. In addition to the features described in the Specific Plan, Specific Plan development shall provide the following improvements to reduce hazardous conditions:

- Modify the roadway cross-sections for Roundhouse Circle as well as East and West Park Boulevard to provide a minimum continuous 20-foot-wide fire access that is not part of a parking lane, bicycle facility or buffer as approved by the City Engineer and North County Fire Authority.

- Modify the cross-section for Roundhouse Circle to provide for a 10-foot parking lane.
- Provide stop signs for local roadways connecting to Roundhouse Circle and provide at least one marked pedestrian crossing location per intersection that meets the standards set forth in the Supplemental Roadway Design Guidelines (EIR Appendix F.1).

Construct the above measures features in coordination with construction of these local roadways.

MM TRA-3k: Tunnel Avenue. Tunnel Avenue shall be upgraded to current codes and standards per General Plan Program C.5a. In addition to the features described in the Specific Plan, Specific Plan development shall provide the following improvements to reduce hazardous conditions:

- Provide a two-way left-turn lane north of Lagoon Road or turn pockets at all driveways with adequate stacking distance to allow southbound vehicles to access driveways for existing and project land uses without stopping in the southbound through lane.
    - Design access features to provide adequate access for large trucks in and out of the Golden State Lumber site, along with safe movement of personal vehicles, such as through traffic controls or modified access into parking facilities. These features shall be designed to ensure that personal vehicles or trucks do not back out onto Tunnel Avenue.
- Provide roundabouts, if approved by the City engineer (or traffic signals if roundabouts are not approved) at intersections of minor arterial and collector streets, including Lagoon Road, Beatty Avenue, the roadway connecting Tunnel Avenue to Geneva Avenue, East Campus Road, and Visitacion Creek North to facilitate access to the East Campus land uses, unless an improvement is demonstrated by substantial evidence approved by the City Engineer not to be warranted at a specific location.

Construct the above measures in coordination with other infrastructure as follows: (1) the segment of Tunnel Avenue at Golden State Lumber and to the north in coordination with the Geneva Avenue extension, (2) the segment to the south of Golden State Lumber prior to opening of the land uses in the Campus East District or in coordination with the Lagoon Road reconstruction.

MM TRA-3l: Sierra Point Parkway. In addition to the features described in the Specific Plan, Specific Plan development shall provide the following to reduce hazardous conditions:

- Provide a roundabout at the intersection of Sierra Point Parkway and Lagoon Road/US 101 southbound on- and off-ramps as part of the realignment of Lagoon Road, if approved by Caltrans (or a traffic signal if Caltrans does not approve a roundabout). This intersection shall be designed to allow for the continuation of the Bay Trail through this intersection consistent with the features presented in the Supplemental Roadway Design Guidelines (EIR Appendix F.1).

Construct the above in coordination with the existing City of Brisbane plans to add a roundabout or traffic signal at this off-ramp to support anticipated traffic growth associated with development at Sierra Point.

MM TRA-3m: Access to Community Fields. If it is to be constructed prior to relocation of the existing Fire Station No. 81, Community Fields Park shall maintain safe and prioritized access for emergency response vehicles at all times to the satisfaction of the Brisbane Public Works Director and North County Fire Authority. In addition, the design of the West Rail Trail shall not encroach into the Caltrain right-of-way and Machinery & Equipment property. Neither shall construction of the West Rail Trail be permitted to grade into the easterly foot of Icehouse Hill.

MM TRA-3n: Safe Routes to School. A sidewalk or multi-use path shall be provided along Main Street west of Bayshore Boulevard within the City of Brisbane to provide a safe route to school for students to the proposed middle/high school within the Baylands as approved by the Brisbane City Engineer.

In addition, Specific Plan development shall provide the following safe routes to school improvements:

- High visibility crosswalks using striped pattern with ladder markings made of high visibility material such as thermoplastic tape instead of paint shall be provided at the following locations:
  - The intersections of Bayshore Boulevard at Geneva Avenue and at Main Street, which shall also be provided with protected intersection designs.
  - All intersections along Geneva Avenue between Bayshore Boulevard and the Caltrain right-of-way, as well as at intersections around the Baylands middle school.

  - Sidewalks on the east side of Bayshore Boulevard along the Specific Plan frontage.

- Crosswalks shall be provided no more than 250 to 500 feet apart along the frontage of the middle school to adequately accommodate students crossing at controlled locations.
- Provide school crossing guards at the intersections of Bayshore Boulevard at Geneva Avenue and at Main Street before and after school.
- Limit speed to 15 miles per hour within 500 feet of school when children are present at school.
- Advance Stop Bars shall be provided at stop-controlled or signalized crosswalks within 500 feet of the middle school to reduce vehicle encroachment into the crosswalk. This feature shall be designed in a manner consistent with advanced stop lines in compliance with national guidance provided in Section 3B.16 of Caltrans; the Manual on Uniform Traffic Control Devices.

The design of the middle school within the Baylands shall incorporate a combination of curb painting, stenciled directions within drop-off and pick-up areas, off-street queueing lanes, signage, and temporary barricades and traffic cones to:

- Separate vehicles from bicycles and pedestrians and safely direct vehicular and non-vehicular movement;
- Provide safe places for students to exit vehicles;
- Maintain through travel lanes on adjacent streets; and
- Provide easy egress routes for vehicles after dropping off or picking up students to minimize unsafe or disruptive vehicle turning movements.

MM TRA-3o: Continued Access to Recology, Golden State Lumber, Kinder Morgan, and Other Lands. Access via public street(s) to Recology, Golden State Lumber, Kinder Morgan Tank Farm, and other lands east of the Caltrain tracks that are not owned by the Specific Plan applicant shall be maintained at all times.

Impact TRA-4: Access for Emergency Response and Evacuation

Less than Significant with Mitigation Incorporated

Temporary lane closures that would temporarily cause traffic to back up and block usable travel lanes during construction would impair emergency access. The Specific Plan's proposed roadway network would provide multiple routes for emergency response, providing

alternatives should any given roadway become inaccessible. In addition, the Bayshore Mobility Plan would maintain the ability for emergency vehicles to bypass traffic on Bayshore Boulevard by providing emergency traffic signal priority, median breaks, and queue jumps.

The Geneva Avenue bridge section four-lane roadway section with no shoulders could adversely affect emergency access. In addition, the proposed cross sections for Roundhouse Circle, East Park Boulevard, and West Park Boulevard would not meet minimum City standards for emergency vehicle access.

During a 100-year storm event, portions of key roadways such as Tunnel Avenue would not be available as an evacuation route, which would hinder emergency access. Emergency access would also not be available to development sites along Frontage Road, including basement parking areas.

Implementation of Mitigation Measures MM TRA-1a through MM TRA-1c would ensure adequate emergency response through construction zones within roadways affected by the 2025 Specific Plan project by providing for through lanes to be maintained at all times during project construction.

Implementation of Mitigation Measure MM TRA-2c would require continuous bus rapid transit lanes along the Geneva Avenue extension, including the bridge over the Caltrain rail line. The bus rapid transit lanes would facilitate emergency response across the bridge and along the entirety of Geneva Avenue, even during peak travel hours.

Mitigation Measure MM TRA-3c would require Specific Plan roadways to meet City design standards and Supplemental Roadway Design Guidelines developed for the Baylands. Implementation of this measure along with Mitigation Measures MM HWQ-4a and MM HWQ-4b would ensure access for emergency service providers throughout the Baylands, regardless of the direction or mode of travel taken by evacuees leaving the site.

While the large volume of haul trucks on the existing two-lane Tunnel Avenue bridge during site grading would substantially reduce emergency vehicle access, Air Quality Mitigation Measure MM AQ-1f would require construction of an overland conveyor system to transport excavated soil material from the eastern portion of the site to the western portion in lieu of transport by trucks.

g. Air Quality

Impact AQ-1: Emissions of Criteria Air Pollutants for Which the Basin is in Nonattainment

Significant and Unavoidable

During site grading, average daily emissions of NO_X would exceed applicable thresholds. Once grading activities are completed, construction emissions would be minimal but would add to operational emissions of residential and commercial uses as buildings are completed and occupied. Thus, a significant impact would occur during site grading.

Operational emissions of reactive organic gases (ROG), oxides of nitrogen (NO_X), and particulate matter which consists of PM that is 10 microns in diameter or less (PM_{10}) from Phase 1 development would exceed annual and daily thresholds, resulting in a significant impact. The addition of Phase 2 development would increase operational emissions of these criteria pollutants and contribute sufficient emissions such that the Specific Plan would also exceed annual and daily thresholds for particulate matter which consists of PM that is 2.5 microns in diameter or less ($PM_{2.5}$), resulting in a significant impact.

Adherence to BAAQMD's best management dust minimization practices, which are mandated by the State Water Board Construction Stormwater General Permit, Order 2022-0057-DWQ, would reduce potential dust-related criteria air pollutant impacts during project construction. However, combined construction and operational emissions of ROG, NO_X, $PM_{2.5}$, and PM_{10} would, however, exceed annual and daily thresholds starting with Phase 1 buildout and continue through full buildout operations.

The provision of one aboveground, 2,000-gallon diesel or ethanol storage tank and two, 1,000-gallon mobile propane tanks to provide emergency fuel storage for City and emergency response use would not be a source of substantial TACs from volatile emissions. No acute, chronic, or carcinogenic TACs are emitted from uncombusted, stored diesel or propane fuel tanks would subject to its BAAQMD Rule 8-5 and be required to be designed to limit leaking, fugitive organic compounds.

Mitigation Measures MM AQ-1a through MM AQ-1c and MM AQ-1e would reduce ROG, NO_X, PM_{10}, and $PM_{2.5}$ emissions due to cleaner engine technology, and MM AQ-1d would reduce ROG emissions from architectural coating during construction by using lower VOC paints. Mitigation Measure MM AQ-1f would reduce ROG, NO_X, PM_{10}, and $PM_{2.5}$ emissions due to reduction of heavy truck trips for transport of excavated soil. Mitigation measures MM AQ-1g through MM AQ-1l would reduce operational emissions of ROG, NO_X, PM_{10}, and $PM_{2.5}$ for Phase 1 development and full Specific Plan buildout; however, emissions of all criteria pollutants would still exceed significance thresholds after mitigation. Impacts for construction,

operations, and combined construction and operational would, therefore, be significant and unavoidable.

Program EIR Mitigation Measures

MM AQ-1a: Clean Off-Road Construction Equipment (Program EIR Mitigation Measure 4.B-2a). To reduce construction vehicle emissions, the following provisions shall be incorporated into construction specifications for all site-specific development and on- and off-site infrastructure projects:

i. Idling times shall be minimized either by shutting diesel-powered or gasoline-powered equipment off when not in use or reducing the maximum idling time of diesel-powered equipment to five minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers in at least five languages (e.g., English, Spanish, Vietnamese, Tagalog, and Chinese) at all access points.

ii. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. It shall be the contractor's responsibility to ensure that all equipment has been checked by a certified mechanic and determined to be running in proper condition prior to operation.

iii. All construction contract specifications shall include a requirement that on-road diesel trucks used to transport spoils consist of 2020 or newer model-year trucks with factory-built engines. All on-road diesel trucks shall be required to have emission control labels as specified in 13 CCR 2183(c) or any subsequent updates to this CARB regulation, whichever is more stringent. The construction contract specifications shall require that the contractor submit to the City a comprehensive inventory of all on-road trucks used to haul spoils. The inventory shall include each vehicle's license plate number, the engine production year, and a notation of whether the truck is in possession of an emission control label as defined in 13 CCR. The contractor shall update the inventory and submit it monthly to the City throughout the duration of the project.

MM AQ-1b: Tier 3 Off-Road Construction Equipment (Program EIR Mitigation Measure 4.B-2b). All construction contract specifications shall include a requirement that off-road construction equipment used for site improvements shall be equipped with Tier 3 (Tier 2 if greater than 750 hp) diesel engines or better. All diesel generators used for project construction must meet Tier 4 emissions standards. If new emissions standards are adopted by U.S. EPA during project construction,

construction contract specifications shall incorporate whichever standard is more stringent.

Additional Construction Mitigation Measures

MM AQ-1c: Zero-Emissions and Tier 4 Off-Road Construction Equipment. The following measures shall be required for construction equipment, which would reduce ROG, NO_X, PM_{10} (including DPM), and $PM_{2.5}$ from equipment exhaust:

1. *Engine Requirements.* All off-road equipment ~~greater than 25 horsepower~~ shall meet the following requirements:

   a. All portable engines, such as generators, shall be electric. No propane or natural gas generators shall be used.

   b. All portable construction tools and equipment less than 25 horsepower shall be electric powered.

   ~~b~~c. Zero-emissions (ZE) construction equipment models, which currently include electric and hydrogen fuel cell technologies, shall be used for all equipment that is commercially available ~~as plug-in or battery-electric equipment. Portable equipment shall be powered by grid electricity~~. Electric equipment shall include, but is not limited to, concrete/industrial saws, sweepers/scrubbers, aerial lifts, welders, air compressors, fixed cranes, forklifts, and cement and mortar mixers, pressure washers, and pumps. To qualify for an exception, the applicant shall provide the City with evidence supporting its conclusion that electric equipment is not commercially available.

   ~~c~~d. All off-road equipment greater than 25 horsepower with e~~E~~ngines that cannot meet zero-emissions standards must meet or exceed either USEPA or CARB Tier 4 Final off-road emission standards.

   ~~d~~e. Engines shall be fueled with alternative fuels, including natural gas, propane, hydrogen fuel cell, and electricity, as commercially available and to the maximum extent feasible during each construction phase and activity.

   ~~e~~f. The Brisbane Community Development Director may permit other best technology that becomes commercially available in the future as substitution(s) for the above items a–d, provided that the project sponsor documents to the satisfaction of the Brisbane Community Development Director that (1) the technology would result in ROG, NO_X, PM_{10}, and $PM_{2.5}$ emissions reductions equivalent or greater than the measure(s) it would substitute for and (2) it would not increase

other pollutant emissions or exacerbate other impacts, such as noise. This may include new alternative fuels or engine technology for off-road equipment (such as electric or hydrogen fuel cell equipment) that is not available as of 2025.

~~f~~g. Idling time for off-road equipment not in use shall be limited to 2 minutes, except as provided in exceptions to the applicable state regulations regarding idling for off-road equipment. Documentation shall be provided to equipment operators in multiple languages (e.g., English, Spanish, Chinese) to remind operators of the 2-minute idling limit.

~~g~~h. Construction contractors shall be required to properly maintain and tune equipment in accordance with manufacturer specifications.

~~2. All portable construction tools and equipment less than 25 horsepower shall be electric powered.~~

~~3~~2. For purposes of this mitigation measure, zero-emissions off-road equipment shall ordinarily be considered "commercially available" if the vehicle is capable of serving the intended purpose and is included in the California Air Resources Board's Advanced Clean Equipment (ACE) List, https://ww2.arb.ca.gov/our-work/programs/msei/off-road-advance-clean-equipment, included in California Air Resources Board's Clean Off-Road Equipment Voucher Incentive Project (CORE) catalog, https://californiacore.org/equipmentcatalog/, or listed as available in the US on the Global Commercial Vehicle Drive to Zero Off-Road Zero-Emissions Technology Inventory (ZETI) inventory, https://globaldrivetozero.org/tools/zeti-offroad/. The City shall be responsible for the final determination of commercial availability, based on all the facts and circumstances at the time the determination is made. For the City to determine that such vehicles are commercially unavailable, the operator must submit documentation from a minimum of three ZE off-road equipment dealers identified on the ACE or CORE websites demonstrating the inability to obtain the required ZE off-road equipment needed within 6 months.

~~4~~3. *Exceptions to Requirement 1c, above.* The City of Brisbane Community Development Director may permit exceptions to the requirements of 1.a,

1.b, 1.c, 1.d, and 2 subject to the provisions of requirements in **Tables 4.9-10 and 4.9-11**, below.

Table 4.9-10: Exceptions to Mitigation Measure MM AQ-1d, Items 1.a, 1.b, 1.c, 1d, and 2

Requirement	Condition(s) for Exceptions
1.a. Electric engines for portable equipment 2. Electric equipment less than 25 horsepower	If electric power from the grid becomes unavailable within the Baylands with the outage anticipated to last more than two (2) working days, non-electric equipment may be used, until the power is restored.
1.b Zero-Emissions (ZE) engines for construction equipment	The Brisbane Community Development Director may permit use of non-electric equipment should the construction contractor demonstrate to the Director's satisfaction that such zero-emissions equipment is not commercially available as defined above. Any non-zero-emissions equipment permitted for use by the Brisbane Community Development Director shall be the next cleanest piece of commercially available equipment that would reduce exhaust emissions of ROG, NO_X, PM_{10}, and $PM_{2.5}$.
1.c. Tier 4 Final emission standards	The Brisbane Community Development Director may permit use of equipment that does not meet Tier 4 Final standards such as but not limited to bore/drill rigs required for grading/shoring/excavation and for mobile cranes required for building construction should the construction contractor demonstrate to the Director's satisfaction that: (1) The contractor does not have the required type of equipment within its current available inventory, has ordered such equipment at least 60 days in advance and has made a good faith effort to lease or rent such equipment but it is not available; (2) A particular piece of Tier 4 final off-road equipment is technically or financially infeasible; (3) The equipment would not produce desired emissions reduction due to required operating modes; or (4) There is a compelling emergency need to use off-road equipment that is not Tier 4 Final compliant.
1.d. Alternative fuel engines for construction equipment	The Brisbane Community Development Director may permit use of non-alternative fueled equipment should the construction contractor demonstrate to the Director's satisfaction that: (1) The use of alternative fuels for internal combustion engines would negatively affect construction performance or void equipment warranties; or (2) If the use of alternative fuels would result in additional ROG, NO_X, PM_{10}, and/or $PM_{2.5}$ emissions compared to the proposed equipment.

NOTES: Equipment subject to any of the above criteria shall be the next cleanest piece of equipment that is commercially available, or another alternative that results in equivalent or greater reductions of ROG, NO_X, PM_{10}, and $PM_{2.5}$ emissions, according to **Table 4.9-11** below. Emerging technologies with verifiable emissions reductions supported by substantial evidence may also be employed in lieu of the step-down schedule below, if those technologies meet the requirements of 1.e, above.

Table 4.9-11: Engine Compliance Alternatives

Compliance Alternative	Minimum Engine Technology / Emissions Standard / Emissions Control
1	Alternative fuels that reduce ROG, NO_X, PM_{10}, and $PM_{2.5}$ emissions compared to the equivalent Tier 4 Final diesel engine.
2	Tier 4 Final
3	Tier 4 Interim

HOW TO USE THE TABLE: If zero-emissions engines are not available, then the Project sponsor shall meet Compliance Alternative 1. If off-road equipment meeting Compliance Alternative 1 are not available, then the Project sponsor shall meet Compliance Alternative 2. If engines that comply with Tier 4 Final off-road emission standards are not available, then the Project sponsor shall meet Compliance Alternative 3.

Sufficient documentation shall be provided by the construction contractor with a request for any exception described above to demonstrate the need for the requested exception. Any exception granted by the Brisbane Community Development Director shall be based on substantial evidence provided by the construction contractor that one or more of the above exception conditions exists.

MM AQ-1d: Super-Compliant VOC Architectural Coatings during Construction. "Super-compliant" volatile organic compound (VOC) (i.e., ROG) architectural coatings that meet the regulatory limits in South Coast Air Quality Management District rule 1113 (SCAQMD 2024),[7] which currently requires a limit of 10 grams VOC per liter shall be used during construction for all interior and exterior spaces and shall include this requirement on plans submitted for review to the planning department (BAAQMD architectural coatings regulations do not have a limit this low). The project sponsor shall submit a signed certification statement that this requirement has been incorporated into contract specifications.

MM AQ-1e: Clean On-Road Construction Trucks. Heavy-duty on-road construction trucks shall comply with the following, which would reduce ROG, NO_X, PM_{10}, and $PM_{2.5}$ emissions:

1. *Engine Requirements.*
    a. Use alternative-fueled or zero-emissions vehicles (ZEVs) that would reduce emissions below a diesel-fueled vehicle such as electricity, hydrogen fuel cell, natural gas, or propane. If alternative fuels are not commercially available, all on-road heavy-duty diesel trucks with a gross vehicle weight rating of 19,500 pounds or greater used within the Specific Plan area (such as haul trucks, water trucks, dump trucks,

[7] South Coast AQMD Rule 1113 is required for the Baylands since it is more stringent than comparable Bay Area AQMD requirements.

concrete trucks, and vendor trucks) shall be model year 2020 or newer.

b. Any other best technology commercially available in the future (i.e., not available as of 2025) may be used in lieu of or in addition to the above item 1.a, provided that (1) the technology would result in equivalent or greater ROG, NO_X, PM_{10}, and $PM_{2.5}$ emissions reductions; and (2) such measures would not increase other pollutant emissions or result in other impacts, such as noise.

c. Require the idling time for on-road vehicles be limited to two minutes, except as provided in exceptions to the applicable state regulations regarding idling for on-road vehicles. Documentation shall be provided to truck drivers in multiple languages (e.g., English, Spanish, Chinese) to remind operators of the 2-minute idling limit.

d. For purposes of this mitigation measure, an alternative-fueled and ZEV truck shall ordinarily be considered commercially available if the vehicle is capable of serving the intended purpose and is included in California's Hybrid and Zero-Emissions Truck and Bus Voucher Incentive Project, https://californiahvip.org/ or listed as available in the US on the Global Commercial Vehicle Drive to Zero inventory, https://globaldrivetozero.org/. The City shall be responsible for the final determination of commercial availability, based on all the facts and circumstances at the time the determination is made. In order for the City to make a determination that such vehicles are commercially unavailable, the operator must submit documentation from a minimum of three (3) ZEV dealers identified on the californiahvip.org website demonstrating the inability to obtain the required ZEVs or equipment needed within 6 months.

2. *Exceptions.* The lead agency grants an exception to the alternative fuel requirements of item 1.a if alternative fuels are not commercially available or the use of alternative fuels for internal combustion engines is not technologically feasible, would void truck warranties, or would result in additional ROG, NO_X, PM_{10}, and $PM_{2.5}$ emissions compared to traditional fuels. The waiver may be granted by the Brisbane Community Development Director based on substantial evidence provided by the project sponsor that one or more of the above waiver conditions exists.

3. The documentation, as described in Mitigation Measure MM AQ-2b item ~~3~~iii above, shall include a description of each general category of on-road trucks required to comply with item 1, *Engine Requirements*. The

description shall also specify the engine model years and fuel type being used (e.g., diesel, electricity, natural gas).

4. ~~The Certification Statement, as described in Mitigation Measure MM AQ-2b item 4 above, shall apply to all applicable requirements for on-road trucks.~~The project sponsor shall submit a signed certification statement that the on-road truck engine requirements have been incorporated into construction contracts.

MM AQ-1f: ~~Conveyor System for~~ **Reduce NO_X Emissions from Transport of Excavated Material.** The project applicant shall implement the best available control technologies (BACT) for reducing emissions of nitrogen oxides (NO_X) resulting from the transport of excavated material from the eastern portion of the Specific Plan area to the western portion, west of the Caltrain right-of-way, as commercially available at the time such soil movement occurs. At minimum, all soil movement trucks shall be model year 2020 or newer.

1. *Requirement*. The Specific Plan applicant shall implement the best available control technologies (BACT) for reducing NO_X emissions from soil movement as commercially available.
2. *Limits and Location*. Compliance with the BACT requirement shall be achieved through on-site or project-related measures and technologies only and shall not rely on off-site emission offsets, trading programs, or voluntary credits.
3. *Applicability*. The BACT requirement applies to the transport of excavated material from the eastern portion of the Specific Plan area to the western portion, west of the Caltrain right-of-way, including movement across Tunnel Avenue for the purposes of balancing fill. Excavated material includes soil material exhumed during the site preparation, excavation, and grading phases associated with Specific Plan construction, including related subphases such as scarification. The BACT requirement applies to any construction equipment or vehicle used to transport excavated material from its initial excavation location to another portion of the site for transfer purposes, including transfer to a conveyor system and/or movement across Tunnel Avenue. Transport activities subject to this measure include but are not limited to hauling, conveying, or otherwise moving excavated soil material for fill balancing purposes.

4. *Definitions.*

   a. Best available control technology (BACT): as defined by Bay Area Air District Regulation 2, Rule 2, Section 206, which is the most stringent of:

      i. The most effective emission control device or technique which has been successfully utilized for the type of equipment comprising such a source; or

      ii. The most stringent emission limitation achieved by an emission control device or technique for the type of equipment comprising such a source; or

      iii. Any emission control device or technique determined to be technologically feasible and cost-effective by the Brisbane Community Development Director; or

      iv. The most effective emission control limitation for the type of equipment comprising such a source which the EPA states, prior to or during the public comment period, is contained in an approved implementation plan of any state, unless the applicant demonstrates to the satisfaction of the Brisbane Community Development Director that such limitations are not achievable. Under no circumstances shall the emission control required be less stringent than the emission control required by any applicable provision of federal, state or Air District laws, rules or regulations.

   b. Commercially available: a low- or zero-NO_X truck shall ordinarily be considered commercially available if the vehicle is capable of serving the intended purpose and is included in California's Hybrid and Zero-Emissions Truck and Bus Voucher Incentive Project, https://californiahvip.org/ or listed as available in the US on the Global Commercial Vehicle Drive to Zero inventory, https://globaldrivetozero.org/. The City shall be responsible for the final determination of commercial availability, based on all the facts and circumstances at the time the determination is made. In order for the City to make a determination that such vehicles are commercially unavailable, the operator must submit documentation from a minimum of three (3) truck dealers identified on the californiahvip.org website demonstrating the inability to obtain the required BACT or equipment needed within 6 months.

5. *Compliance Framework.* To meet the BACT requirement, the Specific Plan applicant shall prepare and implement a Construction Material Transport

NO_X Emissions Reduction Plan (CMTNERP), subject to review and approval by the City prior to issuance of grading permits. The CMTNERP shall:

a. Select and Implement BACT for reducing NO_X emissions. Implement one or more of the following measures and technologies, or functionally equivalent measures and technologies:

   i. Use of zero-emission or zero-NO_X on-site transport technologies, including but not limited to electric or hydrogen fuel cell haul trucks.

   ii. Use of low-NO_X on-site transport technologies, including but not limited to diesel hybrid or hybrid electric haul trucks.

   iii. Use of model year 2020 or newer trucks.

   iv. Shortening truck haul routes to reduce the distance trucks need to travel or to reduce the capacity of trucks needed to move excavated material.

   v. Construction and operation of electrically powered ~~An~~ overland conveyor systems or similar fixed material-handling infrastructure ~~shall be constructed to transport excavated soil material from the eastern portion of the site to the western portion in lieu of transport by trucks. The conveyor system shall be electric and shall include water sprays for dust reduction during transport. Movement of soil from the eastern to the western portion of the Specific Plan area by truck shall be permitted only if the California Public Utilities Commission does not approve a conveyor system crossing over the Caltrain right-of-way~~. Such a system shall comply with all applicable Bay Area Air District Rules and Regulations, including Regulation 2 for permitting and Regulation 6 for fugitive dust emissions, including dust suppression equipment (e.g., water spray bars) to reduce dust generated during transport.

   vi. On-site material staging or processing to reduce transport distances.

   vii. Phasing of soil movement to reduce annual material transport activities.

   viii. Other technologies identified in published guidance or rulemaking documents issued by the Bay Area Air District (Air District), the California Air Resources Board (CARB), the

California Air Pollution Control Officers Association (CAPCOA), and/or the U.S. Environmental Protection Agency (U.S. EPA) that are technically demonstrated, commercially available, and achieve equivalent or greater NO_X reductions than the measures identified above. All measures and technologies shall be supported by quantified emissions calculations and shall not result in new or more severe impacts related to noise, vibration, greenhouse gases, air quality, biological resources, public safety, or other impact areas.

b. *Demonstrate BACT Compliance*. Demonstrate, through quantified calculations, that the combined effect of selected measures and technologies reduces net NO_X emissions from material transport.

c. *Monitoring and Enforcement*. The CMTNERP shall be submitted to the Brisbane Community Development Director for review and approval. All measures and technologies identified in the CMTNERP shall be included on project drawings submitted for the construction-related permit(s) or in other documentation submitted to the Brisbane Community Development Director prior to the issuance of any construction permits. The City shall confirm inclusion of these measures and technologies in the plans prior to issuance of construction permits for the applicable phase.

d. *City Review Standards*. The Brisbane Community Development Director shall approve the CMTNERP if it demonstrates, based on substantial evidence, that:

i. The selected NO_X-reduction measures and technologies are feasible and enforceable; and

ii. All BACT for reducing NO_X emissions as commercially available at the time are implemented.

6. *Feasibility and Substitution*.

a. If the Specific Plan applicant demonstrates, through substantial evidence and subject to City approval, that implementing all commercially available BACT for reducing NO_X emissions is not feasible, where feasible is defined by CEQA Guidelines Section 15364 ("capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors") due to

technological, economic, or legal constraints beyond the Specific Plan applicant's control, the applicant shall:

i. Implement all feasible BACT identified in the CMTERP;

ii. Reduce NO_X emissions to the maximum extent feasible; and

iii. Document the specific constraints preventing full compliance with BACT.

Additional Operations Mitigation Measures

MM AQ-1g: Super-Compliant VOC Architectural Coatings during Operation. ~~Future tenant improvements provided by building owners shall use~~ The Project Sponsor shall require all developed parcels to include within their Covenants, Conditions, and Restrictions (CC&Rs) and/or ground leases requirements for all future interior and exterior spaces to be repainted with super-compliant VOC architectural coatings ~~for all interior and exterior painting~~. "Super-compliant" coatings refer to paints that meet the more stringent regulatory limits in the current version of South Coast Air Quality Management District rule 1113,[8] which requires a standard of 10 grams VOC per liter or less (http://www.aqmd.gov/home/regulations/compliance/architectural-coatings/super-compliant-coatings).

MM AQ-1h: Best Available Emissions Controls for Stationary Emergency Generators. To reduce emissions of ROG, NO_X, PM_{10}, and $PM_{2.5}$ associated with operation of the proposed project's emergency generators, the project applicant shall implement the following measures.

1. Permanent stationary emergency generators installed on-site shall have engines that meet or exceed CARB Tier 4 Off-Road Compression Ignition Engine Standards (California Code of Regulations Title 13, Section 2423). If CARB adopts future emissions standards that exceed the Tier 4 requirement, the emissions standards resulting in the lowest ROG, NO_X, PM_{10}, and $PM_{2.5}$ emissions shall apply.
2. ~~As~~ If non-diesel-fueled emergency generator technology ~~becomes commercially available, and subject to the review and approval of the North County Fire Authority for safety purposes~~ is approved for use by the North County Fire Authority for safety purposes, non-diesel-fueled generators shall be installed in new buildings, provided that alternative fuels used in generators, such as electricity, hydrogen fuel cell, biodiesel,

[8] South Coast AQMD Rule 1113 is required for the Baylands since it is more stringent than current Bay Area AQMD requirements.

renewable diesel, natural gas, or other biofuels or other non-diesel emergency power systems, are demonstrated to reduce ROG, NO_X, PM_{10}, and $PM_{2.5}$ emissions compared to diesel fuel.

3. For each new diesel backup generator permit submitted to air district for the proposed project, the backup generator applicant shall submit the anticipated location and engine specifications to the Brisbane Community Development Director for review and approval prior to issuance of a permit for the generator. Once operational, all diesel backup generators shall be maintained in good working order for the life of the equipment, and any future replacement of the diesel backup generators must be consistent with the original generator's engine emissions specifications. The operator of the facility at which the generator is located shall maintain records of the testing schedule and emergency operations for each diesel backup generator for the life of that diesel backup generator and shall provide this information for review to the Brisbane Community Development Director within three months of requesting such information.

These features shall be submitted to the Brisbane Community Development Director for review and approval and shall be included on the project drawings submitted for the construction-related permit(s) or on other documentation submitted to the Brisbane Community Development Director prior to the issuance of any building permits.

MM AQ-1i: **Promote Use of Low-VOC Consumer Products.** To reduce ROG emissions associated with the project, the project sponsor shall provide education for residential and commercial tenants concerning low-VOC consumer products. Prior to receipt of any certificate of occupancy, the project sponsor shall develop electronic correspondence to be distributed by email annually and upon any new lease signing to residential and/or commercial tenants of each building within the Specific Plan area that encourages the purchase of consumer products that generate lower than typical VOC emissions.

MM AQ-1j: **Operational Truck Emissions Reduction.** The following measures shall be incorporated into the building design and construction contracts (as applicable) to reduce ROG, NO_X, PM_{10}, and $PM_{2.5}$ emissions associated with operational on-road trucks, along with the potential health risk caused by exposure to toxic air contaminants from operational on-road trucks.

1. Equip all truck delivery bays with electrical hook-ups for diesel trucks at loading docks to accommodate plug-in electric truck transport

refrigeration units (TRUs) or auxiliary power units during project operations.

2. Provide a notice on each commercial or office lease or building sale within the Baylands requesting businesses operating their own fleet of truck transport refrigeration units to exclusively use TRUs and auxiliary power units that are electric plug-in capable and trucks that use advanced exhaust technology (e.g., hybrid) or alternative fuels within the Baylands.
3. Prohibit diesel-powered TRUs from operating at loading docks for more than thirty minutes, and post signs at each loading dock presenting this TRU time limit.
4. All loading docks that are on a commercial property and can accommodate trucks with TRUs shall be equipped with electric vehicle (EV) charging equipment for heavy-duty trucks. This measure does not apply to temporary street parking for loading or unloading.
5. Prohibit trucks from idling for more than two minutes, and post "no idling" signs at the site entry point, at all loading locations, and throughout the Specific Plan area.
6. Establish truck routes to avoid both on-site and off-site sensitive receptors. A truck route program, along with truck calming, parking, and delivery restrictions, shall be implemented. This program must demonstrate how the project applicant will locate the truck routes as far from on-site receptors as possible and how truck activity (travel, idling, and deliveries) will be minimized. The program must include the location of construction truck routes and must demonstrate that routes have been established as far as possible from the locations of all on-site and off-site sensitive receptors.

These features shall be submitted to the Brisbane Community Development Director for review and approval prior to the issuance of building permits and shall be included on the project drawings submitted for the construction-related permit or on other documentation submitted to the lead agency. ROG, NO_X, PM_{10}, and $PM_{2.5}$ emissions from project-related operational diesel trucks shall be reduced by implementing the following measures.

MM AQ-1k: Electric Vehicle Charging Infrastructure. Prior to building permit issuance for any site-specific development project that includes off-street parking, the applicant for such development shall demonstrate compliance with the most current California Green Building Standards (CALGreen Code) Tier 2 voluntary electric vehicle (EV) charging requirements or the mandatory requirements of the most recently adopted version of the City of Brisbane building code, whichever

is more stringent. The installation of all EV charging equipment shall be included on the project drawings submitted for the construction-related permit(s) or on other documentation submitted to the City.

MM AQ-1l: Electric Landscaping Equipment. To reduce ROG, NO_X, PM_{10}, and $PM_{2.5}$ emissions associated with the project, only electric landscaping equipment shall be used within the Specific Plan area. No landscaping equipment powered by gasoline, diesel, propane, or other fossil fuels shall be used. The project applicant shall incorporate this requirement into the project design and tenant contracts (as applicable).

Impact AQ-2: Exposure of Sensitive Receptors to Substantial Pollutant Concentrations

Less than Significant with Mitigation Incorporated

Diesel particulate matter (DPM) emitted during construction activities would result in an excess cancer risk level of up to 16.0 in one million during site grading (16.9 over a 30-year exposure period starting with initiation of construction activities). DPM from operational activities would result in an excess cancer risk level of up to 13.0 in one million for on-site Baylands residents and the new middle school in the northwest corner of the Icehouse Hill district during the 30-year exposure period following Specific Plan buildout. These values exceed applicable thresholds and represent significant impacts. Acute and chronic, non-cancer hazard index (HI), and annual average $PM_{2.5}$ concentrations would not exceed significance thresholds.

The effectiveness of Mitigation Measure MM AQ-1c, Zero-Emission and Tier 4 Off-Road Construction Equipment, was quantified in the analysis and the results presented in **Table 4.9-18** through **Table 4.9-21**. Although Mitigation Measures MM AQ-1e, MM AQ-1g, MM AQ-1i, and MM AQ-1k, would further reduce the health risks, as described above, they were not used to calculate the mitigated emissions, because MM AQ-1c was sufficient to show a reduction to below the significance threshold. MM AQ-1j would reduce emissions from mainly gasoline-powered passenger vehicles, and MM AQ-1i would reduce emissions from mainly from gasoline-powered landscaping equipment. These sources would contribute a negligible amount to health risks compared to the substantial contribution to health risk from DPM.

Implementation of these Mitigation Measures would:

- Reduce excess cancer risk during grading and all construction to a maximum of 5.1 in 1 million, which is well below the significance threshold of 10 in 1 million.
- Reduce the maximally exposed child receptor during operations to an excess cancer risk level of up to 5.9 in 1 million for a child residing adjacent to the Caltrain rail line north of Geneva Avenue and to 4.9 in 1 million for students at the Baylands middle school, both below the significance threshold of 10 in 1 million.

- Reduce the maximally exposed individual residence to 4.5 in 1 million for offsite residents and 5.1 in 1 million for onsite residents, both below the significance threshold of 10 in 1 million.

Thus, impacts would be less than significant with mitigation incorporated.

Impact AQ-3: Odors

Less than Significant with Mitigation Incorporated

Because construction-related odors from diesel equipment and vehicles would be localized and temporary, and low-VOC surface coating materials in accordance with BAAQMD Rules would reduce potentially objectionable odors from painting operations, construction activities, including the use of diesel and surface coating materials would be less than significant.

The large majority of uses that would be permitted by the Specific Plan would not generate objectionable odors. While food preparation at restaurants and hotels, as well as coffee roasting within the Baylands, both of which are permitted by the Specific Plan, could result in odor generation, such odors would be generated on a small scale and not have a substantial adverse effect on a substantial number of people, as would be demonstrated by the required monitoring of BAAQMD regulation 7 for any odor complaints.

Daily operations of the water recycling facility could result in objectionable odors to nearby sensitive receptors. The water recycling facility, which is proposed on the east side of the Caltrain right-of-way, would be located approximately 500 feet from the closest residential receptor in the Roundhouse District. The closest, off-site residents would be located approximately 2,000 feet west of the facility. The odor impact of water recycling facility operations would therefore be significant.

Implementation of mitigation measures would establish performance standards for water recycling facility operations, require installation of an odor control system, and mandate adherence to best management practices. Because of the odor controls required by Mitigation Measure MM AQ-3a through MM AQ-3d, the water recycling facility would not emit odors detectable at or beyond the property line of the facility. Impact AQ-3 would thus be less than significant with mitigation incorporated.

Program EIR Mitigation Measures

MM AQ-3a: Recycled Water Plant Odor Management Plan (Program EIR Measure 4.B-8). Prior to the start of operation pursuant to issuance of a permit to operate from the RWQCB, the recycled water plant shall formulate and implement a progressive Odor Management Plan for review and comment by the BAAQMD prior to review and approval by the City. The Odor Management Plan shall select a sufficient number of control measures from the following menu of

options identified by the BAAQMD to attain a performance standard which meets the odor detection thresholds of BAAQMD Regulation 7 as achieved and verified by the BAAQMD inspector.

i. Activated carbon filter/carbon absorption
ii. Biofiltration/bio trickling filters
iii. Fine bubble aerator
iv. Hooded enclosures
v. Wet and dry scrubbers
vi. Caustic and hypochlorite chemical scrubbers
vii. Ammonia scrubber
viii. Energy efficient blower system
ix. Thermal oxidizer
x. Capping/covering storage basins and anaerobic ponds
xi. Mixed flow exhaust
xii. Wastewater circulation technology
xiii. Exhaust stack and vent location with respect to receptors

Additional Mitigation Measures

MM AQ-3b: **Odor Control System.** The water recycling facility shall install sufficient odor controls to manage objectionable odors in compliance with BAAQMD Regulation 7 and meet the performance standard set forth in Section 7-302 of that regulation, which reads:

> "**7-302 Limit on Odorous Substances at or Beyond Property Line:** A person shall not discharge any odorous substance which causes the ambient air at or beyond the property line of such person to be odorous and to remain odorous after dilution with four parts of odor-free air."

To control odors, wastewater processing tanks/structures shall be enclosed and/or covered, and under negative pressure, and provided with positive ventilation through an odor control system such as a two-stage process that involves a biological trickling filter followed by granular activated carbon.

MM AQ-3c: **Hydrogen Sulfide and Odor Management Program for the WRF.** Prior to construction of the WRF, the project applicant shall develop a Hydrogen Sulfide and Odor Management program (HSOM Program) at the WRF for review and

approval by the Community Development Director. The HSOM Program shall address hydrogen sulfide and odor management using a performance-based approach designed to meet the regulatory ambient air concentrations established in BAAQMD Regulation 9, Rule 2, (i.e., 0.06 ppm averaged over three consecutive minutes, or 0.03 ppm averaged over any 60 consecutive minutes) and to limit public complaints. The HSOM Program shall include best management practices and emissions controls as follows:

1. For grit and screenings, refuse containers shall be odor proof and contained within an area draining to the sanitary sewer.
2. Primary screenings shall be housed in a ventilated enclosure at the WRF(s).
3. Carbon absorption, biofiltration, or ammonia scrubbers shall be installed at the WRF(s).
4. Ferrous chloride injection for hydrogen sulfide removal may also be installed and implemented if necessary.

The project applicant shall implement the HSOM Program on an ongoing basis and provide the Directors or the Directors' designees with an annual report to describe implementation of the program and any adjustments needed to improve performance.

The HSOM Program shall address odor complaints that occur over time and shall designate WRF staff to receive and respond to complaints. The name and contact information of the responsible WRF staff shall be posted in a noticeable location on each WRF facility. The performance standard for odors shall be based on a three-tier threshold based on 30-day, 90-day, and three-year averaging times for complaints. The performance standards that must be met shall be as follows:

1. Three or more violation notices for public nuisance related to odors issued by the BAAQMD within a 30-day period;
2. Odor complaints from ten or more complainants within a 90-day period; or
3. Five or more confirmed odor complaints per year averaged over three years as an indication of a significant odor impact from a facility.

If one or more of these standards are not met, the project applicant shall revise the program and make any necessary improvement to the WRF odor controls to achieve all performance standards in subsequent reporting years.

MM AQ-3d: Future Recordkeeping. The new odor control units proposed as part of the WRF would also be subject to recordkeeping requirements and conditions in the BAAQMD's Permit to Operate for the purpose of abating any public nuisance from odors. The recordkeeping shall log all citizen complaints received by the BAAQMD. If citizen complaints exceed 10 or more within a 90-day period (per BAAQMD Regulation 7), additional odor controls would be required.

Impact AQ-4: Consistency with the San Francisco Bay Area Clean Air Plan

Less than Significant

The Specific Plan would support the primary goals of the 2017 Clean Air Plan because it is a mixed-use, transit-oriented development generating and using sustainable energy for residential, commercial, and other uses. In addition, the Specific Plan includes many of the control measures from the 2017 Clean Air Plan.

h. Greenhouse Gas Emissions

~~Impact GHG-1: Specific Plan Area Greenhouse Gas Emissions~~

~~**Significant and Unavoidable**~~

~~The Baylands Specific Plan would result in a net increase in average annual greenhouse gas (GHG) emissions generation of 51,260 $MTCO_2e$. The effect of regulations that are not included in the CalEEMod or EMFAC2021 models and thus not quantified in this EIR would be to reduce GHG emissions from medium- and heavy-duty trucks and emissions from light duty passenger vehicles. However, such reductions would not be sufficient to offset the Specific Plan's net annual increase.~~

~~Implementation of identified GHG and Air Quality mitigation measures would not be able to reduce Baylands GHG emissions to achieve a "net-zero" increase in GHG emissions.~~

~~Implementation of Air Quality Mitigation Measures MM AQ-1e through MM AQ-1l, along with Greenhouse Gas Mitigation Measure MM GHG-1d, would result in a quantifiable reduction of GHG emissions by approximately 4,138 $MTCO_2e$ per year (refer to Appendix H.1) After subtracting this estimated reduction from the emissions shown in **Table 4.10-5**, Baylands development would still exceed the net-zero threshold for Specific Plan area land uses. Other mitigation measures (Air Quality Mitigation Measures MM AQ-1a, MM AQ-1b, MM AQ-1c, MM AQ-1f, MM AQ-1j, and MM AQ-1k, along with Greenhouse Gas Mitigation Measures MM GHG-1a, MM GHG-1b, MM GHG-1c, and MM GHG-1e) for which an estimated reduction is not readily quantifiable along with the regional VMT reduction identified in Section 4.8, *Transportation*, would only achieve marginally more reductions, and Baylands GHG emissions would remain above the GHG-1 net-zero increase threshold for Specific Plan area land uses.~~

Thus, the only remaining feasible measure to achieve the "net-zero" GHG emissions threshold[9] would be implementation of the GHG emissions offset program set forth in Mitigation Measure MM GHG-1e. However, implementation of a large-scale GHG offset credit program such as required by Mitigation Measure GHG GHG-1e would be difficult given the large number of GHG offset credits required, their locational parameters, the timing of their purchase and retirement, and their future availability. Because the availability of GHG offset credits at the time they need to be purchased is uncertain, achieving a net zero increase in Baylands emissions cannot be guaranteed.

Additional Mitigation Measures

MM GHG-1a: Low Global Warming Potential Refrigerants. Refrigerants with a global warming potential of 1,400 or less[10] shall be used in all heat pumps installed in residential and nonresidential buildings, including all HVAC systems, water heaters, and refrigeration appliances. Examples of such low global warming potential include, but are not limited to natural refrigerants such as CO2, ammonia (NH3), and hydrocarbons, or next generation low-GWP synthetic refrigerants like hydrofluoroolefin-1234yf.

MM GHG-1b: Preferred Parking for Alternative-Fueled Vehicles and Carsharing Vehicles. Preferential parking for ZEVs (designated and proximate to the building entry) shall be provided for commercial, office, and hotel uses, as well as guest parking at a rate 10 percent above regulatory provision requirements. In addition, preferential parking shall be provided for ridesharing vehicles (designated and proximate to the building entry) site at a rate 10 percent above City requirements for a transportation demand management plan.

MM GHG-1c: Renewable Fuel Shuttles. The Baylands shuttle system described in Specific Plan Section 6.3.4 shall utilize zero-emission vehicles or run entirely on 100 percent renewable fuels.

MM GHG-1d: Renewable Fuels for On-Site Water Recycling Facilities. The Baylands water recycling facility shall be designed and operated using 100 percent renewable fuels, including carbon-free electricity provided by Pacific Gas & Electric or Peninsula Clean Energy or by on-site renewable energy generation.

MM GHG-1e: GHG Offset Credits. In addition to implementing all feasible construction- and operation-related land use design practices and related mitigation measures for

[9] "Net zero" GHG emissions as no increase in Baylands GHG emissions, including the Specific Plan's 30-year amortized construction plus its new operational GHG emissions.

[10] The U.S. EPA guidance for transitioning to low-GWP alternatives in commercial refrigeration provides available refrigerants with a GWP of 1,400 or less, https://www.epa.gov/sites/default/files/2016-12/documents/international_transitioning_to_low-gwp_alternatives_in_commercial_refrigeration.pdf.

the reduction of construction and operational greenhouse gas (GHG) emissions, the Specific Plan applicant shall retire GHG offset credits in a quantity sufficient to offset 100 percent of the Project's construction emissions and 100 percent of the Project's operational emissions, for a 30-year period, consistent with the performance standards and requirements set forth below. GHG offset credits within the City of Brisbane and regionally within the County shall be prioritized (see *Locational Performance Standards* below).

The Applicant may opt to prepare a Project-wide GHG Emissions Reduction Plan (Plan) to "true-up" re-modeled Project emissions with the amount of GHG offset credits needed to be retired to offset 100 percent of the Project's operational emissions, as stipulated in the section *Emissions Inventory "True Up" Procedures and Standards* below.

Purchase and Retire GHG Offset Credits: The Specific Plan applicant shall purchase and retire GHG offset credits sufficient to offset the project's post-mitigation GHG emissions for the life of the project (assumed to be 30 years) as shown in **Table 4.10-6**.

Table ES-6: Required GHG Emissions Offsets ($MTCO_2e$)

	Construction Emissions[a]		Operational Emissions[b]		Combined Emissions	
	Unmitigated	Mitigated[c]	Unmitigated	Mitigated[c]	Unmitigated	Mitigated[c]
Phase 1[d]	65,007	61,227	1,089,199	1,088,840	1,154,206	1,150,067
Phase 2	7,756	7,756	375,855	375,855	383,641	383,611
TOTAL	**72,763**	**68,983**	**1,465,055**	**1,464,696**	**1,537,818**	**1,533,679**

NOTES: CO_2e = carbon dioxide equivalent; MT = metric tons

a. Construction emissions are total estimated emissions over the entirety of the construction period.
b. All operational values are calculated based on unrounded annual emissions multiplied by 30 years.
c. Mitigated emissions include implementation of the quantifiable air quality and GHG mitigation measures.
d. Phase 1 construction emissions are inclusive of grading.

For construction, the project applicant shall purchase and retire GHG offset credits necessary to offset construction-generated emissions before obtaining the first building permit in each phase of construction, for a total of two offset payments over both construction phases. Alternatively, payments may occur gradually as long as enough offsets are retired in time to offset total construction emissions for each phase.

The project applicant shall also purchase and retire GHG offset credits necessary to offset the cumulative residual increase in operational emissions over the life of the project before the City issues the final certificate of occupancy for the first building in each phase of construction, for a total of two offset payments over two construction phases.

~~***GHG Offset Credit Phasing:*** The project applicant shall purchase and retire GHG offset credits for each of the two construction phases and two operational phases as follows.~~

- ~~***Construction – Phase 1:*** Before obtaining the first grading or other construction-related permit for construction, the project applicant shall purchase and retire the first installment of GHG offset credits for construction emissions as presented in the **Table ES-6**, above.~~
- ~~***Construction – Phase 2:*** Before obtaining the first grading or other construction-related permit in Phase 2 of construction, the project applicant shall purchase and retire GHG offset credits for construction emissions as presented in the table above.~~
- ~~***Operations – Phase 1:*** Before the City issues the final certificate of occupancy for the first building in Phase 1, the project applicant shall purchase the first installment of GHG offset credits for operational emissions as presented in the table above.~~
- ~~***Operations – Phase 2:*** Before the City issues the final certificate of occupancy for the first building in Phase 2, the project applicant shall purchase the second installment of GHG offset credits for operational emissions as presented in the table above.~~

~~***GHG Offset Credit Standards – Eligible Registries, Acceptable Protocols and Defined Terms:*** "GHG offset credit" shall mean an instrument, credit or other certification verifying the reduction GHG emissions issued by one of the following CARB-approved carbon registries: the American Climate Registry, the Climate Action Reserve, and Verra (formerly Verified Carbon Standard). The GHG offset credits shall be third-party verified and enforceable in accordance with the registry's applicable standards, practices, or protocols. The Specific Plan applicant shall provide funding for the City to retain the services of a third-party expert who meets the qualifications described below.~~

~~GHG offset credits shall include, but are not limited to, an instrument, credit or other certification issued by these registries for GHG reduction activities within California. Further, no GHG offset credits shall originate from international areas, as discussed in the "Locational Performance Standards" section below. The Project shall neither purchase GHG offset credits from the Clean Development Mechanism (CDM) registry nor purchase offsets generated under CDM protocols. Qualifying GHG offset credits presented for compliance with this mitigation measure may be used provided that the evidence required by the "Reporting and Enforcement Standards" below is submitted to the City~~

~~demonstrating that each registry shall continue its existing practice of requiring the following for the development and approval of protocols or methodologies:~~

~~i) Adherence to established GHG accounting principles set forth in the International Organization for Standardization (ISO) 14064, Part 2 or the World Resources Institute/World Business Council for Sustainable Development (WRI/WBCSD) Greenhouse Gas Protocol for Project Accounting; and~~

~~ii) Oversight of the implementation of protocols and methodologies that define the eligibility of GHG offset credit projects and set forth standards for the estimation, monitoring, and verification of GHG reductions achieved from such projects. The protocols and methodologies shall:~~

~~a. Be developed by the registries through a transparent public and expert stakeholder review process that affords an opportunity for comment and is informed by science;~~

~~b. Incorporate standardized offset crediting parameters that define whether and how much emissions reduction credit a GHG offset project should receive, having identified conservative project baselines and the length of the crediting period, and considered potential leakage and quantification uncertainties;~~

~~c. Establish data collection and monitoring procedures, mechanisms to ensure permanency in reductions, and additionality and geographic boundary provisions; and,~~

~~d. Adhere to the principles set forth in the program manuals of each of the aforementioned registries, as such manuals are updated from time to time.~~

~~Further, any GHG offset credit used to reduce the project's GHG emissions shall be a GHG offset credit that represents the past or forecasted reduction or sequestration of one metric ton of carbon dioxide equivalent that is "not otherwise required" (CEQA Guidelines Section 15126.4(c)(3)). Each GHG offset credit used to reduce GHG emissions shall achieve additional, real, permanent, quantifiable, verifiable, and enforceable reductions, which are defined for purposes of this mitigation measure as follows:~~

~~i) "Additional" means that the GHG offset credit is not otherwise required by law or regulation, and not any other GHG emissions reduction that otherwise would occur.~~

~~ii) "Real" means that the GHG reduction underlying the GHG offset credit results from a demonstrable action or set of actions and is quantified~~

~~under the protocol or methodology using appropriate, accurate, and conservative methodologies that account for all GHG emissions sources and sinks within the boundary of the applicable carbon offset project, uncertainty, and the potential for activity-shifting leakage and market-shifting leakage.~~

iii) ~~"Verifiable" means that the GHG reduction underlying the GHG offset credit is well documented, transparent, and set forth in a document prepared by an independent verification body that is accredited through the American National Standards Institute (ANSI).~~

iv) ~~"Permanent" means that the GHG reduction underlying the GHG offset credit is not reversible; or, when GHG reduction may be reversible, that a mechanism is in place to replace any reversed GHG emission reduction.~~

v) ~~"Quantifiable" means the ability to accurately measure and calculate the GHG reduction relative to a project baseline in a reliable and replicable manner for all GHG emission sources and sinks included within the boundary of the GHG offset credit project, while accounting for uncertainty and leakage.~~

vi) ~~"Enforceable" means that the implementation of the GHG reduction activity must represent the legally binding commitment of the offset project developer to undertake and carry it out.~~

~~The above definitions are provided as criteria and performance standards associated with the use of GHG offset credits. The City hereby clarifies that such criteria and performance standards are intended only to further construe the standards under CEQA for mitigation related to GHG emissions (see, e.g., State CEQA Guidelines Section 15126.4(a), (c)), and are not intended to apply or incorporate the requirements of any other statutory or regulatory scheme not applicable to the project (e.g., the Cap-and-Trade Program).~~

~~To be eligible to be used to meet this mitigation measure, GHG offset credits must be generated and verified in accordance with published protocols and other applicable standards that can demonstrate to the satisfaction of the City's third-party expert and reviewer that all six of these environmental integrity requirements are substantively satisfied. All GHG offset credits purchased and retired from the registries shall have been verified by an independent verifier who meets stringent levels of professional qualification (i.e., ANSI National Accreditation Board Accreditation Program for Greenhouse Gas Validation/Verification Bodies or a Greenhouse Gas Emissions Lead Verifier accredited by CARB), or an expert with equivalent qualifications to the extent necessary to assist with the verification.~~

~~Without limiting the generality of the foregoing, in the event that an approved registry becomes no longer accredited by CARB and the GHG offset credits cannot be transferred to another accredited registry, the project applicant shall comply with the rules and procedures for retiring and/or replacing offset credits in the manner specified by the applicable protocol or other applicable standards, including (to the extent required) by purchasing an equivalent number of credits to recoup the loss.~~

~~***Locational Performance Standards:*** All GHG offset credits required to reduce the project's GHG emissions shall originate from the following geographic locations (in order of priority): (1) On-site GHG reduction measures or credits over and above which is already required or proposed as part of the 2025 Specific Plan project; (2) within the City of Brisbane outside of the Baylands Specific Plan area; (3) off-site, incorporated areas of San Mateo County; (4) off-site, unincorporated areas of the San Mateo County; (5) off-site areas within nine-county Bay Area Region; and (6) off-site areas within the State of California. No GHG offset credits shall originate from off-site, out-of-state or international areas. As listed, geographic priorities would focus first on local reduction options to ensure that reduction efforts achieved locally would provide cross-over, co-benefits to other environmental resource areas.~~

~~For purposes of implementing this mitigation measure, the City shall require the GHG offset credits to adhere to the following locational performance standards in order to reduce the project's construction and operational GHG emissions:~~

- ~~i) The project shall use all available GHG offset credits within the City of Brisbane or San Mateo County (the first priority is within incorporated areas of the County and the second priority is within unincorporated areas of the County). "Available," for purposes of this subdivision, means that the project applicant provide objective, verifiable evidence to the City documenting that such GHG offset credits are available for retirement from GHG offset credit projects within the subject geography no later than at the time of application for grading permit issuance. The objective, verifiable evidence to be provided includes a market survey report that shall comply with the following content requirements:~~
  - ~~a. Preparation by a GHG offset credit broker with a minimum of 10 years of experience assisting with transactions in emissions markets;~~
  - ~~b. Identification of the carbon registry listings reviewed for GHG offset credit availability, including the related date of inquiry; and,~~
  - ~~c. Identification of the geographic attributes of GHG offset credits that are offered for sale and available for retirement.~~

ii) In the event that a sufficient quantity of GHG offset credits are not "available" in San Mateo County, the project applicant shall obtain the remaining GHG offset credits needed from within the none-county Bay Area region (third priority). For the definition of "available," see subdivision i) immediately above.

iii) In the event that a sufficient quantity of GHG offset credits are not "available" in the nine-county Bay Area region, the project applicant shall obtain the remaining GHG offset credits needed from within the State of California (third priority). For the definition of "available," see subdivision i) immediately above.

iv) In the event that a sufficient quantity of GHG offset credits are not "available" in San Mateo County or the State of California, the project applicant shall obtain the remaining GHG offset credits needed from within the United States (fifth priority). For the definition of "available," see subdivision i) immediately above.

In the unlikely event that an approved registry becomes no longer approved by CARB and the GHG offset credits cannot be transferred to another CARB-approved registry, the project applicant shall comply with the rules and procedures for retiring and/or replacing offset credits in the manner specified by the applicable protocol, standard, or methodology, including (to the extent required) by purchasing an equivalent number of credits to recoup the loss.

Emissions Inventory "True Up" Procedures and Standards: As new federal, state and local regulations are adopted or technological advancements occur, the quantity of GHG emission reductions needed to demonstrate achievement of the no net increase in GHG emissions may decrease. Therefore, the amount of GHG offset credits needed may be reduced if the Applicant can demonstrate, with substantial evidence, that changes in regulation or law, or other increased technological efficiencies have reduced the total CO2e emitted by the Project. As described further in the following paragraph, any modification to the emissions reduction value stated herein shall require approval from the City of Brisbane Community Development Director or the Director's designee, as considered pursuant to a noticed public hearing process that complies with applicable legal requirements, including those set forth in CEQA for the post-approval modification of mitigation implementation parameters.

Specifically, if the Applicant elects to process a "true-up" exercise subsequent to the City's certification of the Final EIR and approval of the Project, the Applicant shall provide an updated operational GHG emissions inventory for the Project that includes emissions from mobile sources, energy, area sources, water

~~consumption, and solid waste. Mobile sources must include off-road equipment, on-road vehicles (on-site and off-site), and rail. Subject to the satisfaction of the City of Brisbane Community Development Director or the Director's designee, these calculations shall be conducted using a City-approved model and/or methodology and must validate the continuing adequacy of modeling inputs used in the EIR that are not proposed to be altered as part of the "true-up" exercise. The inclusion of the validation requirement ensures that any updated operational GHG emissions inventories for the Project fully account for then-existing information that is relevant to the emissions modeling. For additional detail and requirements on the "true-up" exercise, see subsection 4.c Emissions Inventory "True Up" Compliance below.~~

~~The "true up" operational GHG emissions inventory, if conducted, will be provided in the form of a Project-wide GHG Emissions Reduction Plan (GHG Plan) to the City of Brisbane Community Development Director or the Director's designee prior to the issuance of building permits for the next build-out phase. The subject technical documentation shall be prepared by a City-approved, qualified air quality and greenhouse gas technical specialist.~~

~~In all instances, substantial evidence must confirm that any reduction to the total GHG offset credits value as identified in the certified EIR for the Project is consistent with the commitment to achieve a no net increase in GHG emissions for the 30-year life of the Project.~~

~~***Reporting and Enforcement:*** On an annual basis, by March 1 of each year, the project applicant shall submit a letter to the City of Brisbane Sustainability Manager or the Manager's designee confirming implementation of the emission reduction strategies listed in the GHG reduction plan and this EIR.~~

~~In addition, before the City issues the final certificate of occupancy for the first building constructed in each phase, the applicant shall provide copies of GHG offset credit contracts demonstrating required purchases, along with records of their retirement, to the Community Development Director or the Director's designee.~~

~~For purposes of demonstrating that each GHG offset credit is additional, real, permanent, quantifiable, verifiable and enforceable, the reports shall include (i) the applicable protocol(s) and methodologies associated with the GHG offset credits; (ii) the third-party verification report(s) and statement(s) affiliated with the GHG offset credit projects; (iii) the unique serial numbers assigned by the registry(ies) to the GHG offset credits to be retired, which serves as evidence that the registry has determined the GHG offset credit project to have been implemented in accordance with the applicable protocol or methodology and~~

~~ensures that the GHG offset credits cannot be further used in any manner; and (iv) the locational attributes of the GHG offset credits. The reports also shall append the market survey report described in the "Locational Performance Standards" provision above.~~

~~If the City determines that the project's GHG offset credits do meet the requirements of this mitigation measure, the GHG offset credits can be used to reduce project GHG emissions and project permits shall be issued. Upon an affirmative finding from the City that the project's GHG offset credits are eligible for use under this measure, and prior to permit issuance, the City shall confirm that the project applicant has included, in their GHG offset credit agreement(s), a requirement that the GHG offset credit seller(s) provide the City with reasonable notice of any emissions reversal from the GHG offset credits that are the subject of the transaction(s). The City also shall confirm that the project applicant's purchase agreement(s) requires the seller(s) to provide the City with information and evidence regarding the steps taken by the applicable registry(ies) and GHG offset credit project developer(s) to rectify any reversal in accordance with applicable program manuals, protocols, and methodologies, and provide supporting documentation from the registry(ies) to substantiate the correction of the reversal. In the event that the City concludes a GHG offset credit reversal has not been sufficiently corrected within a reasonable period of time based on the nature of the reversal and the standards set forth in the applicable program manuals, protocols and methodologies, the City shall require an equivalent quantity of substitute GHG reductions are achieved. Methods to achieve the reductions could include requiring the project applicant to secure and retire substitute GHG offset credits meeting the requirements of this mitigation measure in a quantity equivalent to those reversed.~~

~~If the City determines that the project's GHG offset credits do not meet the requirements of this mitigation measure, the offsets cannot be used to reduce project GHG emissions and project permits shall not be issued. Additionally, the City may issue a notice of non-consistency and cease permitting activities in the event that the City determines the GHG offset credits provided to reduce project GHG emissions are not compliant with the aforementioned standards. In the event of such an occurrence, project permitting activities shall not resume until the project applicant has demonstrated that the previously provided GHG offset credits are compliant with the standards herein *or* have provided substitute GHG offset credits achieving the standards of this mitigation measure in the quantity needed to achieve the required emission reduction.~~

~~This will serve as documentation to fully enforce the provision that the project will result in net-zero GHG emissions for the Specific Plan's 30-year project life.~~

~~***Emissions Inventory "True Up" Compliance Reporting***~~

(i) ~~***General Requirements.*** If the Applicant chooses to prepare a Project-wide GHG Emissions Reduction Plan (GHG Plan), pursuant to section 3) *Emissions Inventory "True Up" Procedures and Standards* above, the Project sponsor shall retain a qualified air quality consultant to develop the GHG Plan) for implementation over the life of the Project in accordance with the requirements of this mitigation measure.~~

~~The GHG Plan shall quantify, using the most current information available, operational GHG emissions for the life of the Project (defined as 30 years of operation). The Plan shall specify anticipated GHG emission reduction measures sufficient to reduce or offset these emissions in accordance with the standards set forth above, such that the resulting GHG emissions are below the City's "no net increase" threshold of significance pursuant to CEQA.~~

~~For each phase or sub-phase of development, the Plan shall be updated as set forth in greater detail below. At all times throughout the life of the Project, the GHG Plan shall demonstrate that all operational activities are below the City's "no net increase" threshold of significance pursuant to CEQA for (1) operational activities already completed, permitted, and being proposed for permitting; and (2) anticipated future operational activities.~~

~~The City shall retain the services of a third-party expert to assist with the City's review and approval of the GHG Plan. The third-party expert shall also assist the City with its review and approval of updates to the GHG Plan and Progress Reports, as described below. All costs relating to the third-party expert, including City review of its services, shall be paid by the Applicant.~~

~~The GHG Plan shall identify GHG Emission Reduction Measures that shall be implemented to achieve the "no net increase" CEQA significance threshold. Measures shall be verifiable and feasible to implement, and the Plan shall identify the person/entity responsible for each measure, each measure's reduction amount, and the person/entity responsible for monitoring that reduction, all subject to review and approval by the City. The GHG Plan shall also identify the required number of GHG offset credits to achieve the "no net additional" threshold.~~

(ii) ~~***Additional Emission Reduction Measures.*** The following types of measures may be included in the GHG Plan, as necessary, to meet the~~

~~requirements of this mitigation measure and the "no net increase" GHG emissions requirement for the Project:~~

~~*(1) Additional or substitute measures and technology to reduce GHG emissions from Project construction or operations that are not currently known or available:* this may include new energy systems (such as battery storage), new transportation systems (such as autonomous vehicle networks), or other technology (such as carbon capture and storage) that is not currently available at the project level, provided that the GHG Plan demonstrates to the City's satisfaction that such measures are equally or more effective as existing available measures, including those described above and listed in Mitigation Measures MM GHG-1a through MM GHG-1d.~~

Impact GHG-2: Effect on Regional GHG Emissions

Less than Significant

The Specific Plan's location in relation to transit, its mix of land uses, and implementation of TDM programs result in substantially lower per capita VMT than the regional average for Specific Plan area employees and workers. The Specific Plan's per capita VMT was also analyzed on a regional basis, comparing cumulative future 2040 regional VMT with and without the Specific Plan development.[11] As indicated in **Table 4.8-12**, the Baylands Specific Plan would reduce future cumulative 2040 daily regional VMT by 80,000 miles at buildout (105,000 miles with construction of Candlestick interchange improvements).

Because the 2025 Specific Plan project would not increase and would likely reduce regional GHG mobile source emissions, Impact GHG-2 would be less than significant.

Impact GHG-3: Consistency with Applicable Greenhouse Gas Emissions Reduction Plans, Policies, Performance Standards, and Regulations

Less than Significant with Mitigation Incorporated

The 2025 Specific Plan Project is consistent with many but not all applicable greenhouse gas emissions reduction plans, policies, performance standards, and regulations. It would not, however, obstruct implementation of relevant Scoping Plan actions to reduce GHG emissions

[11] The cumulative future 2040 without Specific Plan scenario assumes that the 2,200 dwelling units, 6.5 million square feet of commercial development, and 500,000 square feet of hotel use proposed for the Specific Plan would occur outside of the Baylands within San Francisco and San Mateo County.

related to VMT reduction and building decarbonization CARB 2022 Climate Change Scoping Plan.

- Baylands development would be consistent with most performance metrics contained in the BAAQMD's CEQA Guidelines.
    - Natural gas service would not be extended to any new residential or nonresidential development.[12] The Specific Plan commits to operating with 100 percent renewable energy along with all electric buildings, a minimum of 85,000 MWh of on-site renewable energy generation, and 30 MW of distributed battery storage.
    - As documented in Section 4.11, *Energy Resources*, Baylands development would not result in wasteful, inefficient, or unnecessary energy usage.
    - As documented in Section 4.8, *Transportation*, the Specific Plan would, with implementation of required transportation demand management programs result in per capita VMT for Baylands residents and employees more than 35 percent below the nine-county regional average for the Bay Area and reduce regional vehicle miles traveled consistent with achieving state-wide GHG reduction goals.

While not necessarily meeting CALGreen Tier 2 electric vehicle EV requirements, the Specific Plan would provide a total of 6,924 parking spaces of the total maximum 11,000 parking spaces permitted by the Specific Plan with EV charging infrastructure.

Mitigation Measures

Revisions to the Specific Plan required by Mitigation Measure MM LUP-2 would ensure consistency with MTC's Resolution 4530 by requiring:

- Residential development within ½ mile of the Caltrain Bayshore Station shall average a minimum of 25 dwelling units per acre as measured on a block-by-block basis;
- Decrease the maximum per unit parking ratio for Multi-Family Low, Townhome, and Duplex/Single Family housing types shall be reduced from 1.25 to 1.0 spaces per unit; and
- Require commercial office development within ½ mile of the Caltrain Bayshore Station to have an average minimum FAR of 2.0 as measured on a block-by-block basis.

[12] Existing uses that currently use natural gas and would remain at their current locations would be permitted to retain natural gas service.

Mitigation Measure MM AQ-1k requires that the applicant for development shall demonstrate compliance with the most current California Green Building Standards (CALGreen Code) Tier 2 voluntary electric vehicle (EV) charging requirements.

- Mitigation Measure MM AQ-1k requires on-site development to comply with CALGreen Code Tier 2 vehicle charging standards within the Baylands. These energy-saving project elements would substantially reduce energy consumption compared to existing mixed land use developments throughout the region. ~~Many of these energy benefits are not accounted for in the quantitative analysis provided with respect to Impact GHG-1.~~

i. Energy Resources

Impact EN-1: Consumption of Energy Resources in a Wasteful, Inefficient, or Unnecessary Way

Less than Significant

Construction

Compliance with existing State regulations to minimize fuel use would ensure that Project construction activities requiring the use of fossil fuels would not be wasteful, inefficient, or unnecessary. Moreover, Baylands construction would not be expected to result in demand for energy greater on a per-unit-of-development basis than other development projects in the region, with the exception of the necessary grading that is required to return the Baylands to a safe and healthy condition and provide adequate protection from flooding and projected sea level rise. Therefore, Specific Plan construction would not result in the wasteful, inefficient, or unnecessary consumption of energy. While mitigation for energy construction impacts is not required, air quality mitigation measures MM AQ-1a, MM AQ-1c, and MM AQ-1i would further reduce energy consumption during Baylands construction.

Operations

The Specific Plan is designed to be an energy efficient development by including a suite of sustainability features including LEED Gold buildings, all-electric buildings, electric vehicle charging, on-site solar powered infrastructure systems, distributed and utility-scale Battery Storage systems, on-site bicycle and pedestrian trails connecting to off-site trails, and TDM Plans to reduce mobile fuel use. In addition, transportation demand management programs would be implemented to reduce per capita vehicle miles traveled by Baylands residents and employees by more than 30 percent below the existing regional baseline VMT. The Specific Plan provides for buildings to be designed to be LEED Gold or GreenPoint Rated (based on 2022 rating criteria for LEED and GreenPoint), and residential and non-residential buildings within the Specific Plan area would comply with CALGreen Tier 1 voluntary standards.

Ultimately, Baylands development would have lower per capita energy consumption compared to the Bay Area region due to:

- The combination of the Specific Plan's mixed-use character, location adjacent to transit, provision of a comprehensive on-site trails system with connections to areawide and regional trails, and TDM programs would reduce per capita vehicle miles traveled (VMT) for Baylands residents and employees below the regional average and reduce regional VMT.
- With respect to EV charging, Baylands residential and commercial buildings would be constructed to meet the 2022 CALGreen Tier 1 Voluntary Building Energy Standards and the City's recently adopted Reach Code.
- On-site renewable generation and distributed battery storage would be far greater than is typical development throughout the Bay Area region.

Therefore, the project would not increase per-capita energy consumption in comparison to the regional baseline.

Baylands development would not increase reliance on fossil fuels or decrease reliance on renewable energy sources because:

- The relatively lower per capita VMT identified above would result in less per-capita fossil fuel consumption than is typical for the Bay Area.
- The project would include substantial on-site solar energy generation and on-site battery storage, thereby reducing the need for fossil-fuel-generated energy and actually increasing reliance on renewable energy.

Impact EN-2: Consistency with Applicable Programs, Plans, Ordinances, and Policies for Renewable Energy and Energy Efficiency

Less than Significant

The Baylands Specific Plan provides for transit-oriented mixed-use development within an area designated by *Plan Bay Area 2050* as a Priority Development Area and a Transit Priority Area and would provide substantial on-site energy generation; it would not conflict with *Plan Bay Area 2050*.

j. Noise and Vibration

Impact NOI-1: Temporary Increase in Ambient Noise Levels during Construction

Significant and Unavoidable

Some construction activities, such as concrete pours or other work to maintain safety or avoid traffic impacts, may require nighttime activity that could conflict with the City of Brisbane's ordinance limiting the hours and days allowed for construction work. Such nighttime activities would result in temporary noise level increases exceeding the quieter nighttime ambient noise levels by more than 10 dBA at any Baylands housing that might be occupied while construction activities are being undertaken for other Baylands development increments.

Noise generated by trucks hauling soil from the eastern to the western portion of the Baylands would cause an increase in noise by 5.4 to 12.2 dBA in four locations that have a current Ldn of greater than 60 dBA.

Pile driving activities within the western portion of the Baylands would increase daytime noise levels by 15 to 43 dBA in the 3 locations while pile driving within the eastern portion of the Baylands would increase daytime noise levels by 10 to 17.4 dBA in two locations. Building construction adjacent to an occupied dwelling unit within the Baylands would increase daytime noise levels by more than 10 dBA (+32 dBA).

Implementation of Mitigation Measures MM NOI-1a through MM NOI-1e would reduce construction noise to both off-site receptors and to occupied on-site receptors within the Baylands. However, building construction adjacent to occupied dwelling units within the Baylands and roadway noise increases along four roadway segments would still remain significant and unavoidable because of the proximity of receptors and unavailability of feasible mitigation strategies. Additionally, construction noise impacts from installation of pile foundations would remain significant since site-specific geotechnical conditions may require impact pile driving as close as 50 feet to occupied residential uses within the Baylands and generate noise as great as 21 dBA above ambient in proximate offsite locations, exceeding the 10 dBA over existing ambient level standard. Construction noise impacts therefore would be significant and unavoidable with implementation of all feasible mitigation.

The geotechnical reports prepared for the western and eastern portions of the Baylands (ENGEO 2022) acknowledge that quieter methods of pile foundation installation are dependent on building design and site-specific geotechnical conditions, requiring recommendations for specific pile types and installation techniques to be provided based on design-level geotechnical reports for individual building sites. Thus, the potential for traditional impact pile driving and its associated noise levels over large portion of the site, including the potential for simultaneous impact pile driving to occur at different locations remain. Consequently, even with

implementation of noise reduction measures such as cushion blocks,[13] the potential for achieving the 16 dBA reduction necessary for construction noise to be below 10 dBA over existing ambient levels is unlikely, as barriers would need to be of substantial height to block the line of sight from proposed residential buildings that could be up to 50 feet in height. Therefore, given that foundation construction for Phase 1 development would occur over a 10-year period and could likely involve some degree of impact pile driving, including simultaneous pile driving at different locations, even with identified mitigation measures, this impact would be significant and unavoidable.

Program EIR Mitigation Measures

MM NOI-1a: Construction Noise Control (Program EIR Mitigation Measure 4.J-4a). All applicants for site-specific development within the Baylands shall implement site-specific noise attenuation measures during all construction- related activities under the supervision of a qualified acoustical consultant whose work is subject to City staff and/or city-contracted peer review as a pre-requisite to issuance of site grading(s). These measures shall be included in a Noise Control Plan that shall be submitted for review and approval by the City of Brisbane Building Department to ensure that construction noise does not exceed the standards set forth in the City's Noise Ordinance. These attenuation measures shall include all or any combination of the following control strategies:

- Limit construction activities to between 7:00 a.m. and 7:00 p.m. Monday through Friday and between 9:00 a.m. and 7:00 p.m. on weekends and holidays;
- Pile driving and/or other extreme noise- generating activities (Lmax greater than 90 dBA) would be limited to between 8:00 a.m. and 4:00 p.m. Monday through Friday, with no extreme noise-generating activity permitted between 12:30 p.m. and 1:30 p.m. No extreme noise-generating activities would be allowed on weekends and holidays;
- Equipment and trucks used for construction shall use the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures, and acoustically attenuating shields or shrouds;
- Impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for construction shall be hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. Where use of pneumatic tools is

[13] To reduce noise from impact pile driving, a "cushion," typically made of wood, is placed between the hammer and the pile.

unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used where feasible; this could achieve a reduction of 5 dBA. Quieter procedures, such as use of drills rather than impact tools, shall be used;

- Stationary noise sources shall be located as far as possible from adjacent receptors, and they shall be muffled and enclosed within temporary sheds, incorporate insulation barriers, or include other measures;
- Erect temporary plywood noise barriers around the construction site when adjacent occupied sensitive land uses are present within 75 feet;
- Implement "quiet" pile-driving technology (such as pre-drilling of piles and the use of more than one pile driver to shorten the total pile driving duration), where feasible, in consideration of geotechnical and structural requirements and conditions;
- Use noise control blankets on building structures as buildings are erected to reduce noise emission from the site; and
- Use cushion blocks to dampen impact noise.

The Baylands developer shall pay or reimburse the City for all costs associated with the Noise Control Plan and city-contracted peer review.

MM NOI-1b: Noise complaint response and monitoring (Program EIR Mitigation Measure 4.J-4b). Prior to City issuance of grading permits, applicants for site-specific development projects shall submit to the Brisbane Community Development Department a list of measures that will be undertaken to respond to and track complaints pertaining to construction noise, including:

- A procedure for notifying the City staff of complaints;
- A plan for posting on-site signs pertaining to permitted construction days and hours, complaint procedures, and the contact person who should be notified in the event of a problem;
- A listing of telephone numbers (during regular construction hours and off-hours);
- Designation of an on-site construction complaint manager;
- Notification of neighbors within ~~300~~ 500 feet of the construction area about the estimated duration of pile driving activity at least 30 days in advance of the activity; and

- A preconstruction meeting with the job inspectors and the general contractor/on-site project manager to confirm that noise mitigation and practices (including construction hours, neighborhood notification, posted signs, etc.) are completed.

Additional Mitigation Measures

MM NOI-1c: Construction Hours along existing Roadways and for Concrete Pours. Approval of an exception permit pursuant to the provisions of Brisbane Municipal Code Section 8.28.080 shall be required for any activities where daytime construction activities would cause substantial traffic congestion or safety hazards such as construction along existing roadways and for required nighttime concrete pours. Exception permits for these nighttime construction activities shall be conditioned to provide for a minimal duration of nighttime construction and identify detailed methods to be employed to minimize noise during any such required nighttime construction.

MM NOI-1d: Document measures to achieve noise performance standards. Prior to issuance of (1) a demolition permit, (2) a grading permit for the mass movement of soil from the eastern to the western portion of the Baylands, (3) a grading or building permit for a site-specific development project, or (4) a permit for infrastructure construction, the applicant shall have a Construction Noise Control Plan prepared by a qualified acoustical consultant whose work is subject to City staff and/or city-contracted peer review to identify the specific measures to be implemented to ensure at least one of the following performance standards set forth in Brisbane Municipal Code Chapter 18.28 are achieved:

- No individual piece. of equipment shall produce a noise level exceeding 83 dBA at a distance of 25 feet from the source thereof, unless an exception permit pursuant to Brisbane Municipal Code Section 8.280.080 is acquired from the City of Brisbane.
- The noise level at any point outside of the property plane of the project shall not exceed 86 dBA.

The Construction Noise Control Plan shall be submitted to the City of Brisbane Community Development Department for review and approval prior to permit issuance.

Where applicable to the permit being requested, each of the following measures shall be implemented as requirements of the requested permit to achieve the above performance standards:

1. **Construction Site Perimeter Barrier.** To reduce noise levels for work adjacent to residences, schools, or other noise-sensitive land uses, a noise barrier(s) shall be constructed along the edge of the work site facing the receptor(s). Barriers shall be constructed either with two layers of 0.5-inch-thick plywood (joints staggered) and K-rail or other support, or with a limp mass barrier material weighing 2 pounds per square foot. If commercial barriers are employed, such barriers shall be constructed of materials with a Sound Transmission Class (STC) rating of 25 or greater.
2. **Stationary-Source Equipment Placement.** Stationary noise sources, such as generators and air compressors, shall be located as far from adjacent properties as possible. These noise sources shall be muffled and enclosed within temporary sheds, shall incorporate insulation barriers, or shall use other measures as determined by the Community Development Director to provide equivalent noise reduction.
3. **Stationary-Source Equipment Local Barriers.** For stationary equipment, such as generators and air compressors that will operate for more than one week within 500 feet of a noise-sensitive land use, the construction contractor shall provide additional localized barriers around such stationary equipment that block the line of sight[14] to neighboring properties.
4. **Temporary Power.** Temporary power poles instead of on-site generators shall be used wherever feasible.
5. **Construction Equipment and Haul Trucks.** Equipment and trucks used for soil loading, transport, unloading, grading, and deep dynamic compaction shall use the best commercially available noise control features (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures, and acoustically attenuating shields or shrouds). Exhaust mufflers shall be provided on pneumatic tools when in operation for more than one week within 500 feet of noise-sensitive land use. All equipment shall be properly maintained.
6. **Impact Tool Use.** The Construction Noise Control Plan shall incorporate measures to reduce the use of heavy impact tools and locate use of such tools away from the property line to the extent feasible. Impact tools (e.g.,

[14] If a noise barrier does not block the line of sight between the noise source and the receptor, the barrier will provide little or no attenuation.

jack hammers, pavement breakers, and rock drills) used for demolition and construction shall be hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. Where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used.[15] External jackets on the tools themselves shall be used where feasible.[16] Quieter procedures, such as use of drills rather than impact tools, shall be used.

7. **Truck Traffic Restrictions.** Truck idling shall be restricted to no more than two consecutive minutes per trip end. Trucks shall load and unload materials within approved construction or staging areas, rather than idling or loading/unloading on local streets. If truck staging is required, the staging area shall be located along major roadways with higher traffic noise levels or away from the noise-sensitive receptors, where such locations are available.
8. **Noise Control Blankets.** Where feasible, noise control blankets shall be used on building structures to reduce noise emission from the construction site.

The Baylands developer shall pay or reimburse the City for all costs associated with the Construction Noise Control Plan and city-contracted peer review.

MM NOI-1e: Installation of Pile Foundations. Impact pile driving shall be prohibited for any building within the Baylands unless a site-specific geotechnical study along with any test borings recommended by that study demonstrate that geologic or other unique conditions exist that preclude the use of quieter, alternative pile installation techniques such as, but not limited to:

- "Press-in" method of pile driving such as the Giken Silent Pile Driver[17]
- Piles that could be pre-drilled for auger-cast or micro pile foundation installation
- Vibratory pile driving where press-in or pre-drilled pile installation is infeasible

Where no alternative to impact pile driving is available, noise mitigation at the site of the pile driving, such as, but not limited to, baffles, echo barriers, cushion

[15] This type of muffler can lower noise levels from the exhaust by up to about 10 dBA.

[16] External jackets on tools could achieve a reduction of 5 dBA.

[17] The Giken Silent Pile Driver is capable of generating reduced noise levels of approximately 64 dBA at 16 meters (Giken Ltd. 2024).

blocks, noise blankets, or other methods shall be implemented to ensure that noise from the impact of the pile driving hammer is minimized to achieve compliance with the performance standards set forth in Brisbane Municipal Code Chapter 18.28.[18]

Impact NOI-2: Permanent Increase in Ambient Noise Levels from Stationary Sources

Significant and Unavoidable

Specific Plan requirements for screening of HVAC units do not provide specific provisions that would ensure compliance with applicable thresholds for sensitive receptors in Brisbane (Section 8.26.030 of the Municipal Code) and San Francisco (Section 2909 of the Police Code). Thus, HVAC units could exceed applicable noise ordinance requirements. Even if each HVAC unit within the Specific Plan area would meet applicable noise standards and depending on the location and screening provided for individual units, the aggregate noise from multiple HVAC units operating simultaneously could be more than 10 dB over ambient noise levels.

Noise increases from commercial heavy/medium-duty truck deliveries would be more than 5 dBA where the existing noise level is 59 dB L_{eq} or less at 50 feet away, which could occur during early morning deliveries in nighttime hours (before 7:00 a.m.). The Specific Plan does not contain requirements that would ensure loading docks are sited such that the building acts as a barrier from noise for adjacent noise-sensitive land uses or by provision of noise barriers or limits on delivery times and access routes, potentially allowing noise from loading activities to exceed applicable noise standards.

While the Baylands water recycling facility would provide noise control feature, the facility's design is conceptual. In the absence of design specifications, a quantitative demonstration that the facility would meet applicable noise standards is not possible and it must be assumed that noise levels from operations would exceed applicable thresholds.

Noise increases from battery storage systems which could be located as close as 150 feet to Baylands high-density residential uses within the Roundhouse District, would generate noise that could increase ambient noise levels in excess of 5 dBA.

Temporary events employing amplified sound within park areas could be as close as 50 feet to the low-density residential units and increase ambient noise levels by more than 5 dBA.

Mitigation Measures NOI-2a through NOI-2f would be sufficient to achieve operation of individual stationary sources to be consistent with the noise standards of Brisbane Municipal Code Sections 8.28.030, 8.28.040, and 8.28.050. However, ensuring that resultant noise levels could be maintained less than 5 dBA above ambient levels is not reasonably feasible given that

[18] Such barriers can be installed immediately adjacent to the pile lead itself and reduce noise by as much as 30 dBA.

(1) each given receptor would need a baseline measurement in a noise environment with multiple sources; (2) the noise environment would be constantly changing due to other noise sources as the Specific Plan develops; and, (3) construction activities would hinder establishment of baseline noise levels within the Specific Plan area for many years.

Program EIR Mitigation Measures

MM NOI-2a: Project Design Features (Program EIR Mitigation Measure 4.J-3a). All development within the Baylands shall incorporate the following design features into the final site plans prior to issuance of a building permit:

- Building equipment (e.g., heating, ventilation, and air conditioning units) shall be located away from nearby residences, on building rooftops, or adequately shielded within an enclosure that effectively blocks the line of sight of the source from receivers in order to meet a performance standard of 5 dBA over existing ambient noise levels (generally perceptible increase to most persons) for this source which would potentially operate more than 20 minutes in a given hour.
- Designated truck delivery areas (e.g., loading bays) shall be located at least 100 feet from residences to maintain noise levels of less than 5 dBA over existing monitored levels, except within mixed-use buildings containing both residential and commercial uses. Truck delivery bays and waste collection areas shall be located so that they are blocked by Project buildings or designed with noise reduction barriers to reduce noise impacts on residences or other sensitive receptors.
- Where truck delivery bays are provided within mixed-use buildings containing both residential and commercial uses, they shall be located and designed so as to minimize the effects of noise from loading activities on residential uses within the building.

Additional Mitigation Measures

MM NOI-2b: Compliance with Brisbane Municipal Code. Prior to the issuance of any building permit, the applicant shall demonstrate to the satisfaction of the Brisbane Community Development Director that all mechanical equipment is selected and designed to meet the performance standards of Sections 8.28.030 and 8.28.040 of the Brisbane Municipal Code and that the noise from building's mechanical equipment and to limit increasing noise levels more than 5 dBA L_{eq} above ambient at any sensitive receptor.

If projected noise levels from mechanical equipment would exceed 5 dBA Leq above ambient at any sensitive use or City standards, appropriate noise

reduction measures shall be provided. Methods of achieving these standards include using low-noise-emitting HVAC equipment, locating HVAC and other mechanical equipment within a rooftop mechanical penthouse, and using shields and parapets to reduce noise levels sufficiently to meet the performance standards of Sections 8.28.030 and 8.28.040 of the Brisbane Municipal Code at adjacent land uses.

For example, emergency generators would be required to include industrial-grade silencers that can reduce exhaust noise by 12 to 18 dBA or residential-grade silencers that can reduce such noise by 18 to 25 dBA as necessary. (ASHRAE 2006). Acoustical screening can also be applied to exterior noise sources of the proposed central utility plants and can achieve up to 15 dBA of noise reduction (ENC 2014).

An acoustical study shall be prepared by a qualified acoustical engineer whose work is subject to City staff and/or city-contracted peer review during final building design to evaluate the noise generated by building mechanical equipment and to identify the necessary design measures (e.g., equipment selection, acoustical housing, or screening) to be incorporated to limit increased noise levels to no more than 5 dBA L_{eq} above ambient at any sensitive receptor and meet the City's Municipal Code noise standards. The study shall be submitted to the Brisbane Community Development Director for review and approval before the issuance of any building permit.

The Baylands developer shall pay or reimburse the City for all costs associated with the acoustical study and city-contracted peer review.

MM NOI-2c: Loading Dock Noise. Loading docks shall be located and designed so as to not increase noise levels more than 5 dBA L_{eq} above ambient at any sensitive receptor and meet the City's Municipal Code noise standards.

An acoustical study shall be prepared by a qualified acoustical engineer whose work is subject to City staff and/or city-contracted peer review during final building design to identify the necessary design measures (e.g., loading dock location, acoustical barriers) to be incorporated and demonstrate that loading docks will meet the City's Municipal Code noise standards and not increase noise levels more than 5 dBA L_{eq} above ambient at any sensitive receptor. The study shall be submitted to the Brisbane Community Development Director for review and approval before the issuance of any building permit.

Potential design measures that could be implemented to achieve this performance standard (the City's Municipal Code noise standards) may include, but are not limited to shielding from features integrated into site design, and/or

restrictions on hours for commercial deliveries within the commercial mixed-use areas. Such measures shall be determined by the site-specific noise impact study that addresses commercial mixed-use truck delivery activities, completed by a qualified noise consultant once site-specific development plans are completed, but must be designed to achieve the performance standards in Brisbane Municipal Code Sections 8.28.030 and 8.28.040.

The Baylands developer shall pay or reimburse the City for all costs associated with the acoustical study and city-contracted peer review.

MM NOI-2d: Water Recycling Facility Noise. The Baylands water recycling facility shall be designed to limit noise to no more than 5 dBA above ambient at any sensitive receptor and meet the performance standards of Brisbane Municipal Code Sections 8.28.030 and 8.28.040. Available measures shall be incorporated into the facility's design to meet applicable noise standards, such as locating mechanical equipment within a mechanical penthouse, using shields and parapets to reduce noise levels at nearby land uses, and additional measures such as those provided below in **Table 4.12-36** as required to limit noise to no more than 5 dBA above ambient at any sensitive receptor and meet the performance standards of Brisbane Municipal Code Sections 8.28.030 and 8.28.040.

Table 4.12-36: Major Water Recycling Facility Treatment Process Equipment and Available Noise Mitigation Methods

Noise Source	Potential Noise Reduction Methods
Effluent Pumps	Motor room absorptive surface treatments Acoustic louvers Ventilation duct silencers
Aeration Blowers	Acoustic louvers Ventilation duct silencers Blower inlet silencers Blower vent silencers
Influent and Bypass Pumps Stations	Pump room absorptive surface treatments Acoustic louvers Ventilation duct silencers
Back-Up Generator	Industrial-grade silencers
Odor Control Exhaust Fans	Fan room absorptive surface treatments Acoustic louvers Ventilation duct silencers Sound-rated fan selection and specification Fan duct silencers

SOURCE: Environmental Science Associates, 2024.

An acoustical study shall be prepared by a qualified acoustical engineer whose work is subject to City staff and/or city-contracted peer review during final building design to evaluate the noise generated by building mechanical equipment and to identify the necessary design measures to be incorporated to meet the City's standards of Brisbane Municipal Code Sections 8.28.030 and 8.28.040. The study shall be submitted to the Brisbane Community Development Director or the Director's designee for review and approval before the issuance of any building permit. Cal Water shall pay or reimburse the City for all costs associated with the acoustical study and city-contracted peer review.

MM NOI-2e: Utility-Scale Battery Storage Facility. Battery storage facilities shall be designed to limit noise to no more than 5 dBA above ambient at any sensitive receptor and meet the performance standards of Brisbane Municipal Code Sections 8.28.030 and 8.28.040. Potential design measures that could be implemented to achieve this performance standard (the City's Municipal Code noise standards) may include but are not limited to, using distributed inverter system design, selection of quiet cooling systems and acoustical shielding for inverters and cooling equipment. Such measures shall be determined by the site-specific noise impact study completed by a qualified noise consultant whose work is subject to City staff and/or city-contracted peer review once site-specific development plans are completed but must be designed to achieve the performance standards in Brisbane Municipal Code Sections 8.28.030 and 8.28.040. The battery storage facility applicant shall pay or reimburse the City for all costs associated with the noise impact study and city-contracted peer review.

MM NOI-2f: Amplified Sound. The applicant or operator of all amplified music events within public parks shall prepare and implement a Noise Control Plan for operations at the proposed entertainment venues to reduce the potential for noise impacts from public address and/or amplified music. This Noise Control Plan shall contain the following elements:

- All activities held at the community event area consisting of amplified speech or music shall be limited to daytime hours of 7 am to 10 pm.
- Amplified speech or music levels shall be maintained at or below the performance standard of fifteen (15) dBA above the local ambient to any receiver (Brisbane Municipal Code Sections 8.28.070).

Impact NOI-3: Permanent Increase in Ambient Noise Levels along Roadways

Significant and Unavoidable

One of the 15 roadways segments that were analyzed would exceed applicable thresholds in 2035, and three of the 15 roadway segments would exceed applicable thresholds in 2040.

Potential mitigation strategies are limited and not feasible for all roadways, or in the case of Geneva Avenue and Tunnel Avenue, would be in the purview of other jurisdictions. However, these measures are identified as a menu of available measures to mitigate traffic noise impacts to the extent feasible. As such, it cannot be assured that these measures could be implemented to the degree sufficient to reduce impacts to a less-than-significant level.

Mitigation Measure MM NOI-3 is proposed; however, the degree to which it could feasibly be implemented to reduce traffic noise to a less than significant level cannot be assured.

Mitigation Measures

MM NOI-3: **Traffic Noise Reduction Measures:** Each of the following traffic noise reduction measures that are determined by the Brisbane City Engineer or the Daly City or San Francisco City Engineer for physical improvements along roadway segments in those cities to be feasible shall be implemented to reduce the projected roadway noise increases along (1) Geneva Avenue from Carter Street to Bayshore Boulevard, (2) Tunnel Avenue from Blanken Avenue to north of Beatty Road, and (3) Guadalupe Canyon Parkway west of North Hill Drive by an estimated 0.1 to 0.8 dBA for each measure.

- **Reduction in Traffic Volumes:** Because one of the primary components of traffic noise generation is daily vehicle volume, a reduction in traffic noise levels would result from reducing the overall volume of Baylands-generated traffic. However, achieving a 3 dB reduction in traffic noise levels would require a 50 percent reduction in projected traffic volumes. As the increase in noise along Guadalupe Canyon Parkway is predicted to be 3.2 dBA over the applicable significance criterion of a 1.5 dBA increase (4.7 dBA total increase), an almost 50 percent reduction in the Baylands traffic volume contribution would be necessary to achieve a less than significant roadway noise increase.

  Specific Plan development already includes implementation of a Transportation Demand Management (TDM) program to encourage and create incentives for travel other than via use of single-occupant vehicle trips, in accordance with Brisbane ordinance and San Mateo County's Congestion Management Program requirements. The trip reductions attributable to required implementation of TDM measures are already

reflected in the traffic volumes in the transportation analysis that was used to estimate roadway noise increases in Tables **Table 4.12-37** and **Table 4.12-38**.

- **Reduction in Vehicle Speeds:** Another factor in the generation of traffic noise is vehicle speed. Higher speeds translate to higher traffic noise levels. Each 5-mph reduction in average speed provides approximately 1.4 dBA of noise reduction on an average basis (L_{eq}/DNL). Speed reductions may be achieved by posting new speed limits or through installation of traffic calming infrastructure such as roundabouts. However, vehicle speed limits are set based on speed surveys, safety considerations, and other factors, rather than achieving lower traffic noise levels. In addition, the City and County of San Francisco has jurisdiction over portions of affected roadways within San Francisco (the northern portions of Bayshore Boulevard and Tunnel Avenue). As a result, implementation of this measure could only be assured if speed surveys and safety studies demonstrated the feasibility of reducing speed limits.
- **Construction of Noise Barriers:** Reductions in traffic noise levels can be achieved through the construction of traffic noise barriers. However, at locations where openings or gaps in the barriers would be required for driveway openings or to maintain safe sight distances, the effectiveness of noise barriers would be severely compromised. In addition, this measure would typically require construction of noise barriers on the property of the impacted receptor, rather than within a public right-of-way, so there is no guarantee the impacted receptor would agree to the construction of such barriers. Therefore, barriers are generally, not an available means of mitigation.
- **Acoustical Treatments for Existing Impacted Residences:** Sound insulation treatments, such as replacing existing windows and doors with sound-rated windows and doors and providing a suitable form of forced-air mechanical ventilation, can reduce indoor noise levels sufficient to achieve an interior noise level of 45 dBA DNL, as recommended for interior residential spaces. This measure would typically require construction of replacement doors and windows on the property of the impacted receptor, rather than within a public right-of-way, so there is no guarantee the impacted receptor would agree to the construction of such improvements. Therefore, implementation of the measure cannot be assured.
- **Use of Setbacks:** A 4.5 dBA decrease in traffic noise levels can be achieved for each doubling of distance between the roadway centerline

and affected residences. However, because the locations of existing residences that would be impacted by Baylands-generated increases in traffic noise are fixed, as are the roadways of concern, this measure is not viable for the existing impacted residences.

- **Engineered Asphalt:** Noise-reducing pavement types, such as rubberized asphalt, have been shown to provide an appreciable noise level reduction relative to other pavement types. Studies have demonstrated these measures reduce traffic noise levels along local roadways by 3 to 5 dBA DNL. Engineered asphalt intended to reduce tire-pavement noise could potentially reduce noise levels along impacted roadways. This approach would consist of the replacement of dense grade asphalt with open-grade or rubberized asphalt. However, this approach is likely infeasible. The FHWA currently does not endorse the use of quiet asphalt as a noise abatement measure because the effectiveness of quiet paving declines as the pavement ages and will cease to serve its noise abatement function if not properly maintained.[19] To be a permanent mitigation, subsequent repaving would also have to use "quieter" pavements. The working assumption for maintenance assumes replacement of the asphalt overlay to occur every 7 years as opposed to a 20-year cycle for ridged pavement (Caltrans 2018). The cost per mile is approximately 26 percent more than for Portland cement with standard asphalt (Institute of Noise Control Engineering 2014).

Impact NOI-4: Exposure of People to Railroad, Freeway, and Airport Noise

Less than Significant with Mitigation Incorporated

Residential and hotel development adjacent to the west side of the Caltrain right-of-way would exacerbate the noise impacts of rail operations by exposing residents and hotel guests to DNL noise levels in excess of 65 dBA.

The Baylands is located outside the 65 dB CNEL noise contour of SFO airport operations. In addition, proposed residential and hotel uses are proposed to be located a sufficient distance

[19] The FHWA does not recognize special wearing surfaces as a noise abatement measure under 23 CFR 772 Procedures for Abatement of Highway Traffic Noise and Construction Noise. The noise reduction properties degrade as traffic loads wear these surfaces out over time, resulting in the abatement measure no longer fulfilling its intended abatement commitment and the surface requiring replacement. Replacement with standard pavement would in turn be a potentially substantial adverse environmental effect. Ensuring similar continuing performance for a quiet pavement abatement technique would require regular testing, because the acoustical benefits may deteriorate; also required is the agency's commitment, backed by funding, to maintain the acoustical properties of the pavement in perpetuity.

from the freeway that residents and hotel guests would not be subject to DNL noise levels in excess of 65 dBA.

Implementation of Mitigation Measures MM NOI-4a and NOI-4b would require residential, hotel, and other uses where people normally sleep to be designed to maintain an interior Day Night Noise Level (DNL) no greater than 45 dBA and outdoor common areas to a 65 dBA DNL, Baylands residents would be adequately protected from noise generated by rail operations within the Caltrain right-of-way. As a result, Baylands development would not exacerbate the noise impacts of railroad-generated noise by placing noise-sensitive uses close to the Caltrain right-of-way.

Program EIR Mitigation Measures

MM NOI-4a: Residential Exposure to Railroad Noise (Program EIR Mitigation Measure 4.J-1a). All residential development within the Specific Plan area shall minimize the exposure of people within the Specific Plan area to noise from Caltrain and High-Speed Rail operations through construction of noise barriers or maintenance of buffer distances, and shall adhere to the following noise performance standards:

- Exterior noise level of below 65 dBA, DNL for outdoor common areas within any approved residential use; and
- Interior noise standard of 45 dBA, DNL.

These noise levels shall be attained through use of appropriate building materials as required by State of California Title 24 standards. Compliance with these performance standards shall be verified by an acoustical professional <u>whose work is subject to City staff and/or city-contracted peer review</u> prior to issuance of a building permit. Specific measures to achieve these performance standards shall include all or any combination of the following options:

- Site design measures, including use of building orientation to minimize window exposure toward noise sources, avoid placing balcony areas in high noise areas, and use of buildings as noise barriers.
- Use of acoustically rated building materials (insulation and windows);
- Construction of architectural noise barriers between sources and receptors; and
- Provision of landscaping or other non-noise-sensitive buffer zones between sources and receptors.

<u>The Baylands developer shall pay or reimburse the City for all costs associated with the noise analysis and city-contracted peer review.</u>

MM NOI-4b: Hotel Exposure to Railroad Noise (Program EIR Mitigation Measure 4.J-1b). All hotel projects within the Specific Plan area shall minimize the exposure of people within the Specific Plan area to noise from Caltrain and High Speed Rail operations through construction of noise barriers or maintenance of buffer distances, and shall adhere to the following noise performance standards:

- Exterior noise level of below 65 dBA, DNL for outdoor common areas within any approved residential use or hotel; and
- Interior noise standard of 45 dBA, DNL

These noise levels shall be attained through use of appropriate building materials as required by state of California Title 24 standards. Compliance with these performance standards shall be verified by an acoustical professional whose work is subject to City staff and/or city-contracted peer review prior to issuance of a building permit. Specific measures to achieve these performance standards shall include all or any combination of the following options:

- Site design measures, including use of building orientation to minimize window exposure toward noise sources, avoid placing balcony areas in high noise areas, and use of buildings as noise barriers;
- Use of acoustically rated building materials (insulation and windows);
- Construction of architectural noise barriers between sources and receptors; and
- Provision of landscaping or other non-noise-sensitive buffer zones between sources and receptors.

The Baylands developer shall pay or reimburse the City for all costs associated with the noise analysis and city-contracted peer review.

Impact NOI-5: Temporary or Permanent Increase in Vibration

Less than Significant with Mitigation Incorporated

Although existing off-site structures would not experience Baylands-generated vibration exceeding applicable thresholds, building construction in the early increments of Baylands development would be subject to vibration levels above the applied human annoyance criterion of 72 VdB (0.016 in/sec PPV) or the building damage threshold for modern structures of 0.5 in/sec PPV in the following locations:

- Icehouse Hill District, where pile driving for buildings would expose previously constructed Baylands buildings as close as 40 feet to a vibration level of 0.321 in/sec

PPV, above the applied human annoyance criterion of 72 VdB (0.016 in/sec PPV) but below the building damage threshold for modern structures of 0.5 in/sec PPV.

- Roundhouse District, where pile driving would expose previously constructed Baylands buildings as close as 30 feet to a vibration level of 0.494 in/sec PPV, well above the applied human annoyance threshold for residential uses 72 VdB (0.016 in/sec PPV) but just below the building damage threshold for modern construction. Pile driving could occur as close as 300 feet to the reconstructed Roundhouse, which would experience a resultant vibration level of 0.02 PPV. This predicted vibration level would be below the 0.25 in/sec PPV criteria for historic structures.
- Bayshore District, where pile driving would expose previously constructed Baylands buildings as close as 30 feet to a vibration level of 0.494 in/sec PPV, well above the applied human annoyance threshold for residential uses 72 VdB (0.016 in/sec PPV) but just below the building damage threshold for modern construction of 0.50 in/sec PPV.
- Campus East District, where pile driving would expose previously constructed Baylands buildings as close as 25 feet south of the construction of low-density commercial buildings to a vibration level of more than 0.65 in/sec PPV, well above both the applied human annoyance threshold of 72 VdB (0.016 in/sec PPV) and the building damage threshold of 0.50 in/sec PPV.
- Pile driving activities within 8 feet of Kinder Morgan pipelines would generate sufficient vibration to damage the pipeline. Pile driving within 5 feet of underground pipelines or other underground structures could exceed the 10.0 in/sec PPV criterion.

Mitigation Measures MM NOI-5a and MM NOI-5b would reduce significant impacts related to building damage to the Roundhouse or the Machinery & Equipment building and historic structures to a less-than-significant level by requiring preconstruction surveys, monitoring, and provisions for repairing damage.

Mitigation Measure NOI-5c addresses residual impacts associated with potential damage to non-historic structures and human annoyance impacts. This measure would require the preparation and implementation of a Master Construction Vibration Avoidance and Reduction Plan that would ensure vibration levels from impact or vibratory pile driving within the Baylands would not exceed the following standards:

- 72 VdB (0.02 in/sec PPV) at the nearest occupied housing, which is the applied human annoyance threshold for residential uses: or
- 0.5 in/sec PPV) at the nearest occupied structure, which represents the building damage threshold for modern construction.

Program EIR Mitigation Measures

MM NOI-5a: Pre-Construction Assessment to Minimize Structural Pile-Driving Vibration Impacts on Adjacent Historic Buildings and Structures and Vibration Monitoring (Program EIR Mitigation Measure 4.J-2b). Any development within 85 feet of the Roundhouse and the Machinery & Equipment Building that would require pile driving or other construction techniques that could result in vibrations of 0.25 in/sec shall engage a qualified geotechnical engineer subject to City approval to conduct a pre-construction assessment of existing subsurface conditions and the structural integrity of the nearby historic structures subject to piledriving or other vibration-inducing activity before a building permit is issued to demonstrate that the proposed construction activities would not result in vibration-induced damage to the Roundhouse or the Machinery & Equipment building.

If recommended by the pre-construction assessment, groundborne vibration monitoring of nearby historic structures shall be required. Such methods and technologies shall be based on the specific conditions at the construction site such as, but not limited to, the pre-construction surveying of potentially affected historic structures and underpinning of foundations of potentially affected structures, as necessary. The pre-construction assessment shall include a monitoring program to detect ground settlement or lateral movement of structures in the vicinity of pile-driving activities. Monitoring shall be maintained while construction occurs within 85 feet of historic structures, and results shall be submitted to the City Engineer. In the event of unacceptable ground with the potential to cause structural damage movement (in excess of 0.25 in/sec PPV at historic structures), as determined by the City Engineer, all impact work shall cease until corrective measures (e.g., installation of vibration wave barriers) are implemented to reduce ground movement to below 0.25 inches PPV.

In addition, the following measure shall be implemented:

- Evaluate and implement feasible measures for reducing vibration, such as alternative pile driving methods (e.g., cast-in-drilled-hole piles versus driven piles), alternative foundation types for the new construction (e.g., spread footings versus driven piles), alternative compaction methods, and physical measures (intervening trench, increased distance).
- Require monitoring to be conducted at the building during construction. This monitoring can include crack gages on existing cracks and vibration amplitude monitoring. Establish warning and stop work thresholds for monitoring. Implement visual and audible signals that are triggered by a

vibration monitor when exceedances of warning and stop work thresholds occur. If warning thresholds are exceeded routinely, consider alternative construction approaches.

- If the stop work threshold is exceeded, evaluate the condition of the building for damage. If no damage is indicated consult with structural engineer and/or architectural historian to assess whether higher thresholds are possible and adjust as appropriate.
- If damage occurs, determine if any other construction approaches are feasible to reduce vibration. If none is available examine the severity of the damage to determine if damage is minor and repair is feasible. If repair is feasible continue with construction but monitor vibration and damage closely to ensure that damage remains repairable. Consider whether a lower stop work threshold is feasible.
- Repair any damage that has occurred.

MM NOI-5b: Protection of Underground Utilities (Program EIR Mitigation Measure 4.J-2c). All development sites requiring pile driving shall have underground utility[20] surveys completed before an application for a building permit is submitted to demonstrate that pile driving will be located a minimum 15 feet from buried utilities. All pile driving shall be designed so as to result in peak particle velocity of less than 4.0 in/sec (100 mm/s) at the location of underground utilities.

City permits for pile driving shall include a schedule for inspection of all underground utilities within 30 feet of the pile driving activity. Any damage caused by pile driving activities identified during such required inspections shall be repaired by the contractor to the satisfaction of the City and affected utility. Within one week following completion of pile driving activities, a post-construction assessment of all underground utilities within 30 feet of the pile driving activity shall be submitted to the City by the contractor, confirming that ~~no~~ any damage to ~~any~~ underground utilities that occurred as the result of the pile driving activity~~. Should the post-construction assessment determine that underground utilities were damaged by pile driving activities, such damage shall~~ has been or is in the process of being repaired by the contractor to the satisfaction of the City and affected utility.

[20] Underground utilities include electrical lines, irrigation lines, reclaimed water lines, municipal water lines, sewer lines, gravity flow facilities (storm, sanitary and laterals), cable/ communication lines and gas lines.

Additional Mitigation Measure

MM NOI-5c: Vibration Control. Any impact pile driving that is permitted per Mitigation Measure MM NOI-1f after having demonstrated via a site-specific geotechnical study along with any test borings that geologic or other unique conditions preclude the use of quieter, alternative pile installation techniques shall be subject to the following requirements.

Each site-specific development and infrastructure project that would occur within 75 feet of a conventionally constructed building shall implement sufficient measures so as to ensure vibration from impact or vibratory pile driving would not exceed 0.5 in/sec PPV at the nearest structure or 72 VdB (0.016 in/sec PPV) at the nearest occupied residential structure.

Prior to the issuance of a building permit or construction permit, the applicant shall prepare a Construction Vibration Avoidance and Reduction Plan to identify the specific measures to be implemented to achieve the above performance standard. The plan shall be submitted to the Community Development Director for review and approval, and include, at a minimum, the following vibration avoidance and reduction measures:

- Neighbors within 500 feet of the construction site shall be notified of the construction schedule and that noticeable vibration levels could result from pile driving.
- Vibration levels and/or impacts from pile driving shall be minimized by instituting as many of the following measures as necessary to reduce the potential impacts from pile driving to meet the performance standards identified above:
    - Tower buildings requiring pile driving shall be constructed during the initial phases of construction for a given neighborhood to avoid annoyance vibration impacts on other occupied residential buildings within the neighborhood.
    - Foundation pile holes shall be pre-drilled to minimize the number of impacts required to seat the pile.
    - Piles shall be jetted or partially jetted into place to minimize the number of impacts required to seat the piles.
- The pre-construction survey of underground utility lines required by Mitigation Measure MM NOI-5b shall be conducted within a radius of 100 feet of the construction site. All pile installation locations shall be located no closer than 8 feet to existing utility easements containing

underground cables, pipelines, or fuel lines associated with the Kinder Morgan Tank Farm.

Additionally, ~~construction vibration monitoring shall be implemented to~~ when construction vibration monitoring is required pursuant to Mitigation Measure MM NOI-5a or MM NOI-5c, such monitoring shall document conditions before, during, and after pile driving by actively measuring vibration levels within 30 feet of a modern structure, within 50 feet of a historic structure, or within 8 feet of a utility line right-of-way or easement, and other locations identified pursuant to the Construction Vibration Avoidance and Reduction Plan. All monitoring tasks shall be undertaken under the direction of a licensed Professional Structural Engineer in the State of California (and a Historic Architect if the affected structures are historic resources) whose work is subject to City staff and/or city-contracted peer review and shall be in accordance with industry-accepted standard methods. Construction vibration monitoring shall include the following tasks:

- Identify the sensitivity of nearby structures to groundborne vibration. Perform a pre-construction photo survey, elevation survey, and crack monitoring survey for each of these structures. Surveys shall be performed before any pile driving activity, at regular intervals during pile driving, and after completion. The surveys shall include internal and external crack monitoring in structures, settlement, and distress, and shall document the condition of foundations, walls, and other structural elements in the interior and exterior of the structures.
- Develop a Contingency Plan. The plan shall identify structures where monitoring will be conducted, establish a vibration monitoring schedule, define structure-specific vibration limits, and address the need to conduct photo, elevation, and crack surveys to document conditions before and after pile driving.
- Should monitored vibration levels reach 0.47[21] in/sec PPV at buildings of conventional construction or 0.22 in/sec PPV at historic buildings, alternative construction techniques shall be used to minimize vibration levels during repaving activities where needed to meet vibration criteria. Such alternative construction techniques include, but are not limited to, use of non-vibratory, excavator-mounted compaction wheels and small smooth drum rollers for final compaction of asphalt base and asphalt concrete, if

[21] Identified trigger levels for cease-work reflect a vibration level 0.03 in/sec below the damage criteria.

within 50 feet of a historic structure or 25 feet of a conventionally constructed structure. If needed to meet compaction requirements, smaller vibratory rollers may also be used.

- If vibration levels reach 0.47 in/sec PPV at buildings of conventional construction or 0.22 in/sec PPV at historic buildings, suspend construction and implement alternative construction methods to either lower vibration levels or secure the affected structures.
- Conduct a post-construction survey on structures where either monitoring has indicated high levels or complaints have been received regarding damage. Where damage has resulted from construction activities, make appropriate repairs or provide compensation.
- Within one month after substantial completion of any building constructed with impact pile driving, summarize the results of all vibration monitoring in a report and submit the report for review by the Community Development Director or the Director's designee. The report shall describe measurement methods and equipment used, present calibration certificates, and include graphics as required to clearly identify the locations of vibration monitoring. An explanation of all events that exceeded vibration limits shall be included together with proper documentation supporting any such claims.
- Designate a person responsible for registering and investigating claims of excessive vibration. The contact information for such a person shall be clearly posted on the construction site.

- Should monitored vibration levels reach 3.97 inches per second peak particle velocity at utility locations, construction shall be suspended, and alternative construction techniques shall be used to lower vibration levels or the affected structure(s) shall be secured or reinforced. In the event that there is any visual or other evidence (e.g., odors) that a utility has been damaged, the contractor shall immediately stop work in the area and notify the Brisbane Public Works Director and the appropriate utility provider. Work shall not resume until authorization from the appropriate utility provider has been obtained.

The Baylands developer shall pay or reimburse the City for all costs associated with the Construction Vibration Avoidance and Reduction Plan and city-contracted peer review.

Impact NOI-6: Exposure of People to High Vibration Levels

Less than Significant with Mitigation Incorporated

Development of housing and hotel uses proposed for the tower buildings in the Bayshore and Roundhouse Districts within 50 feet of adjacent to the Caltrain rail line would exacerbate the vibration impacts of Caltrain and other rail operations by exposing on-site residents and hotel guests to more than 70 rail operations generating 72 VdB or more.

Implementation of Mitigation Measure MM NOI-6 would ensure that groundborne vibration from rail operations would be less than the applicable threshold and thereby avoid exacerbating vibration impacts from rail operations on Baylands residential and hotel uses.

Program EIR Mitigation Measures

MM NOI-6: Exposure to Vibration from Rail Operations (Program EIR Mitigation Measure 4.J-2a). All development in the Baylands shall be designed to avoid vibration from Caltrain and other rail operations in excess of 72 VdB. Prior to issuance of any building permit for residential or hotel structures intended for human occupancy within 200 feet of the mainline track, a detailed vibration design study shall be completed by a qualified acoustical engineer whose work is subject to City staff and/or city-contracted peer review to confirm ground vibration levels and frequency of operations along the Caltrain rail line and determine appropriate design that would limit interior vibration levels to less than 72 VdB within residences and hotel rooms. Implementation of the recommended measures of the acoustical study into project design elements shall be verified by the Brisbane Building Department as part of the plan-check process.

Specific measures to achieve the performance standard set forth above shall include all or any combination of the following methods:

- Use of vibration isolation techniques such as supporting the new building foundations on elastomer pads similar to bridge bearing pads;
- Installation of vibration wave barriers. Wave barriers would consist of control trenches or sheet piles, which are analogous to controlling noise with sound barrier. The applicability of this technique depends on the characteristics of the vibration waves.

The Baylands developer shall pay or reimburse the City for all costs associated with the noise analysis and city-contracted peer review.

k. Hazards and Hazardous Materials

Impact HAZ-1: Risks Involved in Transport, Use, Disposal, and Management of Hazardous Materials

Less than Significant with Mitigation Incorporated

Routine Transport, Use, Disposal, or Management of Hazardous Materials during Demolition and Construction Activities

A comprehensive set of federal, state, and local laws and regulations regulate the transportation, use, management, and disposal of hazardous materials and wastes to minimize potential risks of human and environmental exposure during site grading and construction of buildings, infrastructure, and site amenities, avoiding exposure of people and the environment. These programs also provide for training of workers to react to and contain accidental hazardous materials spills and other exposures to hazardous materials. In addition, the design and construction activities involved with undergrounding of electrical lines, installation of renewable energy generation and battery storage facilities, installation of service connections and connections to the Martin Substation would comply with applicable codes, California Public Utilities Commission and Independent System Operator Rules and Regulations, and PG&E requirements. Thus, with the exception of lead within the former shooting range on Icehouse Hill, impacts would be less than significant. However, because clean-up of the former shooting range is addressed by EPA guidelines rather than mandatory requirements, exposure to lead within the former firing range would be significant and require mitigation.

Routine Transport, Use, Disposal, or Management of Hazardous Materials by Operation of Baylands Land Uses and Infrastructure

Proposed Baylands development would primarily consist of residential, commercial/office, public, and open space uses that would not transport, use, store, or dispose of large quantities of hazardous materials that could present a substantial risk to people. Uses such as hardware stores, laboratories, and the relocated fire station that would store hazardous materials in amounts greater than minimum reportable quantities would be required to prepare Hazardous Materials Business Plans tailored to their specific operations. These measures would reduce the potential for hazardous materials release during the routine transport, use, or disposal of such materials.

Consistency with Remedial Action Plans for Operable Units OU-SM and OU-2; Consistency with the Title 27 Landfill Closure Plan

Baylands development would be required to comply with the requirements of Remedial Action Plans for Operable Unit for OU-SM and Operable Unit OU-2, restricting human interaction with contaminated soils or groundwater. Construction of buildings and infrastructure within the

eastern portion of the Baylands will also comply with applicable Title 27 Closure and Post-Closure Maintenance Plan requirements.

Upset or Accident Conditions

Grading and construction activities in the vicinity of Kinder Morgan pipelines includes the potential of accidental loading or undermining of soils covering and underlying the pipeline, causing damage to the pipeline. Because current grading and development plans do not include specific provisions for protecting the structural integrity of the pipeline, a significant impact would result from Baylands development.

Mitigation Measure MM HAZ-1a ensures implementation of General Plan policy requiring completion of site remediation and landfill closure prior to development within the Baylands. Mitigation Measures MM HAZ-1b and MM HAZ-1c address impacts not addressed through compliance with applicable federal, state, and regional hazardous materials regulatory requirements. MM HAZ-1c provides for clean-up of the former police shooting range consistent with US EPA guidelines not included in mandatory hazardous materials requirements for the construction of trails on the southerly slope of Icehouse Hill. Mitigation Measure MM HAZ-1d provides for remediation of the former police shooting range, which would require identifying all areas where lead fragments from the former police shooting range on Icehouse Hill may be found. MM HAZ-1e would protect Kinder Morgan fuel pipelines from risk of upset during site construction.

Program EIR Mitigation Measures

MM HAZ-1a **Confirm Achievement of Remediation Goals (Program EIR 4.G-2a).** Prior to issuance of a building or grading permit for any parcel within OU-SM, OU-2, and the former landfill, the applicant shall provide the City with evidence that the Department of Toxic Substances Control (DTSC), Regional Water Quality Control Board (RWQCB), and/or the San Mateo County Environmental Health Division as the Local Enforcement Agency in relation to the landfill have approved Remedial Design and Implementation Plan(s) or final closure and post-closure maintenance plans for the area subject to the requested permit.

Prior to issuance of a building permit for any parcel within the Baylands, the project applicant shall obtain regulatory approval from the Department of Toxic Substances Control (DTSC), Regional Water Quality Control Board (RWQCB), and/or the San Mateo County Environmental Health Division as the Local Enforcement Agency in relation to the landfill for the proposed land use, in the form of a Remediation Action Completion Report or equivalent closure letter stating that remediation goals have been achieved for proposed land uses.

MM HAZ-1b: Soil and Groundwater Management Plan (Program EIR Mitigation Measure 4.G-2b). Prior to issuance of a building or grading permit for any parcel within the Baylands, a Soil and Groundwater Management Plan shall be prepared by a qualified environmental consulting firm whose work is subject to City staff and/or city-contracted peer review, reviewed, and approved by DTSC and the RWQCB, and implemented by the applicant.

The Soil and Groundwater Management Plan shall also include a requirement for development and implementation of site-specific safety plans to be prepared prior to commencement of construction consistent with Occupational Safety and Health Administration (OSHA) Safety and Health Standards 29 Code of Federal Regulation (CFR) 1910.120, as well as management of groundwater produced through temporary dewatering activities.

Such site-specific safety plans shall include necessary training, operating and emergency response procedures, and reporting requirements to regulate all activities that bring workers in contact with potentially contaminated soil or groundwater, landfill gas, or leachate to ensure worker safety and avoid impacts on the environment. Further, the Soil and Groundwater Management Plan shall include protocols for any areas of the site that require excavation and relocation of refuse material (e.g., building foundations and utility infrastructure) in accordance with Title 27 of the California Code of Regulations to ensure that the integrity of the low-hydraulic-conductivity layer requirements is maintained.

The Baylands developer shall pay or reimburse the City for all costs associated with the Soil and Groundwater Management Plan and city-contracted peer review.

MM HAZ-1c: Master Deconstruction and Demolition Plan (Program EIR Mitigation Measure 4.G-2c). City review and approval of a specific plan per the requirements of the Brisbane General Plan shall be completed prior to submittal of any application for a demolition permit within the Project Site. Prior to issuance of a demolition permit for any parcel within the Baylands, the applicable property owner shall submit a Master Deconstruction and Demolition Plan prepared by a licensed professional to the City Building Official. The plan shall be reviewed and approved by the Building Official prior to issuance of the requested demolition permit. The demolition plan shall include documentation of hazardous materials determinations (surveys) and demolition or deconstruction recommendations in accordance with local and state requirements. If the surveys conducted by licensed professionals prior to issuance of a demolition permit per the requirements above hazardous building materials, demolition or deconstruction shall proceed in accordance with applicable Bay Area Air Quality Management

District (BAAQMD), OSHA, and California Occupational Safety and Health Administration (Cal/OSHA) requirements, which may include air permits or agency notifications, worker awareness training, exposure monitoring, medical examinations, and a written respiratory protection program.

MM HAZ-1d: Former Police Shooting Range Cleanup (Program EIR Mitigation Measure 4.G-2i). Prior to any construction of trails on the southerly slope of Icehouse Hill, best management practices for lead removal consistent with United States Environmental Protection Agency Circular EPA-902-B-01-001, *Best Management Practices for Lead at Outdoor Shooting Ranges*, Revised June 2005, shall be implemented.

Additional Mitigation Measures

MM HAZ-1e: Shooting Range Remediation. Prior to any construction activities on Icehouse Hill where lead fragments from the former police shooting range may be found, the following shall be implemented consistent with United States Environmental Protection Agency Circular EPA-902-B-01-001, *Best Management Practices for Lead at Outdoor Shooting Ranges*, Revised June 2005:

1. Prepare an exhibit along with supporting technical information for review and approval by the Brisbane Police Department identifying all areas where lead fragments from the former police shooting range on Icehouse Hill may be found.
2. Within those areas identified where lead fragments from the former police shooting range might be found, sift munitions fragments from the soil for recycling.[22]
3. Sample and analyze the remaining soil in layers to assess the extent of downward contamination to determine if the leachable level is at or above the United States Environmental Protection Agency (USEPA) limit of 5 milligrams per liter (mg/L). If it does not exceed the limits, the soil can be left in place with no further action required. If the USEPA limit is exceeded, remediation subject to oversight by the appropriate regulatory agency -- San Mateo County Environmental Health Services Division or DTSC -- shall be required prior to relocation of the Mission Blue Nursery to the site.

[22] Recycling the fragments makes them exempt from hazardous waste reporting and management requirements.

MM HAZ-1f: Kinder Morgan Fuel Pipeline. Existing infrastructure for the Kinder Morgan Tank Farm shall be protected in place during Baylands grading and construction consistent with the following requirements and specifications.

A Construction Workplan shall be developed with Kinder Morgan to document construction means and methods, including provisions for appropriate construction techniques, settlement monitoring, and setbacks to protect the structural integrity of existing pipeline facilities in accordance with the following performance standards.

- Any fill materials placed within 100 feet of any Kinder Morgan pipeline easement shall avoid additional loading on existing Kinder Morgan fuel lines and avoid settlement of soils supporting pipelines unless required by a state of regional regulatory authority in an approved site remediation or landfill closure plan.[23]
- Excavation activities within 25 feet of a Kinder Morgan fuel pipeline easement shall be designed to ensure the integrity of manufactured slopes within the excavation at all times.
- Temporary construction dewatering for excavations below groundwater levels shall be performed in a controlled manner and avoid prolonged drawdown of the groundwater table (exceeding one month).

Prior to issuance of a grading or construction permit for activities within 100 feet of a Kinder Morgan fuel pipeline easement, the applicant for such permit shall demonstrate to the satisfaction of the City Engineer that adequate measures will be implemented to ensure the structural integrity of existing pipeline facilities is protected, including measures such as but not limited to physical separation of construction activities, fill, and buildings from pipeline easements along with implementation of Mitigation Measure MM NOI-5b, Protection of Underground Utilities.

The Construction Workplan shall be subject to review and approval by the City of Brisbane prior to commencement of grading within 100 feet of any Kinder Morgan pipeline easement.

[23] As noted in Footnote 11, Caltrans' *Transportation and Construction Vibration Guidance Manual*, April 2020, does not recommend vibration criteria for protection of pipelines since buried pipelines, being constrained by the bedding material and soil surrounding them, can withstand high-vibration intensities.

Impact HAZ-2: Emissions or Handling of Hazardous or Acutely Hazardous Materials or Waste within One-Quarter Mile of a School

Less than Significant with Mitigation Incorporated

A comprehensive set of federal, state, and local laws and requirements regulate the transportation, use, storage, and disposal of hazardous materials and wastes to reduce the potential risks of human and environmental exposure during post-construction operations of the land use types permitted within the Baylands, particularly those operations occurring within 0.25 mile of a school facility. These programs also provide for training of workers to react to and contain accidental hazardous materials spills and other exposures to hazardous materials. No significant impact would thus result in relation to proximity of facilities that handle or emit hazardous or acutely hazardous materials, substances, or waste.

However, as shown in **Table 4.13-3**, proposed middle school locations do not meet all provisions of CCR Title 5, Section 14010 because they are:

- Within 150 feet of PG&E's 230 kV underground electrical transmission line along Bayshore Boulevard.
- Within 1,500 feet of the Caltrain railroad right-of-way.
- Within 1,500 feet of a PG&E 24-inch high-pressure natural gas transmission pipeline.
- Subject to liquefaction and cyclic densification during a design seismic event.

Mitigation Measure MM HAZ-2 requires the proposed middle school to meet the standards set for in CCR Title 5, Section 14010 or to prepare the required studies for review by the Department of Education and to secure approval of the proposed school site pursuant to the provisions of CCR Title 5, Section 14010(u).

Existing state and federal programs provide for protection of school sites and also provide for training of workers to react to and contain accidental hazardous materials spills and other exposures to hazardous materials. MM HAZ-2 would ensure that the proposed school site would meet the design and safety standards set forth in CCR Title 5, Section 14010 or demonstrate safety and provide mitigation for any hazards prior to approval pursuant to CCR Title 5, Section 14010(u).

Program EIR Mitigation Measures

MM HAZ-2: Protection of School Facilities (Program EIR Mitigation Measure 4.G-3). Grade K–12 school facilities constructed within the Baylands shall not be located within 0.25 miles of a facility with hazardous emissions or that handles hazardous or acutely hazardous materials, substances or waste, unless approved by School Facilities Planning Division of the California Department of Education in

conformance with California Code of Regulations (CCR) Title 5, Section 14010, which sets forth California Department of Education criteria for school site locations:

- "If the proposed [school] site is within 1,500 feet of a railroad track easement, a safety study shall be done by a competent professional trained in assessing cargo manifests, frequency, speed, and schedule of railroad traffic, grade, curves, type and condition of track need for sound or safety barriers, need for pedestrian and vehicle safeguards at railroad crossings, presence of high pressure gas lines near the tracks that could rupture in the event of a derailment, preparation of an evacuation plan. In addition to the analysis, possible and reasonable mitigation measures must be identified in accordance the referenced code." California Code of Regulations (CCR) Title 5, Section 14010 (d)
- "The [school] site shall not be located near an above-ground water or fuel storage tank or within 1,500 feet of the easement of an above ground or underground pipeline that can pose a safety hazard as determined by a risk analysis study, conducted by a competent professional, which may include certification from a local public utility commission." CCR Title 5, Section 14010 (h)

Grade K–12 school facilities shall also comply with California Education Code Sections 17210 through 17224 and related statutory provisions related to risk to human health or the environment at proposed school properties as overseen by the Department of Toxic Substances Control (DTSC). In accordance with California Education Code Sections 17210 through 17224 and related statutory provisions, the school district must prepare a Phase I Environmental Site Assessment and/or a Preliminary Endangerment Assessment (PEA) to identify potential contamination and evaluate whether it presents a risk to human health or the environment at proposed school properties as overseen by the Department of Toxic Substances Control (DTSC). The environmental investigation and any required remediation of properties to be developed for use as schools shall be overseen by DTSC in coordination with the California Department of Education and the School Facilities Planning Division.

Final design plans shall be approved by the School Facilities Planning Division of the California Department of Education prior to commencement of construction.

All required remediation within 0.25 mile of a proposed K–12 school site within the Specific Plan area shall be completed prior to occupancy of the school.

Impact HAZ-3: Development on a Hazardous Materials Site Identified Pursuant to Government Code Section 65962.5

Less than Significant

Various portions of the Specific Plan area, including the former Brisbane Landfill, OU-SM, and OU-2, are included on databases listing hazardous materials pursuant to Government Code Section 65962.5. Baylands development would be consistent with approved site remediation and remediation and landfill closure would occur prior to Baylands development. In addition, the only off-site location where Baylands-related off-site infrastructure is proposed is the PG&E Martin Substation, which is subject to regulatory oversight related to past cleanup activities. Thus, the potential for exposure of workers, the public, and the environment to hazardous materials within sites included on databases listing hazardous materials pursuant to Government Code Section 65962.5 would be less than significant.

Impact HAZ-4: Safety or Noise Hazards Due to Aircraft Operations

Less than Significant

Because the Specific Plan area is not within SFO's 65 dB CNEL, an Airport Safety Compatibility Zone, FAA Notification Area, or Airport Imaginary Surface area, the SFO Airport Land Use Compatibility Plan does not identify any land use restrictions due to the location of the Baylands in relation to SFO. Thus, development of the Specific Plan is consistent with the adopted Comprehensive Airport Land Use Compatibility Plan for the Environs of San Francisco International Airport and would not result in a safety hazard or excessive noise for people residing or working in the Specific Plan area due to aircraft operations.

Impact HAZ-5: Emergency Preparedness

Less than Significant

Development review by the City of Brisbane, in combination with review by the North County Fire Authority, would ensure availability of needed evacuation routes and access for emergency response personnel, provision of adequate fire flow and on-site safety measures, implementation of measures to reduce the potential for emergencies, and expand facilities needed to respond to emergencies. Thus, Specific Plan development would not interfere with implementation of an adopted emergency plan, impede evacuation routes, or restrict access for emergency response or recovery.

1. Hydrology and Water Quality

Impact HWQ-1: Water Quality Protection

Less than Significant with Mitigation Incorporated

Baylands development would be required to comply with General Construction Activity (Construction General Permit, Order No. 2009-0009-DWQ, as amended by 2010-0014-DWQ and 2012-0006-DWQ) and the General WQ 2022-0057-DWQ NPDES No. CAS000002), which would reduce construction impacts to less than significant.

The Construction General Permit would require each onsite and offsite Baylands construction activity to minimize or prevent pollutants in stormwater discharges and authorized non-stormwater discharges through use of controls, structures, and management practices as set forth in the General Permit that achieve best available technology (BAT) for toxic and non-conventional pollutants and best conventional technology (BCT) for conventional pollutants. The General Permit also requires that each site-specific construction activity development be designed to ensure that stormwater discharges and authorized non-stormwater discharges will not:

- Adversely affect human health or the environment;
- Contain pollutants in quantities that threaten to cause pollution or a public nuisance; or
- Contain pollutants that cause or contribute to an exceedance of any applicable water quality objectives or water quality standards contained in an applicable water quality control plan.

The Construction General Permit requires that site grading and site-specific development projects encompassing more than 1 acre:

- Complete a risk assessment to determine pollution prevention requirements pursuant to the three risk levels established in the General Permit;
- Eliminate or reduce non-stormwater discharges to storm sewer systems and other waters of the nation; and
- Develop and implement a SWPPP that identifies the sources of sediment and other sources that affect the quality of stormwater discharges and specifies BMPs that will reduce pollution in stormwater discharges to the Best Available Technology Economically Achievable/Best Conventional Pollutant Control Technology standards; and Perform inspections and maintenance of all BMPs.

However, operational BMPs generally call for applying pesticides only as specified on the "Pesticide Use Recommendation" on the label. Because of the large area within the Baylands being landscaped, a significant water quality impact would nevertheless result.

Implementation of Mitigation Measures **MM GEO-4a (Program EIR Mitigation Measure 4.E-4a) and MM** HWQ-1 (Program EIR Mitigation Measure 4.H-5) would minimize use of chemical pesticides and herbicides within the Baylands and, in combination with NPDES permit requirements and compliance with SWPPPs and Provision C.3, would reduce impacts to less than significant.

Program EIR Mitigation Measures

MM HWQ-1: Integrated Pest Management (Program EIR Mitigation Measure 4.H-5). Prior to issuance of an occupancy permit for site-specific development within the Baylands, an integrated pest management plan shall be prepared and implemented, subject to City review and approval, to set forth a preventative, long-term, low toxicity program to control pests. The plan shall provide guidelines for landscape and building maintenance with the emphasis on minimizing the use of pesticides while controlling pests. At a minimum, the integrated pest management plan shall include:

- ***Identification of acceptable pest levels*** (action thresholds) with an emphasis on *control*, not *eradication*, identifying site and pest specific action thresholds, and the controls to be used if those thresholds are exceeded.
- ***Preventive practices:*** Design, construction, and maintenance of landscape facilities, and buildings, as well as operation of uses that prevent or minimize pest problems would include integrated pest management strategies, sanitation practices, and proactive maintenance to minimize pest infestations.
- ***Monitoring:*** Regular observation, including inspection and identification.
- ***Mechanical controls:*** Should a pest reach an unacceptable level, provide for mechanical methods as the first options, including include simple hand-picking, erecting insect barriers, using traps, vacuuming, and tillage to disrupt breeding.
- ***Biological Controls:*** Provide for use of natural biological processes and materials for control, including promoting beneficial insects that prey on target pests and biological insecticides derived from naturally occurring microorganisms.
- ***Responsible Pesticide Use:*** Provide for use of synthetic pesticides generally only as required when preferred methods are infeasible or ineffective, including use of the least toxic pesticide that will do the job and is the safest for other organisms and for air, soil, and water quality;

use of pesticides in bait stations rather than sprays; or spot-spraying rather than general application.

Impact HWQ-2: Groundwater Recharge and Sustainable Management

Less than Significant

Baylands development would not 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 that could impede sustainable management of a groundwater basin or cause subsidence for the following reasons:

- Visitacion Valley Groundwater Basin
    - Local groundwater is not proposed to be used for potable or non-potable purposes as part of Baylands development.
    - Provision C.3 of the NPDES Municipal Regional Stormwater Permit requires runoff during a storm event be retained or detained onsite such that post-development peak flows do not exceed pre-development conditions. Release of stormwater flows to unlined drainages in the Ecological Park and Visitacion Creek will reduce loss of groundwater recharge due to increased impervious surface area within the Specific Plan.
    - Title 27 requirements for final closure of the former Brisbane Landfill require installation of a landfill cap to prevent infiltration of contaminants from the ground surface through the waste matrix in the former landfill. Thus, loss of pervious surface area within the landfill footprint is the result of final landfill closure, which is required to precede Baylands development, rather than to Baylands development itself.
    - As shown in **Figure 4.14-2**, the Visitacion Valley groundwater basin overlies the Brisbane Lagoon, which will continue to recharge the basin.
    - Approximately 26 acres of the Baylands will become subject to daily inundation as the result of projected sea level rise, providing continuous recharge to the basin and thereby preventing subsidence.
    - As a very low priority basin, compliance with Sustainable Groundwater Management Act within the Visitacion Valley Basin is not required.
- Westside Groundwater Basin
    - The Westside Basin is not in a condition of critical overdraft and is designated by DWR as low priority.

- As indicated in the Baylands Water Supply Assessment, Cal Water does not project any extractions from the South Westside Basin in excess of its agreed upon 1,534 afy limit for groundwater extractions.

Impact HWQ-3: Flood Hazards

Less than Significant with Mitigation Incorporated

The Specific Plan's drainage system does not implement Program EIR Program Mitigation Measure 4.H-4a and ensure that key roadways (Sierra Point Parkway, Lagoon Road, Geneva Avenue, and Tunnel Avenue) would be available as evacuation routes in a 100-year storm event. Proposed Baylands development would increase the site's impervious surface area and thereby increase flooding frequency, duration, or depth at two locations (Industrial Way – Bayshore Boulevard intersection; adjacent to the Kinder Morgan tank farm, Brisbane corporation yard, Caltrain right-of-way) but only "require measures by others to adapt to future conditions" to address increased flooding. In addition, Tunnel Avenue would not be available for emergency response or evacuation in the event of a 100-year flood even though the substantial increase in Specific Plan development would necessitate such use.

With implementation of Program Mitigation Measure 4.H-4a, Baylands development would provide adequate flood protection for new residential, commercial, and other uses within the Baylands because:

- The peak flow rate from a 25-year storm event would be accommodated within designated drainage areas and underground drainage pipes; and
- The peak flow rate from a 100-year storm event would be accommodated within underground drainage pipes, designated drainage areas, and within streets such that the finished floor elevations of buildings would have more than 1-foot of freeboard above the 100year storm event hydraulic grade line water elevation with tidal flow and 100 years of estimated sea level rise.

A significant impact would nevertheless result because the Specific Plan's drainage system does not fully implement Program EIR Mitigation Measures 4.H-4a requires compliance with NPDES Construction General Permit and City of Brisbane Municipal Regional Stormwater Permit)or 4.H-4b(requires compliance with RWQCB dewatering permit or Bayshore Sanitary District sanitary sewer discharge requirements).

Mitigation Measures MM HWQ-3a through MM HWQ-3c would ensure adequate response access to all portions of development sites along Frontage Road, including basement parking areas, and would also ensure that Baylands development would not increase flooding frequency, duration, or depth of a 100-year storm on adjacent lands even with anticipated SLR of 6.5 feet through the Year 2100.

Program EIR Mitigation Measures

MM HWQ-3a: Known Drainage Deficiencies (Program EIR Mitigation Measure 4.H-4a). Prior to issuance of a building permit, all site-specific development plans within the Baylands shall include systemwide drainage improvements that shall accommodate all increased runoff and correct the Project's incremental, additional impact to flood risks to areas with existing deficiencies (e.g., Levinson Overflow Area and the PG&E property):

- On-site storm drainage collection facilities shall be sized to convey the peak flow rate from a 25-year storm event entirely within the piping system such that Baylands roadways and recreational facilities are not flooded.
- Drainage improvements shall accommodate the 100-year peak storm event within the piping system and within streets such that building finished floor elevations provide a minimum of 1 foot of freeboard above the 100-year storm event hydraulic grade line water elevation with tidal flow and Year 2100 projected sea level rise.
- Key roadways including Sierra Point Parkway, Lagoon Road, and Tunnel Avenue shall be designed such that these roadways are available as evacuation routes in the event of a 100-year storm event.

The proposed system design shall be submitted to the City Engineer for approval and shall hydraulically isolate existing drainage inlets fronting the Levinson Overflow Area and the PG&E property from the existing Brick Arch Sewer system.

MM HWQ-3b: Bayshore Boulevard Drainage (Program EIR Mitigation Measure 4.H-4b). Prior to issuance of a building permit, all site-specific development plans within the Baylands shall include additional conveyance capacity by incorporating new storm drain facilities along Bayshore Boulevard north of Industrial Avenue. Development plans shall also require addition of a new inlet near the Bayshore Boulevard and Industrial Way intersection that is large enough to intercept surface flows from Levinson Overflow Area and the PG&E property in accordance with and as approved by the City. Review and approval by the City Engineer shall be required to confirm that conveyance capacity is sufficient to accommodate the 100-year peak storm event within the piping system and streets such that building finished floor elevations provide a minimum of 1-foot of freeboard above the 100-year storm event hydraulic grade line water elevation with tidal flow and Year 2100 projected sea level rise.

Additional Mitigation Measures

MM HWQ-3c: Drainage and Flood Protection along Frontage Road. Drainage along Frontage Road shall be designed to:

- Avoid flooding of parked vehicles consistent with National Flood Insurance Program Technical Bulletin 6, *Requirements for Dry Flood-Proofed Below-Grade Parking Areas under Non-Residential and Mixed-Use Buildings* (FEMA 2021).
- Provide emergency response access to all portions of development sites along Frontage Road.

Impact HWQ-4: Release of Pollutants Due to Flood and Tidal Action, Sea Level Rise-Induced Changes to Groundwater, Tsunami, or Seiche

Less than Significant

The Specific Plan requires stormwater runoff to be treated prior to discharge to wetlands, Visitacion Creek, Brisbane Lagoon or San Francisco Bay in compliance with Municipal Regional Stormwater NPDES Permit (MRP) Order No. R2-2022-018, NPDES Permit No. CAS612008 adopted by the RWQCB-San Francisco Bay Region in May 2022. Appropriate source control, site design, and stormwater treatment measures that would be implemented are identified in:

- The San Mateo Countywide Water Pollution Prevention Program C.3 Regulated Project Guide, which describes stormwater treatment options, techniques, design, and maintenance requirements.
- The Green Infrastructure Design Guide, which is a comprehensive design guide for the design, construction, and maintenance of green infrastructure, including sustainable stormwater design.

In addition:

- The operation of the leachate collection and recovery system to be installed as part of final landfill closure prior to Specific Plan development would maintain groundwater flow toward San Francisco Bay and would capture and treat contaminated groundwater, if any.
- Project water storage and above-ground fuel storage tank facilities would be constructed to withstand an earthquake and not rupture. Above-ground fuel tanks to be constructed at fire stations would be provided with containment such that a leak would not be carried into streets, storm drain systems, Visitacion Creek, or the Brisbane Lagoon.

- The Specific Plan area is not located within a tsunami hazard zone. Geologic-induced seiche events have not been documented in San Francisco Bay, and meteorologic effects are quickly dissipated due to the connection with the Pacific Ocean.

m. Geology, Soils, and Seismicity

Impact GEO-1: Fault Rupture

No Impact

There are no known active or potentially active fault traces across the Baylands, and the site is not located within an Alquist-Priolo Earthquake Fault Zone.

Impact GEO-2: Seismic Ground Shaking

Less than Significant

Because the Specific Plan area is located in a seismically active region, buildings and other structures developed within the Baylands would be at risk of damage related to seismic ground shaking and could directly or indirectly expose people to a risk of loss, injury, or death compared to baseline.

New structures for human occupancy would conform to the seismic design parameters of the California Building Code (CBC), while restoration of the Roundhouse would be subject to California Building Code seismic standards for historic structures. Compliance with these requirements would be reviewed by the City of Brisbane for appropriate inclusion in the building plan check and development review process prior to issuance of grading and building permits. Baylands geotechnical studies prepared for this EIR (Appendices M.1, M.2) provide recommendations for compliance with CBC standards, state law and building codes, final geotechnical studies for each site-specific development project will define precise requirements for the foundation system for each building site needed for compliance with the CBC based on the site-specific engineering properties of the materials beneath the structure, combined with the intended loading (weight) of the structure itself.

Impact GEO-3: Liquefaction and Seismic-Related Ground Failure

Less than Significant

Because of the presence of high groundwater and loose, unconsolidated soils underlying the Specific Plan area, which is located in a seismically active region, liquefaction could occur within the Baylands, adversely affecting structures. As documented in the geotechnical studies prepared for the Baylands in 2022 (Appendices M.1, M.2), a substantial risk of loss, injury, or death by exposing people or structures to secondary effects of seismic shaking (e.g., ground

lurching, lateral spreading) would not result from Baylands development. Nevertheless, due to the presence of high groundwater and loose, unconsolidated soils underlying the project site, liquefaction within the Baylands following a major earthquake could result in loss of bearing pressure, lateral spreading, sand boils (liquefied soil exiting at the ground surface), and other potentially damaging effects if not addressed in geotechnical engineering design of buildings and infrastructure.

Baylands development would be required to conform to site-specific foundation design parameters required for compliance with the CBC (Municipal Code Sections 15.01.210, Soils Engineering Report and 15.01.220, Engineering Geology Report), which are reviewed by the City of Brisbane for appropriate inclusion in the building plan check and development review process prior to issuance of grading and building permits.

Site-specific geotechnical analyses building upon the information provided in the geotechnical studies prepared for the Baylands in 2022 would identify the specific seismic and foundation design parameters and monitoring to be required by the City for Baylands development to comply with the CBC based on site-specific geotechnical conditions and the precise location, height, massing, and bulk of each future building within the Baylands.

Impact GEO-4: Slope Stability

Less than Significant with Mitigation Incorporated

Site-specific development projects will be required to comply with Brisbane General Plan policy requirements and the most recent California Building Code requirements for slope stability for manufactured slopes and be incorporated into development plans. All final design and engineering plans submitted for Baylands development would be subject to review and approval by the City of Brisbane Building Official prior to issuance of a grading or building permit.

Although manufactured slopes constructed as part of Baylands development would be required to comply with the most recent California Building Code requirements at the time of construction to ensure the stability of existing and manufactured slopes under static and pseudo-static conditions, placement of fill within 600 feet of the north shore of the lagoon would be inconsistent with both recommendations of the 2008 geotechnical study prepared for the Baylands and Program EIR Mitigation Measure 4.E-4a and could cause instability in the Bay Mud that underlies this area.

Implementation of Mitigation Measure MM GEO-4a (Program EIR Mitigation Measure 4.E-4a) would ensure the stability of manufactured slopes throughout the Baylands. Mitigation Measure MM GEO-4b would ensure that placement of fill materials within 600 feet of Brisbane Lagoon for roadway improvements, habitat enhancement, recreational facilities, or other

approved site improvements such as construction of Lagoon Park would not adversely affect the stability of underlying Bay Mud.

Program EIR Mitigation Measures

MM GEO-4a: Manufactured Slopes (Program EIR Mitigation Measure 4.E-4a). Site-specific development projects within the Baylands shall not place new fill materials within 600 feet of Brisbane Lagoon, except when required for roadway improvements, habitat enhancement, recreational facilities, or other site improvements permitted by the Specific Plan. Placement of new fill materials within 600 feet of the Brisbane Lagoon shall be designed to prevent erosion of soils into the lagoon during and subsequent to construction. All manufactured slopes shall require certification by a licensed geotechnical engineer to the satisfaction of the City Engineer that a factor of safety of at least 1.5 for static conditions and 1.2 under dynamic conditions will be achieved.

Additional Mitigation Measures

MM GEO-4b: Placement of Fill Materials within 600 Feet of the Brisbane Lagoon. Placement of fill materials within 600 feet of the Brisbane Lagoon for roadway improvements, habitat enhancement, recreational facilities, or other approved site improvements shall require certification by a licensed geotechnical engineer to the satisfaction of the City Engineer that the stability of underlying Bay Mud would not be adversely affected.

Impact GEO-5: Expansive Soils and Soil Corrosivity

Less than Significant

Young Bay Mud underlying the Baylands is both expansive and corrosive. Existing state law and building codes provide for an adequate level of safety and the Baylands geotechnical studies prepared for this EIR provide recommendations for compliance with CBC standards, state law, and building codes that will be incorporated into site grading, as well as Baylands building and infrastructure construction. The foundation system for each building within the Baylands must be designed in accordance with the site-specific engineering properties of the soil characteristics beneath the structure and the specific loading characteristics of the building itself. Thus, to comply with the CBC:

- All concrete and metals in contact with corrosive soil would be designed and constructed based on the results of the site-specific soil corrosivity testing and subsequent recommendations of a qualified geotechnical engineer as reviewed and approved by the City. Treatment methods include coating, using galvanized metals, or cathodic protection.

- Building foundations and infrastructure in contact with expansive soils would be designed and constructed based on the results of the site-specific soil corrosivity testing and subsequent recommendations of a qualified geotechnical engineer as reviewed and approved by the City. Treatment methods include removal of expansive soils or chemical treatment such the addition of lime.

Impact GEO-6: Paleontological Resources

Less than Significant with Mitigation Incorporated

Disturbance of paleontological resources within the Colma or Merced formations would result in a significant impact due to their potential for paleontological resources. These formations are more than 25-30 feet below ground surface and the only deep excavations that would be undertaken for Baylands development within these formations would be pile foundation installation. Surficial and shallow excavations, which will make up the majority of ground-disturbing activity, have no potential to encounter or impact paleontological resources. Therefore, it is not likely that paleontological resources would be identified during ground disturbing within the Pleistocene Colma or Pliocene-Pleistocene Merced formations. If an inadvertently identified paleontological resource is damaged during construction, the impact would be significant.

Implementation of Mitigation Measures MM GEO-6a and MM GEO-6b would reduce impacts to paleontological resources to a less-than-significant level by requiring training of construction personnel in paleontological resource identification and requiring a qualified paleontologist to be retained in the event that paleontological resources are identified in order to address any inadvertent discoveries. Mitigation Measure MM GEO-6b requires inadvertent discoveries of fossils to be collected by the paleontological monitor and/or Qualified Paleontologist, who would prepare, identify, and catalogue such discoveries prior to placing such discovered fossils at a public, non-profit institution, or public school for their preservation. While it is highly unlikely that paleontological resources would be found in the landfill or disturbed portions of the Project Area, required awareness training for construction personnel who are involved in ground disturbance in undisturbed areas of the Project Area would facilitate identification of any fossils inadvertently exposed during grading and excavation activities.

Mitigation Measures

MM GEO-6a: Paleontological Resources Awareness Training. Prior to the start of any ground disturbing activities anticipated to exceed 25 feet in depth, the Qualified Paleontologist, or a paleontological specialist under the supervision of the Qualified Paleontologist, shall conduct pre-construction worker paleontological resources sensitivity training. The Qualified Paleontologist, or a paleontological monitor under the supervision of the Qualified Paleontologist, shall contribute to any construction worker paleontological resources sensitivity training either in

person or via a training module. The training shall include information on what types of paleontological resources could be encountered during excavations, what to do in case an unanticipated discovery is made by a worker, and laws protecting paleontological resources. All construction personnel shall be informed of the possibility of encountering fossils and instructed to immediately inform the construction foreman or supervisor if any bones or other potential fossils are unexpectedly unearthed in an area where a paleontological monitor is not present. The Applicant shall ensure that construction personnel are made available for and attend the training and retain documentation demonstrating attendance.

MM GEO-6b: Inadvertent Discovery of Paleontological Resources. If a paleontological resource is discovered during construction, the paleontological monitor shall be empowered to temporarily divert or redirect grading and excavation activities in the area of the exposed resource to facilitate evaluation of the discovery. An appropriate buffer area shall be established by the Qualified Paleontologist around the find where construction activities shall not be allowed to continue. Work shall be allowed to continue outside of the buffer area. At the Qualified Paleontologist's discretion and to reduce any construction delay, the grading and excavation contractor shall assist the Qualified Paleontologist or paleontological monitor in removing rock samples for initial processing and evaluation of the find. All significant fossils shall be collected by the paleontological monitor and/or the Qualified Paleontologist. Collected fossils shall be prepared to the point of identification and catalogued before they are submitted to their final repository. Any fossils collected shall be curated at a public, non-profit institution with a research interest in the materials, such as the UCMP, if such an institution agrees to accept the fossils. If no institution accepts the fossil collection, they shall be donated to a local school in the area for educational purposes. Accompanying notes, maps, photographs, and a technical report shall also be filed at the repository and/or school.

Impact GEO-7: Use of Septic Tanks or Alternative Wastewater Systems

No Impact

Because the Baylands Specific Plan requires construction of an integrated municipal sewer system to serve all proposed uses, septic systems or other alternative wastewater disposal systems would not be used and no impacts related to the capability of soils to support such wastewater treatment would result.

n. Utilities, Service Systems, and Water Supply

Impact UTL-1: Water Supply

Less than Significant

Cal Water, the City of Brisbane, Bayshore Sanitary District, and Baylands Development, Inc have signed a non-binding letter of understanding that provides a framework to supply water to the Baylands, Beatty, and Sierra Point areas by expanding its service area into Brisbane. Water supply provided by Cal Water to its expanded service area within Brisbane would consist of a combination of potable water purchased from the SFPUC supplemented by five existing off-site groundwater wells and recycled water from the water recycling facility to be constructed within the Baylands. Cal Water potable supplies would be delivered via existing turnouts from the SFPUC Regional Water System.

As stated in the Baylands Water Supply Assessment, the increased potable water demand for the Baylands Specific Plan and future projects within Sierra Point would be offset by Cal Water's Development Offset Program and are therefore considered by Cal Water to have a zero net increase. The Development Offset Fee Program provides funds to accelerate water supply projects and expand customer conservation programs. Water projects included in the offset fee program include projects Cal Water is partnering with the SFPUC as described in SFPUC's Alternative Water Supply Plan (SFPUC 2024c), as well as other projects that would increase local water supply. SFPUC alternative water supply projects include supply projects (surface water, purified water, groundwater, or recycled water), storage projects, and conveyance projects.

The Baylands Water Supply Assessment indicates that no shortfalls relative to total demands would occur under normal year conditions. During single dry years, assuming implementation of the Bay-Delta Plan Amendment, the annual supply for the three Peninsula Districts' service areas will be reduced to 21,039 acre-feet per year by 2045. Supply shortfalls relative to total demands during single dry years are estimated to range between 35 percent in 2025 and 44 percent in 2045. During multiple dry years, Cal Water estimates that annual supply for its three Peninsula Districts will be reduced to 23,615 acre-feet in 2025 during the first year of a drought, and 20,492 acre-feet in 2025 in the second, third, fourth, and fifth years of drought, assuming implementation of the Bay-Delta Plan Amendment. Cal Water further estimates that in 2045, annual supply will be reduced to 20,954 acre-feet during the first three years of a drought, and 18,061 afy in the fourth and fifth years of drought. Supply shortfalls relative to total demands are estimated to range between 36 percent during the first year of a drought in 2025 to 53 percent during the fifth year of a drought in 2045.

The Baylands Water Supply Assessment (Appendix P) stated that projected shortfalls would be addressed through implementation of the District's Water Supply Contingency Plan, which requires any new residential, commercial, or industrial development within any of the three

Peninsula Districts that would increase net demand by more than 50 acre-feet per year to pay a special facilities fee, referred to as a "developer offset fee," of $15,400 per acre-foot of net demand increase.[24] Developer offset fees would be used to fund accelerated water supply projects and expanded customer conservation programs. The alternative water projects included in the Developer Offset Fee include projects Cal Water is partnering with the SFPUC as described in SFPUC's Alternative Water Supply Plan. The result of this program is that new residential, commercial, and industrial development projects that pay offset fees are considered by Cal Water to result in a net zero increase in potable water demand.

In addition, BAWSCA, Cal Water, and SFPUC are pursuing the development of additional water supplies to improve SFPUC's Regional Water System and South San Francisco District supply reliability. Pursuant to the water supply assessment, required participation in Cal Waters' Development Offset Program would be that neither Specific Plan development nor anticipated future development within Sierra Point would result in a net increase in water demands. In addition, the Baylands water recycling facility would eliminate the use of potable water for non-potable purposes within the Specific Plan area and would provide 0.41 mgd of recycled water to the Cal Water South San Francisco District, which does not currently have access to recycled water, for non-potable uses.

Impact UTL-2: Construction and Improvement of Utility and Service System Facilities

Less than Significant

No improvements to the SFPUC wastewater treatment facilities would be needed to treat Baylands-generated wastewater. Baylands development would not exceed Brisbane's 6.0 mgd capacity. In addition, the raw sewage, treated sewage, and waste activated sludge discharged to SFPUC's Southeast Treatment Plant would be sufficiently diluted so as to (1) not require any modifications to the plant or result in changes to water quality from treated wastewater and (2) not result in changes to water quality from treated wastewater discharged to San Francisco Bay.

Electrical utility improvements would be designed and installed by PG&E in accordance with CPUC and PG&E design standards. Conformance with applicable CPUC, PG&E and City requirements would sustain efficiency of the utility grid and reduce life-cycle costs.

[24] "Net demand increase" is defined as the expected total potable water use for the development once it is completed, minus the average annual existing potable water use on the property over the previous five years.

Impact UTL-3: Waste Diversion

Less than Significant

Baylands development would minimize solid waste generation and maximize diversion of solid wastes from landfills and incinerators consistent with applicable solid waste management and reduction statutes, regulations, plans, policies, and strategies.

Baylands development would meet the requirements of Brisbane Municipal Code Chapter 15.75 that a minimum of 65 percent of nonhazardous construction and/or demolition waste and 100 percent of inert solid material associated with excavations and land clearing operations, including trees, stumps, and rocks be recycled and/or salvaged for re-use.

Baylands development would also, at a minimum, participate in the same waste diversion programs provided by Recology operations to residential and commercial customers within the City and County of San Francisco, which exceed the requirements of applicable solid waste management and reduction statutes, regulations, plans, policies, and strategies and are more extensive than those currently available within Brisbane.

Impact UTL-4: Landfill Capacity

Less than Significant

Because Recology's Hay Road Landfill currently has daily capacity to accept solid waste from the Baylands and approximately 27,569,000 cubic yards of long term capacity with an estimated remaining site life of 38 years, the addition of 535 cubic yards of solid waste per day from the Specific Plan area on a peak construction day (3,054 tons) and 427 tons per day following construction would not exceed the permitted daily capacity of the Hay Road landfill or substantially reduce its life expectancy. Thus, Specific Plan development would not exceed the capacity of area landfills, and no new or expanded facilities would be needed.

o. Public Services

Impact PUB-1 New and Expanded Public Facilities

Less than Significant with Mitigation Incorporated

The Baylands Specific Plan is expected to generate a maximum resident population of 4,905 and a maximum daytime worker population of approximately 19,480 at buildout, which would approximately double Brisbane's population and employment base. To accommodate the anticipated doubling of service calls that Baylands development would cause and maintain adequate police and fire response times, the City prepared a Police Facilities and Staffing Plan (Appendix N.1) and, in conjunction with the North County Fire Authority, prepared a Fire Facilities and Staffing Plan (Appendix N.2).

To provide service to the Baylands and maintain citywide response times, the Police Department would initiate a two-beat patrol system by adding a new 24/7 officer shift and one civilian daytime shift along with the equipment needed to support the additional shift, along with establishment of a police substation within the Baylands to accommodate additional required staff.

To accommodate the anticipated doubling of service calls that would result from Baylands development and maintain adequate citywide response times, including adequate response times for buildings over 75 feet in height and specialized response to calls for medical assistance, rescue, hazmat, and other special functions within Brisbane, the Fire Protection and Facilities Plan calls for:

- Relocation of the existing NCFA Fire Station No. 81 to 140 Valley Drive to house the existing Engine Company No. 81 and temporarily house a new ladder truck company.
- Establishment of a second fire station within Brisbane to permanently house the new ladder truck company along with a new "squad."[25]

To accommodate students from the Baylands, the Bayshore Elementary School District proposes to establish a middle school within the Baylands and convert the existing Bayshore School to an elementary school serving grades PK-5.[26]

Impacts associated with construction of public facilities within the Specific Plan area would be indistinguishable from those of other grading and construction activities within the Baylands, which would lead to significant unavoidable net increases in emissions of non-attainment criteria pollutants (ROG, NOx, PM_{10}, $PM_{2.5}$), and greenhouse gas. Operation of Baylands-related public facilities would also contribute to significant and unavoidable air quality and greenhouse gas impacts. The contribution of Baylands-related public facilities impacts is addressed in the air quality and greenhouse gas emissions sections of this chapter.

Impact PUB-1 would be less than significant in relation to police, fire protection, and schools for the following reasons:

- Where the physical environmental effects associated with relocating the existing Fire Station No. 81 can be distinguished from the overall assessment of the Specific Plan, they are explicitly addressed and would be less than significant.[27]

[25] "Squad" refers to a specialized company whose primary focus may be suppression but carry specialized equipment and are trained to perform hazmat, rescue, and other special functions.

[26] The existing Bayshore School currently serves all students from pre-kindergarten through 8th grade.

[27] Impacts associated with relocation of the existing Figure Station No. 81 are explicitly analyzed in the following EIR sections: Land Use, Biological Resources, Cultural Resources, Air Quality, Greenhouse Gas Emissions, Noise and Vibration, and Hazards and Hazardous Materials.

- Since the existing Bayshore School was just remodeled and upgraded in 2017, only minimal exterior and interior improvement would be needed to convert the Bayshore School from a PK–8 school to a PK–5 elementary school.

Impact PUB-1 would, however, be significant in relation to libraries and the City's corporation yard for the following reasons:

- The Specific Plan would more than double Brisbane's existing resident and daytime worker population without expanding library facilities, resulting in overuse and deterioration of the existing Brisbane Library.
- The existing corporation yard is not capable of storing sufficient equipment to maintain existing service levels for the City of Brisbane with the addition of Baylands service demands. The result could be inadequate maintenance capability and deterioration of municipal infrastructure. Accordingly, expansion of the City's corporation yard would be required.

Mitigation Measures MM PUB-1a and MM PUB-1b provide for adequate library facilities and land for a new corporation yard that would maintain existing service levels with the addition of Baylands service demands. The physical environmental effects of expanding the City's corporation yard cannot be parsed out from the overall impacts of Baylands development and have been addressed throughout the impact analyses provided in this EIR.

Program EIR Mitigation Measures

MM PUB-1a: On-Site Library (Program EIR Mitigation Measure 4.L-4). To avoid overuse of existing and proposed library facilities, a library facility shall be developed within the Baylands that is of sufficient size to serve the Specific Plan's population. The on-site library shall be constructed and operational prior to issuance of the occupancy permits for more than 50 percent of the residential dwelling units permitted by the Specific Plan, thereby ensuring an on-site resident population at the time of its opening.

Additional Mitigation Measures

MM PUB-1b: Corporation Yard. The Specific Plan shall reserve a site for a new corporation yard acceptable to the Brisbane Public Works Director that meets the following criteria:

- Approximately 2.5 usable acres;
- Generally square in shape;
- Level;
- Fully remediated; and

- Has a direct connection to a minimum roadway classification of collector.

p. Recreational Resources

Impact REC-1: Physical Deterioration of a Park or Recreational Facility

Less than Significant

The 13.2 acres per 1,000 population (64.8 acres) of parks and trail facilities proposed by the Baylands Specific Plan exceeds the current 5.03 acres per 1,000 population available to Brisbane residents. Although new Baylands residents would be able to use existing City parks, existing Brisbane residents would also be able to use the Baylands parks. By providing substantially more parkland per 1,000 population than is currently available to Brisbane residents, Baylands development would not result in overuse of existing neighborhood and community park acreage such that substantial physical deterioration of existing facilities in Brisbane would occur or be accelerated.

Impact REC-2: Physical Deterioration of Candlestick Point Windsurfing Resources

Less than Significant

Although Baylands development would cause some decrease in average wind speeds and increase in turbulence, wind conditions within the majority of the Candlestick Point windsurfing area, including the launch area, would not be affected by the Specific Plan. Areas that would be affected are generally limited to 300-yard area along the shoreline, encompassing about 20 percent of the primary windsurfing area within which the average change in wind speed would generally be 1 to 2 mph, with changes in turbulence generally limited to 1 to 1.5 mph. Thus, Baylands development would not substantially degrade the primary windsurfing area offshore from the Baylands within the Candlestick Point State Recreation Area.

q. Wildland Fire

Impact WLF-1: Exacerbate Fire Risk

Less than Significant with Mitigation Incorporated

Because sparks originating from construction activities have the potential to ignite vegetation or other materials within or adjacent to the construction sites, a significant impact would occur.

Baylands development would be required to comply with the California Building Code, California Fire Code, and Municipal Code fire prevention and weed and flammable waste abatement requirements, which will ensure that required safety measures are incorporated into all building designs. However, human use of trails constructed through or adjacent to habitat

areas as well as recreational improvements on Icehouse Hill have the potential for ignition of dry vegetation.

Mitigation Measure MM WLF-1 identifies specific precautions to be taken prior to and during construction activities that occur within or adjacent to non-irrigated vegetated areas and ensures that crew have been trained in the use of the equipment to extinguish small fires.

By minimizing the risk of construction-related fire ignition, implementation of MM WLF-1 would also minimize the potential for a wildfire to spread and expose people to pollutant concentrations from a wildfire or cause a substantial risk of loss, injury, or death due to downslope or downstream flooding or landslides as the result of runoff, post-fire instability, or drainage changes.

Mitigation Measures

MM WLF-1: Wildfire Risk Reduction. To prevent sparking a wildland fire, construction activities within or adjacent to non-irrigated vegetated areas shall be subject to the following requirements:

- Construction activities shall not occur during red flag warning days.
- Internal combustion engines used in construction shall be equipped with spark arrestors that are in good working order.
- Equipment staging and storage areas shall be cleared of extraneous flammable materials and provided with a non-flammable surface.
- Fires ignited on site shall be immediately reported to the North County Fire Authority.
- No driving (cars, trucks, all-terrain vehicles, or similar) shall be permitted over unmaintained dry vegetation.
- Equipment engines shall be kept free of oil and dust, and mowers shall be kept free of flammable materials.
- Weed trimmers shall be used to cut down any dry weeds and grass before commencing any construction activities.
- Because a rock hidden in vegetation can start a fire if struck by a metal blade, large rocks in the area of grading or blading shall be removed before clearing and grubbing.
- Smoking shall be restricted to designated smoking areas that are void of vegetation and have appropriate cigarette butt receptables.
- Construction crew vehicles within or adjacent to areas of non-irrigated vegetation shall be equipped with a water-type fire extinguisher and crew

shall be trained in the use of the fire extinguisher in the event that equipment sparks a fire.

ES.6 ALTERNATIVES

CEQA requires that an EIR describe a range of reasonable alternatives to the project, or to the location of the project, which could feasibly attain the basic objectives of the project, while avoiding or reducing the significant environmental effects of the proposed Project and to evaluate the comparative merits of the alternatives. Chapter 8, *Alternatives*, also evaluates alternatives to the proposed Project as required by CEQA.

ES.6.1 DESCRIPTION OF ALTERNATIVES ANALYZED IN THIS EIR

a. No Project Alternatives

The No Project-No Build Alternative assumes that the Baylands Specific Plan would not be approved and there would be no further development within the Baylands. No infrastructure improvements would be made, existing uses would continue but not expand, and any new uses within the Baylands would either occupy existing buildings or operate as interim or temporary uses. Since no future development would occur:

- Neither site remediation nor final Title 27 landfill closure would be undertaken;
- No site grading or new construction would be undertaken; and
- An expanded water supply for the Baylands would not be acquired.

The Geneva Avenue extension would not be part of Baylands development but could nevertheless be constructed by others as part of the Bi-County Transportation Study.

The No Project-General Plan Buildout Alternative assumes that the Baylands Specific Plan as it is currently proposed would not be approved and that future development of the Baylands would occur without any amendments to the Brisbane General Plan. Thus, development of the No Project-General Plan Buildout Alternative would differ from the proposed Specific Plan in the following ways.

- The No Project-General Plan Buildout Alternative would encompass only the area that is currently within the Baylands Subarea (see existing General Plan in **Figure 3-3**).
- Sierra Point Parkway would not be extended north from its current terminus at the US 101 freeway southbound off-ramps.
- Lagoon Road would remain in its current alignment and not be realigned to the north to terminate at the US 101 freeway southbound off-ramps.

- Green Shared Streets would not be added to the roadway types identified in the General Plan Circulation Element and would therefore be replaced by standard local streets.

b. Land Development Alternatives

The land development alternatives described and analyzed in this EIR are each based on the assumption that the Specific Plan described in Chapter 3 and analyzed in Chapter 4 would be modified. As shown in **Table ES-2**, each of the seven land development alternatives to the Specific Plan were developed based on different ways of distributing development around the Baylands. Alternatives 1-3 analyze the effects of redistributing proposed Specific Plan development (2,200 dwelling units, 6.5 million s.f. of commercial, 500,000 s.f. of hotel use) around the Baylands, while Alternatives 4-7 analyze the effects of both redistributing and reducing the amount of residential and commercial development that would be permitted within the Baylands.

Table ES-3 provides a summary comparison of the impacts of each of the alternatives analyzed above to those of the Baylands Specific Plan.

Table ES-2: Land Development Alternatives Analyzed in Addition to No Project Alternatives

	Proposed Density Alternatives			Reduced Density Alternatives			
	1. Development around an Operating 45-Acre Light Maintenance Facility (LMF)	**2. Balanced Commercial**	**3. Reduced Maximum Building Heights**	**4. Reduced Commercial Development**	**5. Development around an Operating 45-Acre Light Maintenance Facility (LMF)**	**6. Balanced Commercial**	**7. Reduced Maximum Building Heights**
Housing	2,200 dwelling units west of Caltrain, north of Main Street. (same as Specific Plan)	2,200 dwelling units west of Caltrain, north of Main Street. (same as Specific Plan)	2,200 dwelling units west of Caltrain, north of Main Street. (same as Specific Plan)	2,200 dwelling units west of Caltrain, north of Main Street. (same as Specific Plan)	1,800 dwelling units west of Caltrain, north of Main Street. (same as Specific Plan)	1,800 dwelling units west of Caltrain, north of Main Street. (same as Specific Plan)	1,800 dwelling units west of Caltrain, north of Main Street. (same as Specific Plan)
Commercial Development (west of Caltrain)	4.0 million s.f. commercial office 500,000 s.f. hotel (same as Specific Plan)	3.6 million s.f. commercial office 500,000 s.f. hotel (same locations as Specific Plan)	4.0 million s.f. commercial office 500,000 s.f. hotel (same as Specific Plan)	2.8 million s.f. commercial office 350,000 s.f. hotel (same locations as Specific Plan)	2.8 million s.f. commercial office 350,000 s.f. hotel. (concentrated along Geneva Ave. and Sierra Point Pkwy.)	2.6 million s.f. commercial office 350,000 s.f. hotel (same locations as Specific Plan)	2.8 million s.f. commercial office 350,000 s.f. hotel (concentrated along Geneva Ave. and Sierra Point Pkwy.)
Commercial Development (east of Caltrain)	2.5 million s.f. commercial office (same as Specific Plan)	2.9 million s.f. commercial office (same locations as Specific Plan)	2.5 million s.f. commercial office (same as Specific Plan)	1.7 million s.f. commercial office (concentrated on Geneva Ave and Sierra Point Pkwy)	1.7 million s.f. commercial office (concentrated on Geneva Ave and Sierra Point Pkwy)	1.9 million s.f. commercial office (same locations as Specific Plan)	1.7 million s.f. of commercial office (same as Specific Plan)
Maximum Building Heights	Same as Specific Plan (permits 20+ story buildings)	12-story max. for commercial office 8-story max. for housing	12-story max. for commercial office 8-story max. for housing	12-story max. for commercial office 8-story max. for housing	Same as Specific Plan (permits 20+ story buildings)	12-story max. for commercial office 8-story max. for housing	12-story max. for commercial office 8-story max. for housing
High-Speed Rail Light Maintenance Facility (LMF)	Relocates development outside of an operating 45-acre LMF footprint.	Could relocate development outside of an operating 45-acre LMF footprint.	Does not include high-speed rail LMF.	Could relocate development outside of an operating 45-acre LMF footprint.	Relocates development outside of an operating 45-acre LMF footprint.	Could relocate development outside of an operating 45-acre LMF footprint.	Does not include high-speed rail LMF.

	Proposed Density Alternatives			Reduced Density Alternatives			
	1. Development around an Operating 45-Acre Light Maintenance Facility (LMF)	**2. Balanced Commercial**	**3. Reduced Maximum Building Heights**	**4. Reduced Commercial Development**	**5. Development around an Operating 45-Acre Light Maintenance Facility (LMF)**	**6. Balanced Commercial**	**7. Reduced Maximum Building Heights**
Roadways west of Caltrain	Same as Specific Plan.	Same as Specific Plan.	Same as Specific Plan.	Same as Specific Plan.	Same as Specific Plan.	Same as Specific Plan.	Same as Specific Plan.
Roadways east of Caltrain	Realigns Tunnel Ave. to the east. Otherwise, same as Specific Plan.	Same as Specific Plan. Could include realignment of Tunnel Ave. to the east to allow for a 45-acre high speed rail LMF.	Same as Specific Plan.	Same as Specific Plan. Could include realignment of Tunnel Ave. to the east to allow for a 45-acre high speed rail LMF.	Realigns Tunnel Ave. to the east. Otherwise, same as Specific Plan.	Same as Specific Plan. Could include realignment of Tunnel Avenue to the east to allow for a 45-acre high speed rail LMF.	Same as Specific Plan.
Infrastructure west of Caltrain	Same as Specific Plan.	Same as Specific Plan.	Same as Specific Plan.	Same as Specific Plan.	Same as Specific Plan.	Same as Specific Plan.	Same as Specific Plan.
Infrastructure east of Caltrain	Shifts water recycling and water storage tank to the east of Tunnel Ave.	Same as Specific Plan unless water recycling and water storage tank are shifted east for LMF.	Same as Specific Plan.	Same as Specific Plan unless water recycling and water storage tank are shifted east for LMF.	Shifts water recycling and water storage tank to the east of Tunnel Ave.	Same as Specific Plan unless water recycling and water storage tank are shifted east for LMF.	Same as Specific Plan.
Parks/Habitat Restoration west of Caltrain	Same as Specific Plan.	Same as Specific Plan.	Same as Specific Plan.	Same as Specific Plan.	Same as Specific Plan.	Same as Specific Plan.	Same as Specific Plan.
Parks/Habitat Restoration east of Caltrain	< 3-acre reduction in Visitacion Creek to allow for 45-acre LMF.	Same as Specific Plan unless Tunnel Avenue is realigned to allow for 45-acre LMF.	Same as Specific Plan.	Same as Specific Plan unless Tunnel Avenue is realigned to allow for 45-acre LMF.	< 3-acre reduction in Visitacion Creek to allow for 45-acre LMF.	Same as Specific Plan unless Tunnel Avenue is realigned to allow for 45-acre LMF.	Same as Specific Plan.

	Proposed Density Alternatives			Reduced Density Alternatives			
	1. Development around an Operating 45-Acre Light Maintenance Facility (LMF)	**2. Balanced Commercial**	**3. Reduced Maximum Building Heights**	**4. Reduced Commercial Development**	**5. Development around an Operating 45-Acre Light Maintenance Facility (LMF)**	**6. Balanced Commercial**	**7. Reduced Maximum Building Heights**
Renewable Energy Generation; Energy Conservation	Same generation as proposed Specific Plan. Development to meet CALGreen Tier 2 standards.	Same as proposed Specific Plan. Development to meet CALGreen Tier 2 standards.	Same as proposed Specific Plan. Development to meet CALGreen Tier 2 standards.	Increased generation from expanded solar farm. Development to meet CALGreen Tier 2 standards.	Increased generation from expanded solar farm. Development to meet CALGreen Tier 2 standards.	Same as proposed Specific Plan. Development to meet CALGreen Tier 2 standards.	Same as proposed Specific Plan. Development to meet CALGreen Tier 2 standards.
Sustainable Infrastructure	Same as Specific Plan except: • Utility-scale battery storage would be shifted to the north side of Geneva Ave. east of Caltrain. • Water recycling facility would be shifted to the east side of Tunnel Ave.	Same as Specific Plan unless Tunnel Ave. is realigned, in which case: • Utility-scale battery storage would be shifted to the north side of Geneva Ave. east of Caltrain. • Water recycling facility would be shifted to the east side of Tunnel Ave.	Same as proposed Specific Plan.	Same as Specific Plan unless Tunnel Ave. is realigned, in which case: • Utility-scale battery storage would be shifted to the north side of Geneva Ave. east of Caltrain. • Water recycling facility would be shifted to the east side of Tunnel Ave.	Same as Specific Plan except: • Utility-scale battery storage would be shifted to the north side of Geneva Ave. east of Caltrain. • Water recycling facility would be shifted to the east side of Tunnel Ave.	Same as Specific Plan unless Tunnel Ave. is realigned, in which case: • Utility-scale battery storage would be shifted to the north side of Geneva Ave. east of Caltrain. • Water recycling facility would be shifted to the east side of Tunnel Ave.	Same as proposed Specific Plan.

Table ES-3: Summary Comparison of Impacts That Would Result from the Specific Plan, No Project-No Build, and Land Development Alternatives

	Comparison of Alternatives Impacts to Specific Plan Impacts									
	Specific Plan	No Project Alternatives		Proposed Density Alternatives			Reduced Density Alternatives			
		No Build	General Plan Buildout	1. Development Around an Operating 45-Acre LMF	2. Balanced Commercial	3. Reduced Maximum Building Height	4. Reduced Commercial Development	5. Development Around an Operating 45-Acre LMF	6. Balanced Commercial	7. Reduced Maximum Building Height
Land Use and Planning Policies										
Physical Division of Existing Community										
(construction)	LTS w/Mit.	Reduced (No Impact)	Similar	Similar	Similar	Similar	Similar	Similar	Similar	Similar
(operations)	LTS	Reduced (No Impact)	Similar	Similar	Similar	Similar	Similar	Similar	Similar	Similar
Consistency w/ Relevant Plans	LTS w/Mit.	Increased (does not implement General Plan)	Similar	Similar	Similar	Similar	Similar	Similar	Similar	Similar
Socioeconomic Effects										
Inducement of Unplanned Growth	LTS	Increased (requires new housing outside Baylands)	Similar	Similar	Similar	Similar	Similar	Similar	Similar	Similar
Displacement of Housing and Businesses	LTS	Reduced (No Impact)	Similar	Similar	Similar	Similar	Similar	Similar	Similar	Similar
Housing for All Economic Segments of the Community	LTS	Increased (requires new housing outside Baylands)	Similar	Similar	Similar	Similar	Similar	Increased	Increased	Increased

	Comparison of Alternatives Impacts to Specific Plan Impacts									
	Specific Plan	No Project Alternatives		Proposed Density Alternatives			Reduced Density Alternatives			
		No Build	General Plan Buildout	1. Development Around an Operating 45-Acre LMF	2. Balanced Commercial	3. Reduced Maximum Building Height	4. Reduced Commercial Development	5. Development Around an Operating 45-Acre LMF	6. Balanced Commercial	7. Reduced Maximum Building Height
Urban Decay	LTS	Reduced (No Impact)	Similar	Similar	Similar	Similar	Similar	Similar	Similar	Similar
Aesthetic and Visual Resources										
Public Views of Scenic Resources	LTS w/Mit.	Reduced (No Impact)	Similar	Similar	Similar	Reduced (due to lower building heights)	Similar	Reduced (due to reduced density and building height)	Reduced (due to reduced density and building height)	Reduced (due to reduced density and building height)
Impacts on Scenic Resources	LTS w/Mit.	Reduced (No Impact)	Similar	Similar	Similar	Similar	Similar	Similar	Similar	Similar
Consistency with Visual Quality Policies	LTS w/Mit.	Reduced (No Impact)	Similar	Similar	Similar	Similar	Reduced (due to reduced building heights and commercial square footage)	Similar	Similar	Similar
Nighttime Lighting	LTS w/Mit.	Reduced (No Impact)	Similar	Similar	Similar	Similar	Similar	Reduced (due to less lighted area)	Similar	Similar
Daytime Glare	LTS w/Mit.	Reduced (No Impact)	Similar	Similar	Similar	Similar	Reduced (due to less glare-producing area)	Reduced (due to less glare-producing area)	Reduced (due to less glare-producing area)	Reduced (due to less glare-producing area)

	Comparison of Alternatives Impacts to Specific Plan Impacts									
	Specific Plan	No Project Alternatives		Proposed Density Alternatives			Reduced Density Alternatives			
		No Build	General Plan Buildout	1. Development Around an Operating 45-Acre LMF	2. Balanced Commercial	3. Reduced Maximum Building Height	4. Reduced Commercial Development	5. Development Around an Operating 45-Acre LMF	6. Balanced Commercial	7. Reduced Maximum Building Height
Biological Resources										
Candidate, Sensitive, and Special-Status Plants, Animals, and Habitats	LTS w/Mit.	Reduced (No Impact)	Similar	Similar	Similar	Similar	Similar	Similar	Similar	Similar
Wetlands and Non-Wetland Waters Acreage, Functions, and Values	LTS w/Mit.	Reduced (No Impact)	Increased (due to lack of habitat restoration at Lagoon Park)	Similar	Similar	Similar	Similar	Similar	Similar	Similar
Movement of Fish and Wildlife Species	LTS w/Mit.	Reduced (No Impact)	Similar	Similar	Similar	Similar	Reduced (due to reduced building glass area)	Reduced (due to reduced building glass area)	Reduced (due to reduced building glass area)	Reduced (due to reduced building glass area)
Consistency with Brisbane Municipal Code Chapter 12.12, Private Tree Regulations	LTS	Reduced (No Impact)	Similar	Similar	Similar	Similar	Similar	Similar	Similar	Similar
Consistency with San Bruno Mountain Habitat Conservation Plan	LTS w/Mit.	Reduced (No Impact)	Similar	Similar	Similar	Similar	Similar	Similar	Similar	Similar

	Comparison of Alternatives Impacts to Specific Plan Impacts									
	Specific Plan	No Project Alternatives		Proposed Density Alternatives			Reduced Density Alternatives			
		No Build	General Plan Buildout	1. Development Around an Operating 45-Acre LMF	2. Balanced Commercial	3. Reduced Maximum Building Height	4. Reduced Commercial Development	5. Development Around an Operating 45-Acre LMF	6. Balanced Commercial	7. Reduced Maximum Building Height
Cultural and Tribal Cultural Resources										
Historic Resources (Roundhouse and Machinery & Equipment Buildings)	LTS w/Mit.	**Increased (due to Roundhouse deterioration) SU**	Similar	Similar	Similar	Similar	Similar	Similar	Similar	Similar
Archaeological Resources	LTS w/Mit.	Reduced (No Impact)	Similar	Similar	Similar	Similar	Similar	Similar	Similar	Similar
Tribal Cultural Resources	No Impact	Similar (No Impact)	Similar (No Impact)	Similar (No Impact)	Similar (No Impact)	Similar (No Impact)	Similar (No Impact)	Similar (No Impact)	Similar (No Impact)	Similar (No Impact)
Disturbance of Human Remains	LTS	Reduced (No Impact)	Similar	Similar	Similar	Similar	Similar	Reduced (due to less excavation)	Reduced (due to less excavation)	Similar
Transportation										
Vehicle Miles Traveled	LTS	Increased (due to development outside Baylands)	Increased (due to differences in travel routes)	Similar	Increased (due to less transit use by Baylands employees)	Increased (due to less transit use by Baylands employees)	Increased (due to less transit, bicycle, and pedestrian travel)	Increased (due to less transit use)	Increased (due to less transit use)	Increased (due to less transit use)
Transit, Bicycle, and Pedestrian Travel	LTS w/Mit.	Reduced (No Impact)	Similar	Similar	Increased (due to less transit use by Baylands employees)	Increased (due to less transit use by Baylands employees)	Increased (due to less transit, bicycle, and pedestrian travel)	Similar	Increased (due to less transit use)	Increased (due to less transit use)

	Comparison of Alternatives Impacts to Specific Plan Impacts									
		No Project Alternatives		Proposed Density Alternatives			Reduced Density Alternatives			
	Specific Plan	**No Build**	**General Plan Buildout**	**1. Development Around an Operating 45-Acre LMF**	**2. Balanced Commercial**	**3. Reduced Maximum Building Height**	**4. Reduced Commercial Development**	**5. Development Around an Operating 45-Acre LMF**	**6. Balanced Commercial**	**7. Reduced Maximum Building Height**
Hazards to Vehicles, Bicyclists, and Pedestrians	LTS w/Mit.	Reduced (No Impact)	Similar	Similar	Similar	Similar	Similar	Similar	Similar	Similar
Emergency Access	LTS w/Mit.	Reduced (No Impact)	Increased (due to differences in travel routes)	Similar	Similar	Similar	Similar	Similar	Similar	Similar
Air Quality										
Emissions of Criteria Air Pollutants	**SU**	Increased (due to development outside Baylands)	**Increased (due to increased travel) SU**	**Similar SU**	**Increased (due to less transit use by Baylands employees) SU**	**Similar SU**	**Increased (due to increased vehicular travel by Baylands employees) SU**	**Similar SU**	**Similar SU**	**Similar SU**
Exposure of Sensitive Receptors to Substantial Pollutant Concentrations	LTS w/Mit.	Reduced (No Impact)	Similar	Similar	Similar	Similar	Similar	Similar	Similar	Similar
Odors	LTS w/Mit.	Reduced (No Impact)	Similar	Similar	Similar	Similar	Similar	Similar	Similar	Similar
Consistency with 2017 Regional Clean Air Plan	LTS	Reduced (No Impact)	Similar	Similar	Similar	Similar	Similar	Similar	Similar	Similar

	Comparison of Alternatives Impacts to Specific Plan Impacts									
	Specific Plan	No Project Alternatives		Proposed Density Alternatives			Reduced Density Alternatives			
		No Build	General Plan Buildout	1. Development Around an Operating 45-Acre LMF	2. Balanced Commercial	3. Reduced Maximum Building Height	4. Reduced Commercial Development	5. Development Around an Operating 45-Acre LMF	6. Balanced Commercial	7. Reduced Maximum Building Height
Greenhouse Gas Emissions										
Specific Plan Area Greenhouse Gas Emissions	**SU**	**Increased (due to travel outside Baylands) SU**	**Increased (due to increased travel) SU**	**Similar SU**	**Increased (due to less transit use by Baylands employees) SU**	**Similar SU**	**Increased (due to increased vehicular travel by Baylands employees) SU**	**Reduced (due to reduced emissions) SU**	**Reduced (due to reduced emissions) SU**	**Reduced (due to reduced emissions) SU**
Effect on Regional Greenhouse Gas Emissions	LTS	Reduced (No Impact)	**Increased (due to increased travel)**	Similar	Similar	Similar	**Increased (due to less transit use by Baylands employees)**	**Increased (due to less transit use by Baylands employees)**	**Increased (due to less transit use by Baylands employees)**	**Increased (due to less transit use by Baylands employees)**
Consistency with Greenhouse Gas Reduction Plans, Policies, Standards, and Regulations	LTS w/Mit.	Reduced (No Impact)	Similar	Similar	Similar	Similar	Similar	Similar	Similar	Similar
Energy Resources										
Wasteful, Inefficient, or Unnecessary Use of Energy	LTS	Increased (due to development outside Baylands)	Increased (due to increased travel)	Similar	Similar	Similar	Similar	Reduced (due to reduced demand and increased solar energy generation)	Reduced (due to reduced demand)	Reduced (due to reduced demand)

	Comparison of Alternatives Impacts to Specific Plan Impacts									
		No Project Alternatives		Proposed Density Alternatives			Reduced Density Alternatives			
	Specific Plan	No Build	General Plan Buildout	1. Development Around an Operating 45-Acre LMF	2. Balanced Commercial	3. Reduced Maximum Building Height	4. Reduced Commercial Development	5. Development Around an Operating 45-Acre LMF	6. Balanced Commercial	7. Reduced Maximum Building Height
Consistency with Energy Reduction Plans, Policies, and Programs	LTS w/Mit.	Reduced (No Impact)	Similar	Similar	Similar	Similar	Similar	Similar	Similar	Similar
Noise and Vibration										
Temporary Ambient Noise Increase during Construction	**SU**	Reduced (No Impact)	**Similar SU**	**Similar SU**	**Similar SU**	**Increased (due to more pile driving) SU**	**Reduced (due to less pile driving) SU**	**Reduced (due to less pile driving and less development near sensitive receptors) SU**	**Reduced (due to less development near sensitive receptors) SU**	**Reduced (due to less pile driving) SU**
Permanent Ambient Noise Increase from Stationary Sources	**SU**	Reduced (No Impact)	**Similar SU**	**Similar SU**	**Similar SU**	**Similar SU**	**Similar SU**	**Similar SU**	**Similar SU**	**Similar SU**
Traffic Noise Increase	**SU**	Reduced (No Impact)	**Increased (due to differences in travel routes) SU**	**Similar SU**	**Similar SU**	**Similar SU**	**Similar SU**	**Reduced (due to less traffic) SU**	**Reduced (due to less traffic) SU**	**Reduced (due to less traffic) SU**

	Comparison of Alternatives Impacts to Specific Plan Impacts									
		No Project Alternatives		Proposed Density Alternatives			Reduced Density Alternatives			
	Specific Plan	No Build	General Plan Buildout	1. Development Around an Operating 45-Acre LMF	2. Balanced Commercial	3. Reduced Maximum Building Height	4. Reduced Commercial Development	5. Development Around an Operating 45-Acre LMF	6. Balanced Commercial	7. Reduced Maximum Building Height
Exposure of People to Railroad, Freeway, and Airport Noise	LTS w/Mit.	Reduced (No Impact)	Similar	Reduced (due to LMF separating offices from rail line)	Similar	Reduced (due to less development near rail line)	Reduced (due to less development near rail line)	Reduced (due to fewer sensitive receptors near high-noise areas)	Reduced (due to fewer sensitive receptors near high-noise areas)	Reduced (due to less development near rail line and freeway)
Increase in Groundborne Vibrations	LTS w/Mit.	Reduced (No Impact)	Similar	Similar	Similar	Similar	Reduced (due to less pile driving)	Reduced (due to less pile driving and less development near rail line)	Reduced (due to less pile driving overall and near sensitive receptors)	Reduced (due to less pile driving)
Exposure of People to High Vibration Levels	LTS w/Mit.	Reduced (No Impact)	Similar	Reduced (due to LMF separating offices from rail line)	Similar	Reduced (due to less development subject to existing vibration)	Reduced (due to less development near rail line)	Similar	Similar	Reduced (due to less development near rail line and freeway)
Hazards and Hazardous Materials										
Risks from Transport, Use, Disposal, and Management of Hazardous Materials	LTS w/Mit.	Reduced (No Impact)	Similar	Similar	Similar	Similar	Reduced (due to reduced commercial development intensity)	Reduced (due to reduced development intensity)	Reduced (due to reduced development intensity)	Reduced (due to reduced development intensity)

	Comparison of Alternatives Impacts to Specific Plan Impacts									
		No Project Alternatives		Proposed Density Alternatives			Reduced Density Alternatives			
	Specific Plan	No Build	General Plan Buildout	1. Development Around an Operating 45-Acre LMF	2. Balanced Commercial	3. Reduced Maximum Building Height	4. Reduced Commercial Development	5. Development Around an Operating 45-Acre LMF	6. Balanced Commercial	7. Reduced Maximum Building Height
Health Hazards for Schools due to Release of Hazardous Materials or Proximity to Hazardous Conditions	LTS w/Mit.	Reduced (No Impact)	Similar	Similar	Similar	Similar	Similar	Similar	Similar	Similar
Development on Listed Hazardous Materials Sites	LTS	Reduced (No Impact)	Similar	Similar	Similar	Similar	Similar	Reduced (due to less development on landfill site)	Reduced (due to less development on landfill site)	Similar
Safety Hazard or Excessive Noise from Aircraft Operations	LTS	Reduced (No Impact)	Similar	Similar	Similar	Similar	Similar	Similar	Similar	Similar
Emergency Preparedness and Response	LTS	Reduced (No Impact)	Similar	Similar	Similar	Similar	Similar	Similar	Similar	Similar
Hydrology and Water Quality										
Protection of Water Quality	LTS w/Mit.	Reduced (No Impact)	Similar	Similar	Similar	Similar	Similar	Similar	Similar	Similar
Groundwater Recharge and Sustainable Management	LTS	Reduced (No Impact)	Similar	Similar	Similar	Similar	Similar	Similar	Similar	Similar

	Comparison of Alternatives Impacts to Specific Plan Impacts									
		No Project Alternatives		Proposed Density Alternatives			Reduced Density Alternatives			
	Specific Plan	No Build	General Plan Buildout	1. Development Around an Operating 45-Acre LMF	2. Balanced Commercial	3. Reduced Maximum Building Height	4. Reduced Commercial Development	5. Development Around an Operating 45-Acre LMF	6. Balanced Commercial	7. Reduced Maximum Building Height
Flood Hazards	LTS w/Mit.	Increased (due to lack of sea level rise adaptation)	Similar	Similar	Similar	Similar	Similar	Similar	Reduced (due to reduced runoff)	Similar
Release of Pollutants due to Flood, Tsunami, Sea Level Rise and Emergent Groundwater, or Seiche	LTS	Increased (due to lack of sea level rise adaptation)	Similar	Similar	Similar	Similar	Similar	Similar	Similar	Similar
Geology, Soils, and Seismicity										
Fault Rupture	No Impact	Similar (No Impact)	Similar (No Impact)	Similar (No Impact)	Similar (No Impact)	Similar (No Impact)	Similar (No Impact)	Similar (No Impact)	Similar (No Impact)	Similar (No Impact)
Seismic Ground Shaking	LTS	Reduced (No Impact)	Similar	Similar	Similar	Similar	Reduced (due to fewer people subject to risk)	Reduced (due to fewer people subject to risk)	Reduced (due to fewer people subject to risk)	Reduced (due to fewer people subject to risk)
Liquefaction and Seismic-Related Ground Failure	LTS	Reduced (No Impact)	Similar	Similar	Similar	Similar	Reduced (due to fewer commercial buildings)	Similar	Similar	Similar
Slope Instability	LTS w/Mit.	Reduced (No Impact)	Similar	Similar	Similar	Similar	Similar	Similar	Similar	Similar
Expansive Soils and Soil Corrosivity	LTS	Reduced (No Impact)	Similar	Similar	Similar	Similar	Reduced (due to less building area)	Reduced (due to less building area)	Reduced (due to fewer buildings)	Similar

	Comparison of Alternatives Impacts to Specific Plan Impacts									
		No Project Alternatives		Proposed Density Alternatives			Reduced Density Alternatives			
	Specific Plan	No Build	General Plan Buildout	1. Development Around an Operating 45-Acre LMF	2. Balanced Commercial	3. Reduced Maximum Building Height	4. Reduced Commercial Development	5. Development Around an Operating 45-Acre LMF	6. Balanced Commercial	7. Reduced Maximum Building Height
Paleontological Resources	LTS w/Mit.	Reduced (No Impact)	Similar	Similar	Similar	Similar	Similar	Similar	Similar	Similar
Use of Septic Tanks or Alternative Wastewater Disposal Systems	No Impact	Similar (No Impact)	Similar (No Impact)	Similar (No Impact)	Similar (No Impact)	Similar (No Impact)	Similar (No Impact)	Similar (No Impact)	Similar (No Impact)	Similar (No Impact)
Utilities, Service Systems, and Water Quality										
Water Supply	LTS	Reduced (No Impact)	Similar	Similar	Similar	Similar	Similar	Similar	Similar	Similar
Construction, Relocation, or Improvement of Utilities	LTS	Reduced (No Impact)	Similar	Similar	Similar	Similar	Similar	Similar	Similar	Similar
Consistency with Solid Waste Management Policies	LTS	Reduced (No Impact)	Similar	Similar	Similar	Similar	Similar	Similar	Similar	Similar
Landfill Capacity	LTS	Reduced (No Impact)	Similar	Similar	Similar	Similar	Reduced (due to less solid waste)	Reduced (due to less solid waste)	Reduced (due to less solid waste)	Reduced (due to less solid waste)
Public Services and Facilities										
New or Altered Public Facilities	LTS w/Mit.	Reduced (No Impact)	Similar	Similar	Similar	Similar	Reduced (due to reduced demand for services)	Reduced (due to reduced demand for services)	Similar	Similar

	Comparison of Alternatives Impacts to Specific Plan Impacts									
	Specific Plan	No Project Alternatives		Proposed Density Alternatives			Reduced Density Alternatives			
		No Build	General Plan Buildout	1. Development Around an Operating 45-Acre LMF	2. Balanced Commercial	3. Reduced Maximum Building Height	4. Reduced Commercial Development	5. Development Around an Operating 45-Acre LMF	6. Balanced Commercial	7. Reduced Maximum Building Height
Recreation Resources										
Physical Deterioration of a Park or Recreational Facility	LTS w/Mit.	Reduced (No Impact)	Similar	Similar	Similar	Similar	Similar	Similar	Similar	Similar
Physical Deterioration of Candlestick Point Windsurfing Resources	LTS	Reduced (No Impact)	Similar	Similar	Similar	Similar	Similar	Similar	Similar	Reduced (due to reduced building heights)
Wildland Fire										
Wildland Fire Potential	LTS	Reduced (No Impact)	Similar	Similar	Similar	Similar	Reduced (due to fewer people)	Reduced (due to fewer people)	Reduced (due to fewer people)	Reduced (due to fewer people)
Conclusions										
Achieve Project Objectives?	Yes	**No**	Yes but to a lesser degree	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Overall Comparison to Project Impacts		Reduced	Increased	Similar	Similar	Reduced	Reduced	Reduced	Reduced	Reduced

NOTE: **Bold text** indicates significant unavoidable impact.

LTS = less than significant

LTS w/Mit. = less than significant with mitigation incorporated

SU = significant unavoidable

ES.6.2 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA requires that an EIR identify an environmentally superior alternative. If the No Project Alternative is identified as the environmentally superior alternative, the EIR must also identify an environmentally superior alternative from among the other alternatives (CEQA Guidelines Section 15126.6(e)(2)). The environmentally superior alternative for the Baylands considers both the number of significant impacts each alternative would generate as well as the relative severity of each alternative's adverse environmental effects.

The Reduced Density, Lower Maximum Building Height Development Alternative, which would provide for development of 1,800 dwelling units, 4.5 million square feet of commercial office and 500,000 square feet of hotel use, while reducing the maximum allowable building heights within the Baylands to 12 stories for commercial office and 8 stories for residential development, would be the environmentally superior alternative for Baylands land development. This alternative would have the least overall adverse effect on the physical environment in comparison to the Specific Plan and the alternatives evaluated in this Draft EIR. Reduced Density, Lower Maximum Building Height development would have the following effects on the significant unavoidable impacts of the Specific Plan:

Impact AQ-1: The Baylands Specific Plan would cause a net increase in emissions of non-attainment criteria pollutants (ROG, NO_X, $PM_{2.5}$, PM_{10},) exceeding BAAQMD Regional Criteria Pollutant Significance Thresholds during construction and for operations at the completion of Phase 1 development, as well as at full Specific Plan buildout.

Lowering building heights while simultaneously reducing the amount of residential and commercial development as the Specific Plan would reduce overall mobile source pollutant emissions for project operations.

~~**Impact GHG-1:** The Baylands Specific Plan would cause an increase in total greenhouse gas (GHG) emissions generated within the Baylands.~~

~~Lowering building heights to reduce Baylands development by 400 dwelling units and 2.5 million s.f. of commercial office use would reduce the Specific Plan's net increase of GHG emissions.~~

Impact NOI-1: The use of impact pile driving for construction of buildings over 5 stories in height or for the Geneva Avenue bridge in proximity to occupied residential and office buildings would cause unavoidable adverse effects, particularly if multiple pile driving activities were undertaken within the Baylands at the same time, until construction of such buildings is completed.

Lowering the heights of taller buildings while simultaneously reducing the Specific Plan's overall development intensity could decrease the number of buildings that would require pile foundations. In addition, reduced building heights could enhance the feasibility of constructing pile foundations using quieter technologies.

Impact NOI-2: The aggregate operation of all stationary noise sources would increase noise levels generated within the Specific Plan area as a whole. Because the exact future location and configuration for all of these sources cannot be known at this time, it is not possible to ensure that the aggregate increase in noise levels at specific off-site receptor locations from stationary sources would not result in a permanent noise increase in excess of 5 dBA L_{eq}.

Due to the logarithmic scale used to measure noise, reducing development intensity would not likely be sufficient to substantially reduce permanent increases in ambient noise compared to the Specific Plan.

Impact NOI-3: Increased noise levels from Baylands-generated traffic would exceed applicable standards along one roadway segment at the conclusion of Phase 1 development (assumed to occur in 2035), increasing to 3 roadway segments at full Specific Plan buildout (assumed to be 2040).

Lower Maximum Building Height (Reduced Density) development would generate less traffic than the Specific Plan, while retaining direct access to the US 101 freeway Candlestick interchange. As a result, the amount of traffic along area roadways would decrease, reducing significant unavoidable impacts of the Specific Plan, although not to a less than significant level.

Additional effects of the Reduced Density, Lower Maximum Building Height Alternative include:

- Reducing the Specific Plan's overall impacts.
- Eliminating the Specific Plan's proposed 20+ story towers.
- Retaining variation in building heights and lower density residential and office building types (single family, duplex, townhouse) without increasing the number of buildings requiring pile driving for building foundations.
- Expanding the 55-acre solar farm and generating a greater proportion of the Baylands electrical demand onsite compared to Project Density alternatives.

ES.7 AREAS OF CONTROVERSY

CEQA Guidelines Section 15123 specifies that the EIR summary shall identify "areas of controversy" known to the Lead Agency, including issues raised by agencies and the public, and issues to be resolved, including the choice among alternatives and whether or how to mitigate the significant effects. To date, the following areas of controversy and issues to be resolved have been identified.

ES.7.1 ISSUES TO BE RESOLVED

CEQA Guidelines Section 15123(b)(3) requires that an EIR disclose issues to be resolved including the choice among alternatives and whether or how to mitigate significant impacts. In relation to the Baylands Specific Plan, key issues to be resolved include:

1. Whether this Draft EIR adequately describes the physical environmental effects (impacts) of the 2025 Specific Plan and other project components, including measures to avoid or minimize significant environmental effects.
2. Whether the Specific Plan and other project components with or without modifications are consistent with the provisions of the Brisbane General Plan, including General Plan Amendments GP-1-18 and GP-1-19, as well as consistent with Measure JJ.
3. Whether the Specific Plan and other project components appropriately incorporate mitigation measures identified in the certified Program EIR for the Baylands.
4. Whether there are any alternatives to the Specific Plan or other project components that would substantially lessen any of its significant impacts and achieve the underlying purpose and most but not necessarily all of the Specific Plan objectives identified in this EIR.
5. Whether the benefits of Baylands development outweigh the significant environmental impacts of Specific Plan development that cannot be feasibly avoided or mitigated to a level of insignificance.
6. Based on the above, whether the Specific Plan and related actions should be adopted, with or without modifications.

ES.7.2 AREAS OF CONTROVERSY

An NOP for this Draft EIR was released on February 20, 2020, opening a 60-day public review period. A scoping meeting was held for the Draft EIR on March 4, 2020. Due to subsequent changes to the Specific Plan and infrastructure proposed by the applicant, the NOP was recirculated for a 30-day public review that started on April 26, 2023, during which a second scoping meeting was held (May 9, 2023). Based on the history of comments received from the public and agencies during the review of the Program EIR, public hearings leading to the

adoption of GP-1-18 and GP-1-19, and comments received on the NOP and updated NOP, the primary areas of controversy include the following (with Draft EIR section(s) addressing these issues in parentheses):

- Compatibility of proposed high-density development with the existing Brisbane community and adjacent residential neighborhoods in San Francisco, along with changes in the character of the Baylands (Chapter 3, *Project Description*; Section 4.3, *Land Use and Planning Policies*; Section 4.4, *Aesthetic and Visual Resources*)
- Proposed development of 20+ story residential and office towers along the west side of the Caltrain line. (Chapter 3, *Project Description*; Section 4.4, *Aesthetic and Visual Resources*)
- Residential development needed to comply with Regional Housing Needs Allocation occurring on lands within the former Southern Pacific railyard that are contaminated with hazardous materials and subject to remediation pursuant to the regulatory authority of state agencies. (Chapter 2, *General Environmental and Planning Context*; Chapter 3, *Project Description*; Section 4.13, *Hazards and Hazardous Materials*)
- Commercial development on the former Brisbane Landfill subject to final landfill closure pursuant to the regulatory authority of state and county agencies. (Chapter 2, *General Environmental and Planning Context*; Chapter 3, *Project Description*; Section 4.13, *Hazards and Hazardous Materials*)
- Availability of a water supply to serve proposed Baylands development and impacts associated with the proposed California Water Company supply, including construction of off-site recycled water lines. (Chapter 3, *Project Description*; Section 4.16, *Utilities, Service Systems, and Water Supply*)
- Potential impacts on existing biological habitats and implementation of identified mitigation measures (Chapter 3, *Project Description*; Section 4.6, *Biological Resources*)
- Adaptation to sea level rise and water quality impacts on the Brisbane Lagoon and San Francisco Bay (Chapter 2, *General Environmental and Planning Context*; Section 4.6, *Biological Resources*, and Section 4.14, *Hydrology and Water Quality*)
- Traffic that would be generated by proposed Baylands development. (Section 4.8, *Transportation*)
- Air pollutant and greenhouse gas emissions impacts, including emission of toxic air contaminants (Section 4.9, *Air Quality*, and Section 4.10, *Greenhouse Gas Emissions*)
- Noise during construction (in particular, the use of impact pile driving) and post-construction operations (Section 4.12, *Noise and Vibration*)
- Potential for liquefaction and ability of soils to safely support mid- and high-rise structures (Section 4.15, *Geology, Soils, and Seismicity*)

- Adequacy of existing and proposed public infrastructure, facilities, and services for the Baylands (Section 4.16, *Utilities, Services Systems, and Water Supply*, and Section 4.17, *Public Services and Facilities*)
- Availability of active recreational facilities and effects on windsurfing resources within the Candlestick Point State Recreation Area (Section 4.18, *Parks, Open Space/Open Areas, and Recreational Resources*)
- Relationship between the Baylands Specific Plan and the California High Speed Rail Authority's proposed light maintenance facility within the Baylands (Chapter 2, *General Environmental and Planning Context*, Chapter 8, *Alternatives)*

CHAPTER 1 INTRODUCTION

This environmental impact report ("EIR") has been prepared by the City of Brisbane ("City") as the Lead Agency in conformance with the California Environmental Quality Act ("CEQA") (Public Resources Code Section 21000 et seq.) and CEQA Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3, Section 15000 et seq.). Its purpose is to identify, analyze, and mitigate the significant environmental effects that would result from development of the 2025 Baylands Specific Plan ("Specific Plan") and related components (collectively referred to as "2025 Specific Plan project." Sunquest Properties, Inc. ("Sunquest") and its development manager, Baylands Development, Inc. (BDI), are collectively referred to as the "applicant."

Significant Environmental Impacts (CEQA Guidelines Section 15126(a))

"An EIR shall identify and focus on the significant effects of the proposed project on the environment. In assessing the impact of a proposed project on the environment, the lead agency should normally limit its examination to changes in the existing physical conditions in the affected area as they exist at the time the notice of preparation is published, or where no notice of preparation is published, at the time environmental analysis is commenced."

In addition to addressing the physical environmental impacts of a project, CEQA Guidelines Section 15126.2(a) also requires that an EIR "also analyze any significant environmental effects the project might cause or risk exacerbating by bringing development and people into the area affected."

As stated by the court in *California Building Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal. 4th 369, "[W]hen a proposed project risks exacerbating those environmental hazards or conditions that already exist, an agency must analyze the potential impact of such hazards on future residents or users. In those specific instances, it is the project's impact on the environment — and not the environment's impact on the project —that compels an evaluation of how future residents or users could be affected by exacerbated conditions." (Id. at 377–378.)

1.1 OVERVIEW OF THE BAYLANDS SPECIFIC PLAN

1.1.1 PROJECT LOCATION

The Baylands Specific Plan area ("Specific Plan area," "Baylands," "Baylands site," or "site") encompasses approximately 680.1 acres (558.3 acres of existing land area[28] and 121.8 acres of lagoon) within the City of Brisbane in northeast San Mateo County. The Baylands is located along the west side of San Francisco Bay adjacent to US Highway 101 ("US 101"), immediately south of the City and County of San Francisco (see **Figure 1-1**).

[28] Approximately 26 acres of existing land area are subject to sea level rise and will experience daily inundation by the year 2100, reducing the Baylands' land area to 532.3 acres.

Figure 1-1: Regional Location



SOURCE: Metis Environmental Group, 2024

1.1.2 PROPOSED BAYLANDS DEVELOPMENT

The Baylands Specific Plan proposes development of 2,200 residential units; 6.5 million square feet of commercial, office, retail, conference, life science, and office campus uses; 500,000 square feet of hotel use (approximately 800 rooms); a grade 6–8 middle school; and open space/open area, parks, and trails within the 680.1-acre site. The Specific Plan also proposes extensive potable water, recycled water, sewer, drainage, electrical, and other utilities improvements. Approximately 157 acres of the site's 532.3-acre Year 2100 land area (29.5 percent) are proposed to be devoted to conservation and outdoor recreation.

Residential uses would be clustered in the northwestern portion of the site in proximity to the Bayshore Caltrain station. The land use character in the northern portion of the Baylands would be transit-oriented with the highest intensity development, including residential uses combined with a mix of retail, commercial, a major office cluster, hotels, and entertainment uses. The primary focus in the west-central portion of the site around the historic Roundhouse, which is to be restored for adaptive reuse, would be on lower density housing, a middle school, and

campus-style office development. Lower density commercial office and infrastructure uses would be provided within the eastern portion of the site.

Baylands development includes several components that require approval from the City of Brisbane and other agencies, including:

- **City of Brisbane**
    - General Plan Land Use Element Amendment to:
        - Adjust the northerly boundary of the Baylands Subarea to reflect the northern boundary of the Specific Plan area east of the Caltrain right-of-way.
        - Change the land use designation for the portion of the Baylands Specific Plan currently within the Beatty Subarea from Heavy Commercial to Baylands Planned Development, Residential Prohibited.
    - General Plan Circulation Element Amendment to:
        - Realign Lagoon Avenue to provide direct access to the southbound US 101 freeway on- and off-ramps adjacent to the current terminus of Sierra Point Parkway;
        - Extend Sierra Point Parkway from its current terminus at the US 101 freeway on- and off-ramps north to Geneva Avenue;
        - Reflect proposed Baylands roadways on Circulation Element Figure C-3 *Proposed Circulation Improvements*;
        - Designate the Geneva Avenue extension through the Baylands as a Regional Arterial;
        - Add "Green Shared Street" as a roadway type.
    - Approval of the 2025 Baylands Specific Plan, along with:
        - Amendments to Title 17, Zoning, of the Brisbane Municipal Code to establish the land use regulations and development standards set forth in the Baylands Specific Plan as the regulatory authority governing development within the Specific Plan area.
        - Change of Zone from Commercial Mixed-Use (C-1), Marsh Lagoon Bayfront (MLB), Manufacturing (M-1) to Baylands Specific Plan.
    - Bayshore Boulevard Mobility Plan for improvements along Bayshore Boulevard from Geneva Avenue to the southerly Brisbane city limits to facilitate mobility for Brisbane residents and businesses.

  - Relocate Brisbane's existing Fire Station No. 81 from its existing site at 3445 Bayshore Boulevard to a new 2-story, 10,000-square-foot facility at 140 Valley Drive and establish a new fire station within the Baylands.
  - Development Agreement with the City of Brisbane specifying terms and conditions for Baylands development.

- **Other Public Agencies**
  - Acquisition of a water supply by establishing the California Water Service Company as the service agency for the Baylands, Sierra Point, and Beatty Subareas of the City of Brisbane (San Mateo County Local Agency Formation Commission).
  - Development of a grade 6–8 middle school within the Baylands and conversion of the existing grade PK–8 Bayshore School to a grade PK–5 elementary school (Bayshore School District, California Department of Education).

A complete listing of current and future required approvals and permits from the City of Brisbane and other agencies is presented in Chapter 3, *Project Description*, which also provides descriptions of each proposed action.



Baylands Specific Plan area in the foreground with San Bruno Mountain, Brisbane, and Daly City in the background.

1.2 ENVIRONMENTAL REVIEW REQUIREMENTS AND PROCESS

Because it would require discretionary actions by the City of Brisbane and other public agencies, the 2025 Specific Plan and related components constitute a "project" that must be evaluated for its potential to create adverse physical environmental effects. As defined by CEQA (Public Resources Code Section 15002(d), "'project' has been interpreted to mean far more than the ordinary dictionary definition of the term."

Standard for Adequacy of an Impact Report (CEQA Guidelines Section 15151)

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

CEQA Guidelines Section 15378(a) states that project "means the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment, and that is any of the following:

(1) An activity directly undertaken by any public agency including but not limited to public works construction and related activities clearing or grading of land, improvements to existing public structures, enactment and amendment of zoning ordinances, and the adoption and amendment of local General Plans or elements thereof pursuant to Government Code Sections 65100–65700.

(2) An activity undertaken by a person which is supported in whole or in part through public agency contacts, grants, subsidies, loans, or other forms of assistance from one or more public agencies.

(3) An activity involving the issuance to a person of a lease, permit, license, certificate, or other entitlement for use by one or more public agencies."

1.2.1 PURPOSE AND INTENDED USE OF THIS EIR

Pursuant to the provisions of CEQA Guidelines Section 15121(a), this EIR is intended as an informational document to:

- Inform public agency decision-makers and the general public of the significant environmental effects that would directly or indirectly result from development of the 2025 Baylands Specific Plan project;
- Identify mechanisms to avoid or minimize (mitigate) significant environmental effects, including:
    - Mitigation measures that would become requirements of the Baylands Specific Plan or other requested actions should they be approved; and
    - A reasonable range of alternatives to the Specific Plan and other requested actions as they are currently proposed.

Purpose of an Environmental Impact Report (CEQA Guidelines Section 15121(a))

"An EIR is an informational document which will inform public agency decision-makers and the public generally of the significant environmental effect(s) of a project, identify possible ways to minimize the significant effect(s), and describe reasonable alternatives to the project. The public agency shall consider the information in the EIR along with other information that may be presented to the agency."

The analysis in this EIR builds on the information, analyses, and conclusions provided in the Brisbane Baylands Program EIR certified on July 19, 2018 (State Clearinghouse No. 2006022136), with new and updated information where needed. The prior EIR certified by the City of Brisbane is available at:

- Draft EIR: https://archive.brisbaneca.org/baylands-deir
- Full set of comments on the Draft EIR: https://archive.brisbaneca.org/deir-comments
- Final EIR: https://archive.brisbaneca.org/baylands-final-eir-0

Chapter 9 of this EIR serves as a Subsequent EIR pursuant to CEQA Section 21166 and CEQA Guidelines Section 15162.

This EIR does not recommend approval or denial of the Specific Plan or other requested actions, nor is the EIR intended to determine whether proposed Baylands development is "good" or "bad." The EIR is, as stated above, an informational document intended to identify and avoid or minimize (mitigate) any significant physical environmental effects that might result from the proposed development.

1.2.2 REVIEW PROCESS FOR THE BAYLANDS SPECIFIC PLAN EIR

a. Procedural Steps Undertaken to Date

Procedural steps undertaken to date for the Baylands Specific Plan EIR include:

- **Prepare and Distribute a Notice of Preparation; Conduct a Scoping Meeting.** Pursuant to CEQA Guidelines Section 15063(a), the City of Brisbane, as Lead Agency, determined that an EIR would be required for the Baylands Specific Plan and that preparation of an

Initial Study was therefore not required. On February 20, 2020, the City distributed a Notice of Preparation (NOP) for the EIR opening a 60-day public review period starting on February 20, 2020. Written comments were received from the following parties.

- Deborah Durbin: February 20, 2020
- California Native American Heritage Commission: February 24, 2020
- Bayshore Sanitary District: March 3, 2020
- Michael Barnes: March 4, 2020
- Caltrain: March 16, 2020
- San Francisco International Airport: March 16, 2020
- San Mateo Local Agency Formation Commission (LAFCo): March 17, 2020
- Committee for Renewable Energy in the Baylands (CREBL): March 18, 2020
- California High Speed Rail Authority (CHSRA): March 19, 2020
- San Francisco Bay Conservation and Development Commission (BCDC): March 20, 2020
- California Department of Fish and Wildlife (CDFW): March 20, 2020
- California State Lands Commission: March 20, 2020
- Modesto Irrigation District (MID): March 20, 2020
- Roland Lebrun: March 20, 2020
- Brisbane Complete Streets Safety Committee: March 24, 2020
- Bay Area Air Quality Management District (BAAQMD): April 14, 2020
- John Browning: April 14, 2020
- Prem Lall: April 19, 2020
- Brisbane Open Space and Ecology Committee (OSEC): April 20, 2020
- City and County of San Francisco: April 20, 2020
- California Department of Transportation (Caltrans): April 20, 2020
- Law Offices of Matthew Emrick (Stanislaus Groundwater Appliance): April 20, 2020
- Sierra Club, Loma Prieta Chapter: April 20, 2020
- Tuolumne River Trust: April 20, 2020

Draft EIR Appendix B.1 includes the full text of each of these written comments.

Pursuant to CEQA Guidelines Section 15082(c)(1), the City of Brisbane hosted a public scoping meeting for the Draft EIR on March 4, 2020, to provide an opportunity for members of the public and public agencies to provide input on the scope and content of the environmental information and analysis to be included in the EIR for the proposed Baylands Specific Plan. Issues that members of the public raised at the March 4, 2020, scoping meeting[29] included:

- Site remediation and final landfill closure need to be completed to ensure the safety of future uses within the Baylands.
- Site grading will require movement of a substantial amount of soil, including soil movement from the eastern to the western portion of the Baylands, which could require substantial truck traffic on area streets that are not designed for heavy trucks.
- Provision of off-road Class I bicycle trails is needed and should take priority over on-street bicycle routes and lanes.

- **Prepare and Distribute an Updated Notice of Preparation; Conduct a Scoping Meeting.** Due to changes in Baylands' infrastructure, the City distributed an updated NOP for the EIR opening a 30-day public review period starting on April 26, 2023. A second scoping meeting for the Draft EIR was held on May 9, 2023. A list of the agencies, organizations, and individuals that received the NOP are included in Appendix B.1. along with each of the comments received on the NOP. Comments on the May 2023 NOP were received from:
  - Native American Heritage Commission: April 28, 2023
  - California High Speed Rail Authority: May 23, 2023
  - Hetch Hetchy Regional Water System (San Francisco Public Utilities Commission [SFPUC]): May 24, 2023
  - Dana Dilworth: May 24, 2023
  - Roland Lebrun: May 24, 2023
  - Tuolumne River Trust: May 24, 2023
  - Brisbane Baylands Community Advisory Group (BBCAG): May 25, 2023
  - California Department of Transportation (Caltrans): May 25, 2023
  - Carpenters Union Local 217 San Mateo County: May 25, 2023
  - San Mateo Local Agency Formation Commission (LAFCo): May 25, 2023

[29] Written comments from the 2020 scoping meeting are provided in Appendix B.1.

- Zone 7 Water Agency (Zone 7 of the Alameda County Flood Control and Water Conservation District): May 25, 2023
- Bayshore Sanitary District (BSD): May 26, 2023
- Brisbane Open Space and Ecology Committee (OSEC): No Date
- Contra Costa Water District: September 6, 2023

Appendix B.1 includes the full text of each of the written comments.

- **Prepare the Draft EIR.** This Draft EIR was prepared in accordance with state and local CEQA Guidelines by the City of Brisbane with assistance from a consulting team of environmental planners, engineers, and scientists retained by the City. The consulting team that helped the City prepare the Draft EIR is identified in Chapter 10, *EIR Preparation Staff and Resources*.
- **Prepare a Notice of Availability/Notice of Completion; Distribute the Draft EIR for Agency and Public Review and Comment.** The City filed a Notice of Completion with the State Clearinghouse and prepared a Public Notice of Availability of the Draft EIR on April 3, 2025. During the public review period (April 3, 2025, to September 2, 2025), the City is soliciting input from other agencies and the public regarding the information, analyses, and findings set forth in this Draft EIR. Additional details are included in the published notices.

b. Procedural Steps to Be Undertaken Following the Close of the Draft EIR Public Review Period

Procedural steps to be undertaken following the public review period for this EIR include:

- **Respond to Comments on the Draft EIR and Prepare a Final EIR.** Following the public review period referenced above, a Final EIR will be prepared. The Final EIR will include:
  - The Draft EIR including any revisions;
  - Copies of all written comments received by the City during the Draft EIR public review period;
  - A list of persons and entities providing these comments;
  - Responses to significant environmental issues raised in comments; and
  - Any other additional information deemed necessary by the City as Lead Agency.

  Prior to public hearings held by the Brisbane Planning Commission and City Council, the City will release the proposed Final EIR on its website for agency and public review.

In addition, the City will provide each public agency that commented on the Draft EIR with the City's proposed response to those comments.[30]

- **Consider and Certify the Final EIR as Meeting the Requirements of CEQA.** Prior to making any decision regarding approval of the Specific Plan, other requested actions, or modifications to the Specific Plan or other requested actions, the City, as Lead Agency, is required to certify that the Final EIR was completed in compliance with CEQA; that it was presented to the City Council; that the City Council reviewed and considered the information in the Final EIR prior to approving or approving as modified all or any portion of the Specific Plan; and that the Final EIR reflects the City's independent judgment and analysis (CEQA Guidelines Section 15090).

  CEQA requires the City, as Lead Agency, to undertake the following actions.

  - *Adopt Findings.* In accordance with CEQA Guidelines Section 15091, should the City Council approve or approve as modified the Specific Plan or any other requested action, it is required to make findings, based on substantial evidence, that:
    - Changes or alterations have been required in, or incorporated into, the Specific Plan that avoid or substantially lessen each of the significant environmental effects identified in the Final EIR;
    - Changes or alterations that are within the responsibility and jurisdiction of another public agency and not the City of Brisbane have been adopted by the other agency or can and should be adopted by the other agency; or
    - Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the project alternatives identified in the Final EIR or any additional mitigation measures.
  - *Adopt a Mitigation Monitoring Reporting Program.* At such time as the City makes findings regarding significant effects identified in the EIR, it will also, as required by CEQA Guidelines Section 15097, adopt a Mitigation Monitoring and Reporting Program (MMRP) for mitigation measures that were adopted or made conditions of project approval to mitigate significant effects.

[30] Although CEQA Guidelines Section 15088(b) requires only that each public agency submitting comments on the Draft EIR be provided with the City's proposed response to that agency's comments 10 days prior to certification of the Final EIR, it is the City's intent to publish and distribute the entirety of the Final EIR, including all responses to comments to public agencies that provided comments on the Draft EIR and to make the entirety of the Final EIR available for public review prior to the start of the Planning Commission's public hearings.

- **Make a Decision on the Project.** Following completion and consideration of the Final EIR and public hearings by the Planning Commission and City Council, the City may:

  (1) Approve the 2025 Specific Plan and other actions being considered by the City as initially proposed;

  (2) Approve the 2025 Specific Plan and other actions with one or more revisions, modifications, or conditions of approval;

  (3) Approve with or without revisions, modifications, or conditions of approval one of the project alternatives described in this EIR, with or without approving, or modifying other actions being considered by the City; or

  (4) Disapprove the Specific Plan and its alternatives, while approving, modifying, or disapproving other actions being considered by the City.

  If the City proposes to approve the Specific Plan or other actions requested of the City, either as initially proposed or with modifications, the following additional steps would be undertaken:

  - *Statement of Overriding Considerations.* If Specific Plan development or other actions being considered by the City either as proposed or with modifications would result in one or more unavoidable significant environmental effect, the City would, prior to any approval and as required by CEQA Guidelines Section 15093, prepare and approve a written "Statement of Overriding Considerations" that sets forth the specific economic, legal, social, technological, or other benefits of the Specific Plan or other actions that outweigh their unavoidable environmental effects.
  - *Notice of Determination.* Following any approval, a Notice of Determination (NOD) would be filed by the City with both the County and California State Clearinghouse (in accordance with CEQA Guidelines Section 15094).

1.2.3 AVAILABILITY AND REVIEW OF THE DRAFT EIR

The Baylands Specific Plan Draft EIR is being distributed directly to agencies, organizations, and interested groups and persons for comment during the formal public review period (April 3, 2025, through September 2, 2025) in accordance with CEQA Guidelines Sections 15085, 15086, and 15087. A Notice of Completion and a Notice of Availability of the Baylands Specific Plan Draft EIR were published concurrently with distribution of this document.

In accordance with CEQA Guidelines Section 15204, comments are most helpful when they:

(a) Focus on the sufficiency of the document in identifying and analyzing the possible impacts on the environment and ways in which the significant effects of the project might be avoided or mitigated. Comments are most helpful when they suggest

additional specific alternatives or mitigation measures that would provide better ways to avoid or mitigate the significant environmental effects.

(c) Submit data or references offering facts, reasonable assumptions based on facts, or expert opinion supported by facts in support of the comments.

Comments on the Draft EIR should be sent to:

Mr. John Swiecki, Community Development Director
City of Brisbane
50 Park Place
Brisbane, CA 94005
baylands@brisbaneca.org

1.3 ISSUES TO BE RESOLVED THROUGH THE CEQA AND DEVELOPMENT REVIEW PROCESSES

CEQA Guidelines Section 15123(b)(3) requires that an EIR disclose issues to be resolved, including the choice among alternatives and whether or how to mitigate significant impacts. In relation to the Baylands Specific Plan, key issues to be resolved include:

1. Whether this Draft EIR adequately describes the physical environmental effects (impacts) of the 2025 Specific Plan and other project components, including measures to avoid or minimize significant environmental effects.
2. Whether the Specific Plan and other project components with or without modifications are consistent with the provisions of the Brisbane General Plan, including General Plan Amendments GP-1-18 and GP-1-19, as well as consistent with Measure JJ.
3. Whether the Specific Plan and other project components appropriately incorporate mitigation measures identified in the certified Program EIR for the Baylands.
4. Whether there are any alternatives to the Specific Plan or other project components that would substantially lessen any of its significant impacts and achieve the underlying purpose and most but not necessarily all of the Specific Plan objectives identified in this EIR.
5. Whether the benefits of Baylands development outweigh the significant environmental impacts of Specific Plan development that cannot be feasibly avoided or mitigated to a level of insignificance.
6. Based on the above, whether the Specific Plan and related actions should be adopted, with or without modifications.

1.4 FORMAT OF THE DRAFT EIR

Following Chapter 1, *Introduction*, the Draft EIR is organized as follows:

Chapter 2, *General Environmental and Planning Context*, describes the regional and local context within which the 2025 Specific Plan and other project components are proposed and would be implemented. It discusses previous planning review and environmental documentation undertaken by the City of Brisbane for Baylands development. Chapter 2 describes:

- The Baylands' physical setting and history;
- Current General Plan and zoning designations, land uses, and infrastructure;
- The relationship between the previously certified Brisbane Baylands Program EIR and this EIR.
- The relationship between the proposed Specific Plan and:
    - Approved site remediation and final landfill closure plans, including related requirements of state regulatory agencies for development of the Baylands; and
    - The High-Speed Rail light maintenance facility that is proposed by the California High-Speed Rail Authority within the eastern portion of the Specific Plan area.

Chapter 3, *Project Description*, describes project objectives, the proposed 2025 Specific Plan, and other project components, including on-site and off-site infrastructure. Chapter 3 also identifies the specific City of Brisbane and other public agency approvals and actions required for approval and implementation of the 2025 Specific Plan and other project components.

Chapter 4, *Environmental Setting, Impacts, and Mitigation Measures*, discusses existing conditions; the regulatory context for Baylands development; significance criteria and methodology for determining the significance of impacts; environmental impacts that would directly or indirectly result from the 2025 Specific Plan project; and proposed mitigation measures. This chapter also identifies and provides substantial evidence demonstrating that Specific Plan development would not result in significant impacts for certain environmental issues that therefore need not be examined in detail in this EIR. Finally, this chapter summarizes the Specific Plan's significant unavoidable environmental impacts (those for which implementation of all proposed mitigation measures would not reduce the impact to a less than significant level).

Chapter 5, *Significant Irreversible Environmental Changes*, addresses environmental effects associated with the Baylands Specific Plan that have the potential for irretrievable and irreversible commitment of resources.

Chapter 6, *Growth-Inducing Effects*, describes the Specific Plan's potential to induce growth beyond the development described in the 2025 Specific Plan.

Chapter 7, *Cumulative Environmental Effects*, provides an analysis of the impacts that would result from the combination of the 2025 Specific Plan project together with other past, present, and reasonably foreseeable probable future projects causing related impacts.

Chapter 8, *Alternatives*, provides an analysis of the ability of land development and water supply alternatives to the 2025 Specific Plan project to avoid or reduce the extent of impacts, particularly significant impacts, that would result from Baylands development. As required by CEQA Guidelines Section 15126.6, the alternatives evaluation includes analysis of the No Project Alternative (environmental effects that would result should the 2025 Specific Plan project not be approved), and a discussion of the environmentally superior alternative.

Chapter 9, *Subsequent EIR Analysis and Findings*, evaluates and make findings regarding the extent to which the 2025 Specific Plan project would cause (1) new significant impacts that were not previously identified in the Program EIR or (2) substantially more severe significant impacts than were previously identified in the Program EIR.

Chapter 10, *EIR Preparation Staff and Resources*, identifies the authors of the EIR, including City staff and the EIR consultant team, as well as the organizations and other persons that were consulted during preparation of this EIR.

EIR Appendices

Appendix A 2025 Baylands Specific Plan

Appendix B Notices of Preparation, Distribution List, and Responses to the Notices of Preparation

Appendix C Urban Decay Technical Report

Appendix D Biological Resources Technical Report

Appendix E Cultural Resources Technical Reports

- E.1 Cultural Resources Technical Report
- E.2 Roundhouse Restoration Plan

Appendix F Transportation Technical Reports

- F.1 Transportation Impact Assessment, including Supplemental Design Guidelines for Baylands Roadways and Bayshore Boulevard Mobility Plan
- F.2 Baylands Safe Routes to School Study

Appendix G Air Quality Technical Reports

- G.1 Air Quality Technical Report

G.2 Health Risk Assessment

G.3 Mitigated Air Quality and Health Risk Calculations

Appendix H Greenhouse Gas Emissions

H.1 Greenhouse Gas Emissions Technical Report

~~H.2 Greenhouse Gas Emissions Mitigated Calculations[31]~~

Appendix I Energy Resources Technical Report

Appendix J Noise and Vibration Technical Report

Appendix K Hazardous Materials Remediation and Final Landfill Closure Plans

K.1 Operating Unit San Mateo (OU-SM) Remedial Action Plan

K.2 Operating Unit 2 (OU-2) Remedial Action Plan

K.3 Former Brisbane Landfill Closure Plan and Post-Closure Maintenance Plan

K.4 Operable Unit OU-SM Approval Record

K.5 Operable Unit OU-2 Approval Record

K.6 Brisbane Baylands Landfill Closure Plan Approval Record

Appendix L Hydrology Reports

L.1 Sea Level Rise (SLR) Technical Report

L.2 Groundwater Modeling to Evaluate Potential Influence of Sea Level Rise on Groundwater Levels

Appendix M Geotechnical and Paleontological Resources Reports

M.1 Geotechnical Report for the Western Portion of the Baylands

M.2 Geotechnical Report for the Eastern Portion of the Baylands

M.3 Paleontological Resources Report

Appendix N Police and Fire Protection Services Plans

N.1 Police Facilities and Staffing Plan

N.2 Fire Protection Services Plan

Appendix O Wind Analysis

Appendix P Water Supply Assessment

~~[31] The Baylands GHG Emissions Reduction Plan outlines measures that will be taken to reduce GHG emissions from Baylands construction and operations and is intended to fulfill the role of a Baylands-specific climate action plan consistent with the requirements of CEQA Section 15183.5(b).~~

1.5 FUTURE ENVIRONMENTAL REVIEW OF SITE-SPECIFIC DEVELOPMENT AND INFRASTRUCTURE PROJECTS

As noted above, this EIR discloses the significant environmental impacts that would result from the 2025 Baylands Specific Plan project in accordance with CEQA and CEQA Guidelines. The environmental impact analyses presented in this EIR are based on the maximum extent and intensity of development permitted by the Baylands Specific Plan, even though future development might ultimately have a smaller footprint or lesser intensity than what is permitted by the Specific Plan.

CEQA Guidelines Section 15182 exempts certain residential, commercial, and mixed-use projects that are consistent with a specific plan that was adopted with a certified EIR from subsequent environmental review, as follows.

- **Residential Projects Implementing Specific Plans (CEQA Guidelines Section 15182(c) and Government Code Section 65457).** These CEQA Guidelines sections would exempt site-specific residential development projects that are undertaken pursuant to and in conformity with the Baylands Specific Plan from environmental review beyond this EIR. Pursuant to CEQA Guidelines Section 15182(c), site-specific residential development projects undertaken pursuant to and in conformity with the Baylands Specific Plan are exempt from further CEQA review unless:
    - Substantial changes are proposed in the project that will require major revisions of the previous EIR due to new significant environmental effects or a substantial increase in the severity of previously identified significant environmental effects;
    - Substantial changes occur with respect to the circumstances under which the project is undertaken will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
    - New information of substantial importance, which was not known and could not have been known at the time the previous EIR was certified shows the project will have one or more significant effects not previously discussed, or significant effects previously examined will be substantially more severe than shown in the previous EIR;
    - Mitigation measures or alternatives previously found to not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project; or
    - Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment (CEQA Guidelines Section 15162).

Such projects would, however, be subject to all applicable mitigation measures in the adopted MMRP for the Baylands.

CEQA's environmental review exemption for certain residential projects implemented pursuant to an adopted specific plan aligns with the housing goals of the California Legislature, which has declared that the state is in a housing crisis with high housing costs and a lack of supply. To remedy this crisis, the Legislature passed significant legislation to encourage development, increase high-density neighborhoods, and supply affordable housing. Such housing laws are generally aimed at facilitating and expediting the construction of housing in jurisdictions that are not supplying a sufficient amount and would have implications for processing entitlements related to buildout of the Baylands Specific Plan.

For example, the Housing Accountability Act (Government Code Section 65589.5) establishes the state's overarching policy that a local government may not deny, reduce the density of, or make infeasible residential development projects that are consistent with objective local development standards.[32] Senate Bill (SB) 35 provides a ministerial approval process to streamline the approval of certain housing projects in jurisdictions that are not meeting their Regional Housing Needs Allocation ("RHNA") goals set by California's Department of Housing and Community Development ("HCD"). HCD has determined that the City of Brisbane is such a jurisdiction that has to date made insufficient progress towards providing very low- and low-income housing units. Development in Brisbane, including within the Baylands, is therefore subject to the SB 35 streamlined ministerial approval process for proposed developments that provide at least 50 percent affordability. Similarly, SB 330 streamlines certain housing development projects, shortens the timeframes for approval under the Permit Streamlining Act, and freezes development standards in affected jurisdictions.

SB 35 makes these types of residential projects ministerial, and therefore, CEQA's environmental review requirements do not apply. CEQA only applies to discretionary projects that require the exercise of judgment or deliberation to determine whether the project will be approved, unlike ministerial projects, which only require conformance with a fixed standard or objective measurement and require little or no personal judgment by a public official. Future legislative actions similarly expediting housing approvals using ministerial processes and limiting the City's jurisdiction would have repercussions for the environmental review of future site-specific development and infrastructure projects implementing the Baylands Specific Plan.

[32] Before doing any of these things, local governments must make specified written findings based upon a preponderance of the evidence that a specific, adverse health or safety impact exists. Legislative intent language for the Housing Accountability Act indicates that conditions giving rise to such a specific, adverse impact on public health and safety would occur infrequently.

- **Projects Proximate to Transit (CEQA Guidelines Section 15182(b)).** CEQA also exempts certain transit-oriented residential, commercial, and mixed-use projects that are consistent with an adopted specific plan for which an EIR was certified from environmental review. Such residential or mixed-use projects, or a project with a floor area ratio of at least 0.75 on commercially zoned property, must be:
    - Located within a transit priority area;
    - Consistent with an adopted specific plan for which an environmental impact report was certified; and
    - Consistent with the general land use designation, density, building intensity, and applicable policies specified for the project area in a sustainable communities strategy (CEQA Guidelines Section 15182(b)(1)).

  Subsequent site-specific development projects complying with the requirements that are within ½ miles of the Bayshore Caltrain station could qualify for this exemption

  CEQA Guidelines Section 15183(a) similarly exempts projects from environmental review that are consistent with the development density established by existing zoning, community plan, or general plan policies for which an EIR was certified to streamline the review of such projects and reduce the need to prepare repetitive environmental studies. Under these circumstances, CEQA permits a lead agency to limit its examination of environmental effects to those that the agency determines:

    - Are peculiar to the individual project or the parcel on which the project would be located;
    - Were not analyzed as significant effects in a prior EIR on the zoning action, general plan, or community plan with which the project is consistent;
    - Are potentially significant off-site impacts and cumulative impacts which were not discussed in the prior EIR prepared for the general plan, community plan or zoning action; or
    - Are previously identified significant effects which, as a result of substantial new information which was not known at the time the EIR was certified, are determined to have a more severe adverse impact than discussed in the prior EIR (CEQA Guidelines Section 15183(b)).

  Thus, CEQA Guidelines Section 15183.3(a) provides for streamlined environmental review of certain infill projects where the effects of such infill projects have been previously addressed and analyzed in a prior EIR for a planning-level decision or by uniformly applicable development policies.

1.6 DEFINITIONS OF KEY CEQA TERMINOLOGY

Feasible: "Capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors" (CEQA Section 21061.1).

Project Impacts

Less than Significant Impact: A physical environmental effect that would (1) result directly or indirectly from the proposed project and (2) not exceed any identified significance threshold based on the methodology specified for the impact being analyzed.

Less than Significant with Mitigation Incorporated: A significant adverse impact that would result directly or indirectly from the proposed project for which implementation of proposed mitigation measures would avoid or reduce the physical environmental effect so as to be less than significant with the implementation of such mitigation measures. However, if proposed mitigation measures are not adopted, impacts would remain significant and unavoidable.

Mitigation Measure: A proposed condition of approval that addresses a significant environmental impact by either (1) avoiding the impact; (2) reducing or minimizing the magnitude, scope, or intensity of the impact; or (3) compensating for the impact by replacing or substituting for the (natural) resource or ecological functions that would be impaired, suspended, or eliminated.

Significance Criteria, Significance Thresholds: Identifiable quantitative, qualitative, or performance level criteria for specific environmental effects, noncompliance with which means the effect will normally be determined to be significant and compliance with which means the effect normally will be determined to be less than significant.

Significant Environmental Effect, Significant Impact: A physical environmental effect that would (1) result directly or indirectly from the 2025 Specific Plan project, and (2) exceeds any identified significance threshold based on the methodology specified for the impact being analyzed. A significant environmental effect or impact includes any substantial adverse change in physical environmental conditions, such as land, air, water, minerals, flora, fauna, ambient noise, and objects of historic and aesthetic significance (CEQA Guidelines Section 15382). An economic or social change by itself is not typically considered to be a significant impact, even if the change would be substantial. However, social or economic changes related to a physical environmental change may be considered in determining whether the physical change is significant (CEQA Guidelines Section 15382).

Significant and Unavoidable Impact: A significant adverse environmental impact that would result directly or indirectly from the 2025 Specific Plan project and for which either no

mitigation is feasible, or the physical environmental effect would still remain significant even after implementation of all feasible mitigation measures.

Cumulative Impacts

Cumulative Impact: The cumulative impact from two or more projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time (CEQA Guidelines Section 15355).

Cumulatively Considerable Impact: A cumulatively considerable impact would result when the 2025 Specific Plan project would make a substantial contribution to a significant cumulative impact.

Less than Cumulatively Considerable Impact: A less than cumulatively considerable impact would result when the contribution of the 2025 Specific Plan project to a significant cumulative impact on the environment would not be substantial.

1.7 ACRONYMS USED IN THIS DOCUMENT

AASHTO	American Association of State Highway and Transportation Officials
AB	Assembly Bill
ABAG	Association of Bay Area Governments
ACE	Advanced Clean Equipment
ACRES	Assessment, Cleanup, and Redevelopment Exchange System
ACS	American Community Survey
ACT	Advanced Clean Trucks
ADC	alternative daily cover
ADA	Americans with Disabilities Act
ADOE	Archaeological Determinations of Eligibility
ADT	average daily traffic
AF	acre-feet
AFY	acre-feet per year
AGF	active ground floor
ALUC	Airport Land Use Commission
ALUCP	airport land use compatibility plan
AMSL	above mean sea level
ANSI	American National Standards Institute

AQMP	air quality management plan
ASCE	American Society of Civil Engineers
ASHRAE	American Society of Heating, Refrigerating, and Air-Conditioning Engineers
AST	above-ground storage tanks
AWWA	American Water Works Association
BAAQMD	Bay Area Air Quality Management District
BACMs	best available control measures
BACT	best available control technology
BART	Bay Area Rapid Transit
BAWSCA	Bay Area Water Supply and Conservation Agency
BBCAG	Brisbane Baylands Community Advisory Group
BCDC	Bay Conservation and Development Commission
BDI	Baylands Development Inc.
BMP	best management practice
BOD	biochemical oxygen demand
BP	before present
BRT	bus-rapid transit
BSD	Bayshore Sanitary District
Btu	British thermal unit
CAAQS	California Ambient Air Quality Standards
CAFÉ	Corporate Average Fuel Economy
CalARP	California Accidental Release Prevention
CalEMA	California Emergency Management Agency
CalEPA	California Environmental Protection Agency
CAL FIRE	California Department of Forestry and Fire Protection
CALGreen	California Green Building Standards Code
Cal OES	California Governor's Office of Emergency Services
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CAO	Cleanup and Abatement Order
CAP	climate action plan
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CARE	Chico Advocates for a Responsible Economy

CASQA	California Stormwater Quality Association
CBC	California Building Code
CCA	Community Choice Aggregation
C/CAG	City/County Association of Governments of San Mateo County
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERCLIS	Comprehensive Environmental Response, Compensation and Liability Information System
CERS	California Environmental Reporting System
CERS HAZ	California Environmental Reporting System Hazards Waste Sites
CESA	California Endangered Species Act
CFD	computational fluid dynamics
CFDW	California Department of Fish and Wildlife
CFR	Code of Federal Regulations
CGDP	California Goldfields – Dwarf Plantain Flower Fields
CH_4	Methane
CHMIRS	California Hazardous Material Incident Report System
CHP	California Highway Patrol
CHRIS	California Historic Resources Information System
CHSRA	California High Speed Rail Authority
CIP	Capital Improvement Program
City	City of Brisbane
CIWMP	San Mateo County Countywide Integrated Waste Management Plan
CMP	Congestion Management Program
CNDDB	California Natural Diversity Database
CNEL	community noise equivalent level
CNPS	California Native Plant Society
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
COC	contaminant of concern
COPC	chemical of potential concern

CORE	CARB's Clean Off-Road Equipment Voucher Incentive Project
CPP	Community Proposed Plan
CPP-V	Community Proposed Plan – Recology Expansion Variant
CPSRA	Candlestick Point State Recreation Area
CPUC, PUC	California Public Utilities Commission
CREBL	(Brisbane) Committee for Renewable Energy in the Baylands
CRHR	California Register of Historical Resources
CRPR	California Rare Plant Ranking
CSD	Community Services District
CUPA	Certified Unified Program Agency
CVC	California Vehicle Code
CVC	California Vehicle Code
CVOCs	chlorinated volatile organic compounds
dB	decibel
dBA	A-weighted decibel
DDT	dichlorodiphenyltrichloroethane
DELISTED TNK	Delisted Storage Tank
DELISTED CTNK	Delisted CERS Tanks
DELISTED HAZ	Delisted CERS Hazardous Waste Sites
DHS	California Department of Health Services
d.u., du	dwelling unit
du/ac	dwelling units per acre
DNL, Ldn	day-night noise level
DOF	California Department of Finance
DPM	Diesel particulate matter
DSP	Developer-Sponsored Plan
DSP-V	Developer-Sponsored Plan – Entertainment Variant
DTSC	Department of Toxic Substances Control
DWR	California Department of Water Resources
ECOS	Environmental Conservation Online System
EIR	environmental impact report
EIS	environmental impact statement
EMF	electromagnetic field
EO	Executive Order

EOC	Emergency Operations Center
EOP	(Brisbane) Emergency Operations Plan
EPA/USEPA	United States Environmental Protection Agency
ERIS	Environmental Risk Information Services
ERNS	Emergency Response Notification System
ESA	Environmental Science Associates
ESL	environmental screening level
EV	electric vehicle
FAR	floor area ratio
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FHWA	Federal Highway Administration
FICON	Federal Interagency Committee on Noise
FIRM	Flood Insurance Rate Maps
FS/RAP	feasibility study/remedial action plan
FTA	Federal Transit Administration
gal	gallons
GHG	greenhouse gas
GIS	Geographic Information Systems
gpm	gallons per minute
GWP	global warming potential
HAZGEN	Generators from Hazardous Waste Manifest Data
HAZNET	Handlers from Hazardous Waste Manifest Data
HAZ TSD	Hazardous Waste Manifest Data
HCD	California Department of Housing and Community Development
HFC	hydrofluorocarbon
HHRA	human health risk assessment
HIST CHMRS	Historical CHMRS
HIST CORTESE	Historical Cortese List
HIST TNK	Historical Hazardous Substance Storage Container Information-Facility Summary
HRA	Health Risk Assessment
HUD	United States Department of Housing and Urban Development
HVAC	heating, ventilation, and air conditioning
in/sec	inches per second

IPCC	Intergovernmental Panel on Climate Change
ISO	Insurance Service Office
JPA	Joint Powers Authority
JUHSD	Jefferson Union High School District
LAFCo	Local Agency Formation Commission
LEA	local enforcement agency
LED	light emitting diode
LFG	landfill gas
LMF	light maintenance facility for the California High-Speed Rail system
LOS	level of service
LUST	leaking underground storage tank
MEIR	maximally exposed individual residences
mgd	million gallons per day
MMBtu	million British thermal units
MMRP	mitigation monitoring and reporting program
MMT	million metric tons
$MMTCO_2e$	million metric tons of carbon dioxide equivalent
MOA	memorandum of agreement
MOU	memorandum of understanding
MPOA	Master Property Owners' Association
MRZ	Mineral Resource Zone
MS4	municipal separate storm sewer system
MT	metric ton
MTC	Metropolitan Transportation Commission
$MTCO_2e$	metric tons of carbon dioxide equivalent
Muni	San Francisco Municipal Railway
MW	megawatt
MWh	megawatt-hour
N_2O	nitrous oxide
ND	LEED for Neighborhood Development
NAHC	Native American Heritage Commission
NCFA	North County Fire Authority
NEPA	National Environmental Policy Act
NFPA	National Fire Protection Association

NFRAP	No Further Remedial Action Planned
NHTSA	National Highway Traffic and Safety Administration
NMFS	National Marine Fisheries Service
NO_2	nitrogen dioxide
NOAA	National Oceanic and Atmospheric Administration
NOD	Notice of Determination
NOP	Notice of Preparation
NO_X	nitrogen oxides
NPDES	National Pollution Discharge Elimination System
OLUCI	California Governor's Office of Land Use and Climate Innovation (formerly Governor's Office of Planning and Research [OPR])
OSEC	Brisbane Open Space and Ecology Committee
OSHA	Occupational Safety and Health Administration
OU-SM	Operable Unit-SM
PAH	polynuclear aromatic hydrocarbon
Pb	lead
PCB	polychlorinated biphenyl
PCE	Peninsula Clean Energy
PDA	Priority Development Area
PFC	perfluorocarbon
PG&E	Pacific Gas and Electric Company
PK	pre-kindergarten
$PM_{2.5}$	fine particulate matter (less than 2.5 micrometers in diameter)
PM_{10}	particulate matter (less than 10 micrometers in diameter)
ppm	parts per million
PPV	peak particle velocity
PRC	Public Resources Code
PSR	(Candlestick Interchange) Project Study Report
R&D	research and development uses
RCRA	Resource Conservation and Recovery Act
RDIP	Remedial Design and Implementation Plan
RHNA	Regional Housing Needs Allocation
ROG	reactive organic gas
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board

SamTrans	San Mateo County Transit District
SB	Senate Bill
SCS	Sustainable Communities Strategy
s.f., sf	square feet
SF_6	sulfur hexafluoride
SFO	San Francisco International Airport
SFPUC	San Francisco Public Utilities Commission
SHPO	State Office of Historic Preservation
SIP	State Implementation Plan
SMARA	California Surface Mining and Reclamation Act of 1975
SMCTA	San Mateo County Transportation Authority
SO_2	sulfur dioxide
SO_3	sulfur trioxide
SO_4	sulfate
SVOC	semi-volatile organic compound
SWPPP	stormwater pollution prevention plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
TDM	Transportation Demand Management
TK	transitional kindergarten
TMDL	total maximum daily load
TOG	total organic gas
TPA	Transportation Priority Area
TPH	total petroleum hydrocarbon
TPH-g	gasoline-range hydrocarbons
TPH-d	diesel-range hydrocarbons
TPH-mo	motor oil range hydrocarbons
TRB	Transportation Research Board
TRU	transportation refrigeration unit
TSM	transportation system management plan
TSS	total suspended solid
USDA	United States Department of Agriculture
USDOT	United States Department of Transportation
USFS	United States Forest Service

USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UST	underground storage tank
UV	ultraviolet
VMT	vehicle miles traveled
VOC	volatile organic compound
WBWG	**Western Bat Working Group**
WDR	waste discharge requirement
WETA	**Water Emergency Transportation Authority**
WRF	water recycling facility
WSA	water supply assessment
yr	year
ZE	zero-emission
ZEV	zero-emission vehicle
ZNE	zero net energy

1.8 REFERENCES

Baylands Development, Inc. *The Baylands Specific Plan*. January 2023.

California Department of Housing and Community Development. *Housing Accountability Act Technical Assistance Advisory (Government Code Section 65589.5)*. Accessed December 22, 2023. https://www.hcd.ca.gov/community-development/housing-element/housing-element-memos/docs/hcd-memo-on-haa-final-sept2020.pdf.

City of Brisbane. *Brisbane Baylands Final Program EIR* (State Clearinghouse No. 2006022136) certified on July 19, 2018. https://archive.brisbaneca.org/baylands-final-eir-0.

CHAPTER 2 GENERAL ENVIRONMENTAL AND PLANNING CONTEXT

This chapter describes the local, regional, state, and federal environmental and planning context within which the 2025 Baylands Specific Plan and related project components would be developed, including the planning review and environmental documentation that was previously undertaken by the City of Brisbane for the Baylands. It also describes the Baylands' physical setting and history, as well as the current General Plan and zoning, land uses, and infrastructure. Additional resource-specific details regarding environmental setting are provided in the individual resource sections of Chapter 4.

2.1 PROJECT LOCATION

The City of Brisbane and the Baylands Specific Plan area lie within the nine-county San Francisco Bay Area region in the northeastern corner of San Mateo County, immediately south of the City and County of San Francisco (see **Figure 2-1**). Collectively, San Francisco and San Mateo counties are sometimes referred to as the "Peninsula."

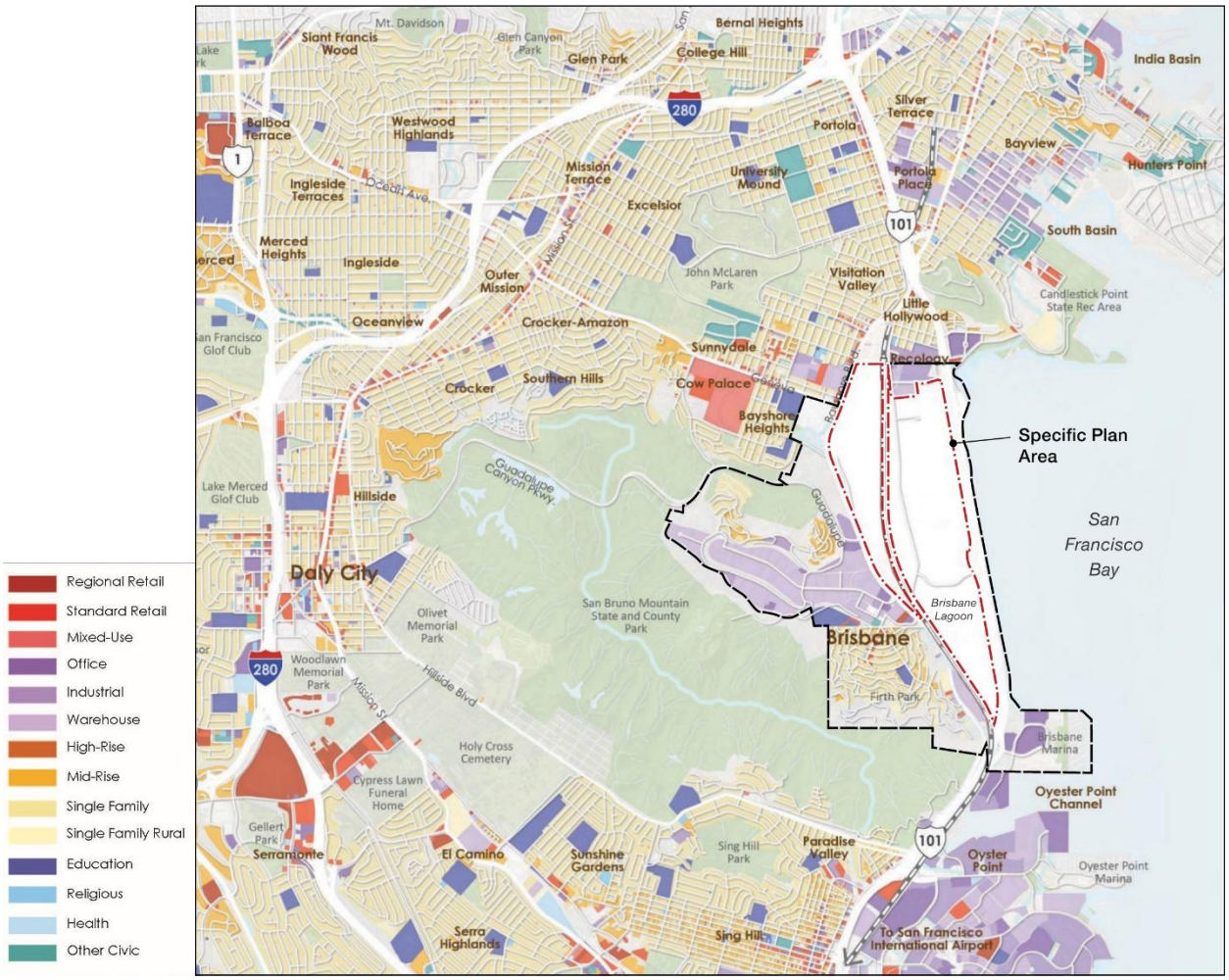
Figure 2-1: Regional Location



SOURCE: Metis Environmental Group, 2024

Brisbane is nestled between the City and County of San Francisco (Visitacion Valley and Little Hollywood neighborhoods) to the north; San Bruno Mountain, the City of Daly City, an unincorporated portion of San Mateo County to the west; and the City of South San Francisco to the south. San Francisco Bay, which lies approximately 250 feet east of the Baylands, forms Brisbane's eastern boundary. As viewed from US Highway 101 (US 101) and flights leaving San Francisco International Airport, the Brisbane community lies within a low-density "cove" formed by the ridges extending from San Bruno Mountain that separate the community from highly urbanized areas to the north and south. The combination of these ridges, the Brisbane Lagoon, and industrial uses and utility facilities in the northern portion of the City physically separate Brisbane from the adjacent urban communities of San Francisco, Daly City, and South San Francisco, as illustrated in **Figure 2-2**, which also illustrates the large size of the Specific Plan area in relation to the developed portions of Brisbane west of Bayshore Boulevard.

Figure 2-2: Generalized Land Use Context, 2022



San Bruno Mountain, whose slopes form the western edge of Brisbane, provides a dramatic visual backdrop to the City when viewed from the north and east. Views of Candlestick Point and the Bay to the east are available from the developed east-facing slopes of San Bruno Mountain.

The City of Brisbane (2024 population = 4,661) maintains a small-town suburban character despite its location adjacent to the highly urbanized cities of San Francisco (2024 population = 843,071), Daly City (2024 population = 101,458), and South Francisco (2024 population = 64,601) (DOF 2024). Both San Francisco and South San Francisco are major employment centers, employing an estimated 785,530 and 46,635 people, respectively, in 2020. Brisbane is situated along the urbanized US 101 freeway corridor between San Francisco immediately to the north and the "Silicon Valley" area with its estimated 1.6 million jobs in San Mateo and adjoining Santa Clara counties approximately 25 miles to the south of Brisbane. Development of the 2,200 dwelling units, along with up to 6.5 million sf of commercial office development and an additional 500,000 sf of hotel use permitted by the Specific Plan would increase Brisbane's 2024 population of 4,661 by approximately 4,905 residents and increase the City's estimated 2022 employment base of 13,000 by up to 19,480 jobs.

2.2 DESCRIPTION OF THE BAYLANDS SITE

2.2.1 LOCATION

The Baylands Specific Plan area, which includes the Baylands subarea of the Brisbane General Plan[33] and the Brisbane Lagoon, encompasses approximately 680.1 acres (532.3 acres of existing land area[34] and 121.8 acres of lagoon) located approximately 250 feet west of San Francisco Bay (see **Figure 3-2**). The site is bounded to the east by US 101, to the west and south by Bayshore Boulevard, and by the City and County of San Francisco to the north.

2.2.2 PHYSICAL SETTING

The Specific Plan area is bisected in a north–south direction by the Caltrain railroad right-of-way and in an east–west direction by Visitacion Creek. The majority of the Specific Plan area is flat or gently sloping toward San Francisco Bay, with an elevation range of 10 to 50 feet above mean sea level. The most prominent natural feature within the Baylands is Icehouse Hill, located in the southwestern portion of the site, which ranges from 25 to 200 feet above mean sea level. There are steep cuts on the east side of Icehouse Hill along the west side of the Caltrain

[33] A portion of the Specific Plan area is currently within the Beatty Subarea. As part of the 2025 Specific Plan project, a General Plan amendment is proposed to place the entirety of the Specific Plan area within the Baylands Subarea.

[34] Approximately 26 acres of the Baylands Specific Plan's existing 558.3-acre land area is subject to sea level rise through the Year 2100. Thus, Specific Plan land use development statistics are based on 532.3 acres of land area (558.3 acres of existing land area – 26 acres subject to approximately 83 inches of sea level rise through 2100 = 532.3 net acres of land for development purposes).

railroad line and more gently sloping cuts along Bayshore Boulevard on the west side of the hill. The most prominent manmade feature within the Baylands is the former Brisbane landfill in the eastern portion of the site. The former landfill appears as two rectangular plateaus, bounded by manufactured slopes with Visitacion Creek running between them.

Major regional transportation facilities connecting the Baylands and Brisbane to the Bay Area region and beyond include the US 101 freeway via the "Candlestick" and Sierra Point Parkway interchanges adjacent to and within the Baylands, respectively. Caltrain, a major commuter line connecting San Francisco with communities in the Peninsula region and San Jose, has tracks that bisect the Baylands, with its Bayshore station located at the northern end of the site. Local transit services are available through the SamTrans and San Francisco Muni systems along Bayshore Boulevard immediately to the west of the Baylands.

2.2.3 HISTORY OF THE BAYLANDS

The earliest recorded non-indigenous land use in what is now Brisbane was ranching. The Guadalupe Valley, within which Central Brisbane, Crocker Park, and the Northeast Ridge are located, was part of an 1838 Mexican land grant known as *Rancho Cañada de Guadalupe la Visitacion y Rodeo Viejo*. Charles Crocker purchased most of this land grant in 1884 and called it Visitacion Ranch.

a. Filling of San Francisco Bay to Create the Baylands

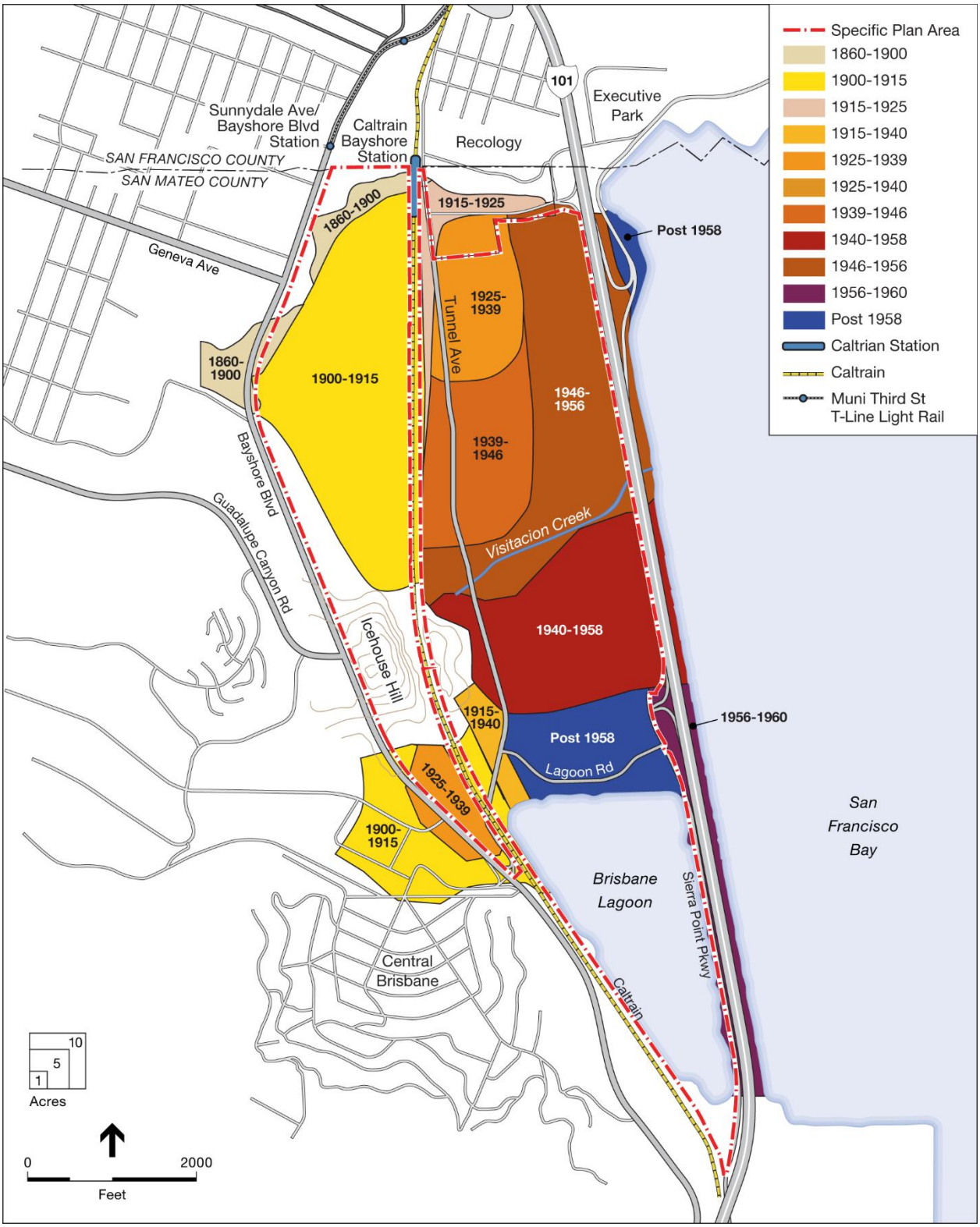
As shown in **Figure 2-3**, the majority of the Baylands was historically part of San Francisco Bay. Filling of the Bay to create the Baylands started in the 1860s with construction of a rail line from San Francisco to San Jose. After the 1906 San Francisco earthquake, the area west of the rail corridor was filled in primarily with rubble generated by demolition of damaged San Francisco structures.

By 1915, the area west of the rail line had been filled and was no longer part of the Bay. Filling of the Bay to create the Brisbane Landfill progressed from north to south starting about 1915, with fill operations completed in the early 1960s.

b. Historic Uses of the Baylands

The primary historic uses of the Baylands include the former Southern Pacific Bayshore Railyard west of the Caltrain right-of-way and the former Brisbane Landfill east of the rail line.

Figure 2-3: Historic Filling of San Francisco Bay to Create the Baylands



Southern Pacific Railroad Maintenance Yard

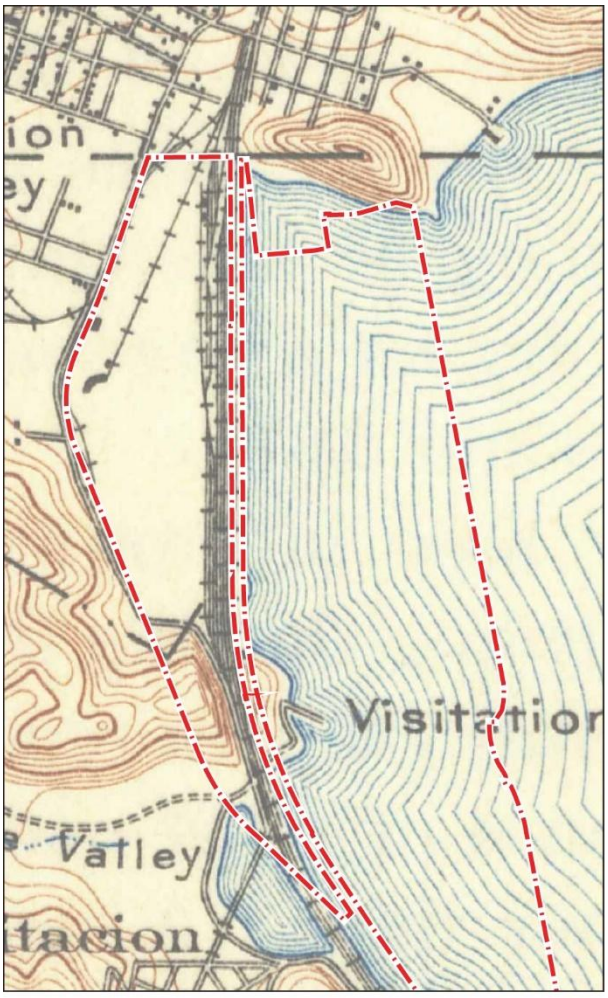
The San Francisco & San Jose Railroad (SF&SJRR) Company completed the rail line connecting the two cities in 1864 and was consolidated into the Southern Pacific Railroad (SPRR) system in 1870. At the turn of the 20th century, SPRR initiated extensive improvements to the rail line, including construction of the "Bayshore Cutoff," a new level route that more closely followed the San Francisco Bay shoreline at the time.

As part of the Bayshore Cutoff project, a modern freight terminal designed to replace the old machine shops and car repair and roundhouse facilities in San Francisco was constructed on approximately 200 acres of fill at Visitacion Bay within what is now the western portion of the Baylands site. The new "Bayshore Yard," approximately 8,400 feet long, included a roundhouse, machine and car shops, and a hump.[35] The Roundhouse at the Bayshore Yard was built circa 1907 to service freight locomotives and is now listed on the National Register of Historic Places. The former Tank and Boiler Shop at the Bayshore Yard was built in 1920 to maintain and repair the iron boilers on the steam locomotives.

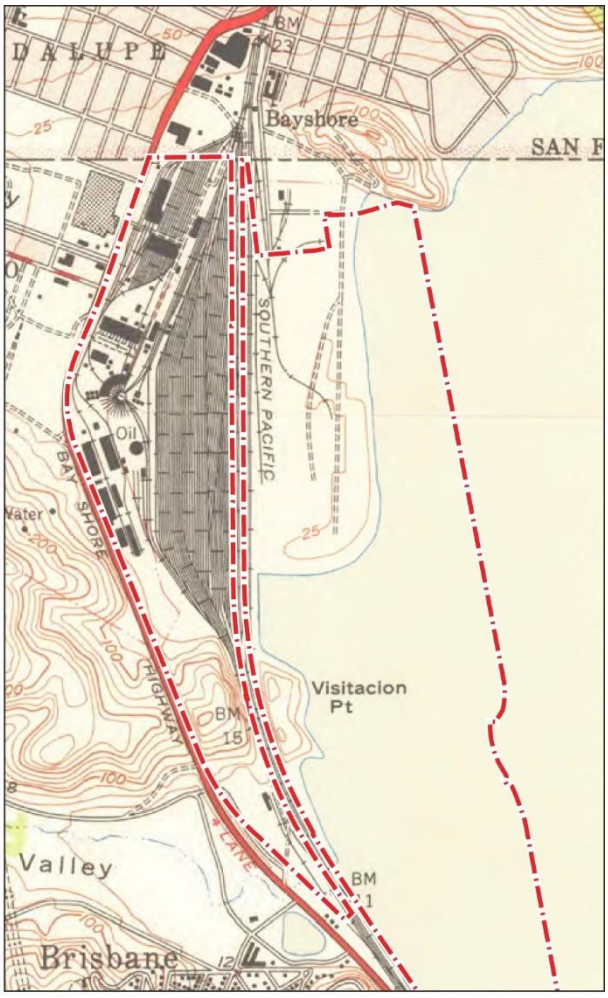
Use of the freight yard ceased in the 1960s and the yard was predominantly idle at the time of its purchase in the late 1980s by Tuntex, now Sunquest Properties, Inc., the current owner of the site. Caltrain took over the Union Pacific rail line in the 1980s, and by 1989 nearly all of the railroad spur tracks, numerous maintenance shops, and smaller support structures had been removed from the Baylands. **Figure 2-4** shows changes in the former railyard site over time.

[35] A railroad "hump" is an artificially built hill that uses the force of gravity to propel the cars through the various switches in order to arrange them into various trains without having to use switch engines to guide the cars into place. The hump at Bayshore is no longer extant.

Figure 2-4a: Former Brisbane Rail Yard over Time (1915–1950)



1915
The railroad through this site officially opened for service on December 8, 1907.



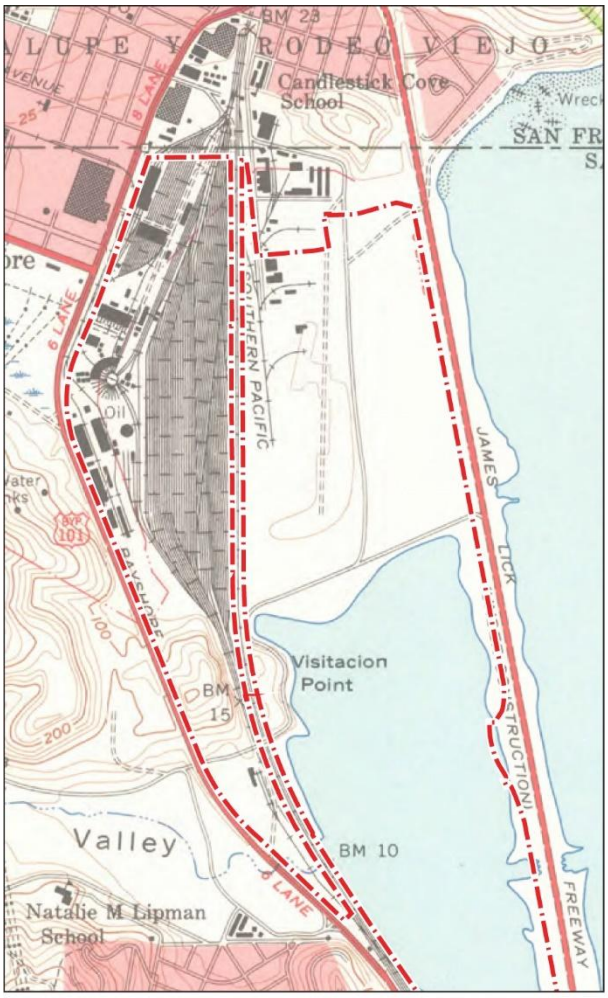
1950
Peak of railroad operations. By 1950, approximately 75 railroad maintenance shops and smaller structures had been constructed along the western edge of the railroad yard and clustered along Bayshore Boulevard.

Figure 2-4b: Specific Plan Area as Viewed Looking North from Icehouse Hill, 1905

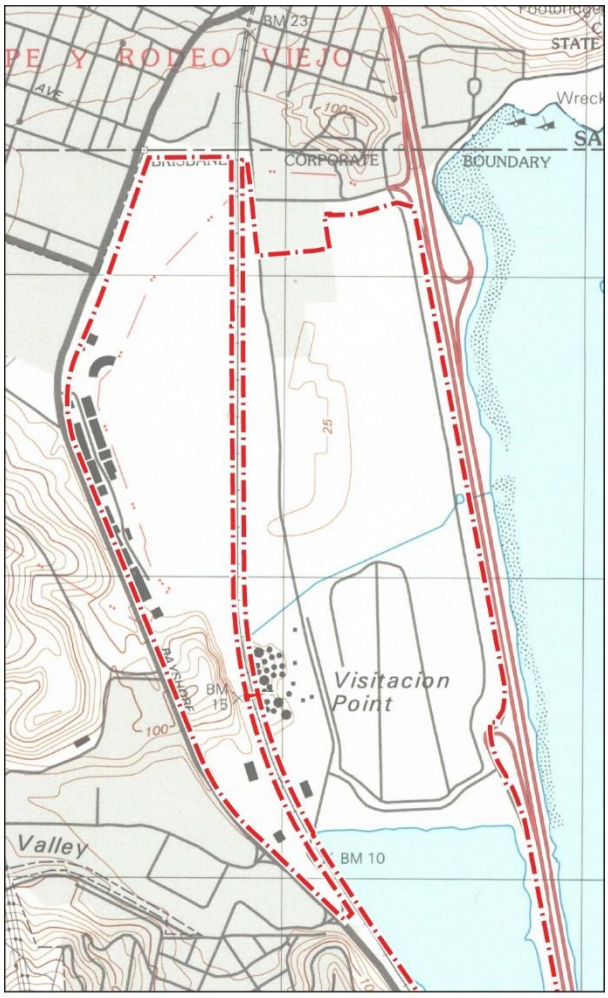


The in-progress railroad line through the middle of the photo is the Bayshore Cutoff that would become the eastern edge of the SPRR Bayshore yard through what is now the Baylands. The area east of the rail line would be filled with solid waste starting in the 1930s, creating the "Brisbane Landfill." The hill in the back right is Candlestick Point. (OpenSFHistory.org 2023)

Figure 2-4c: Former Brisbane Rail Yard over Time (1956–1995)



1956
The construction of U.S. Highway 101 (U.S. 101) in the mid-1950s established the easternmost boundary of the Bay fill.

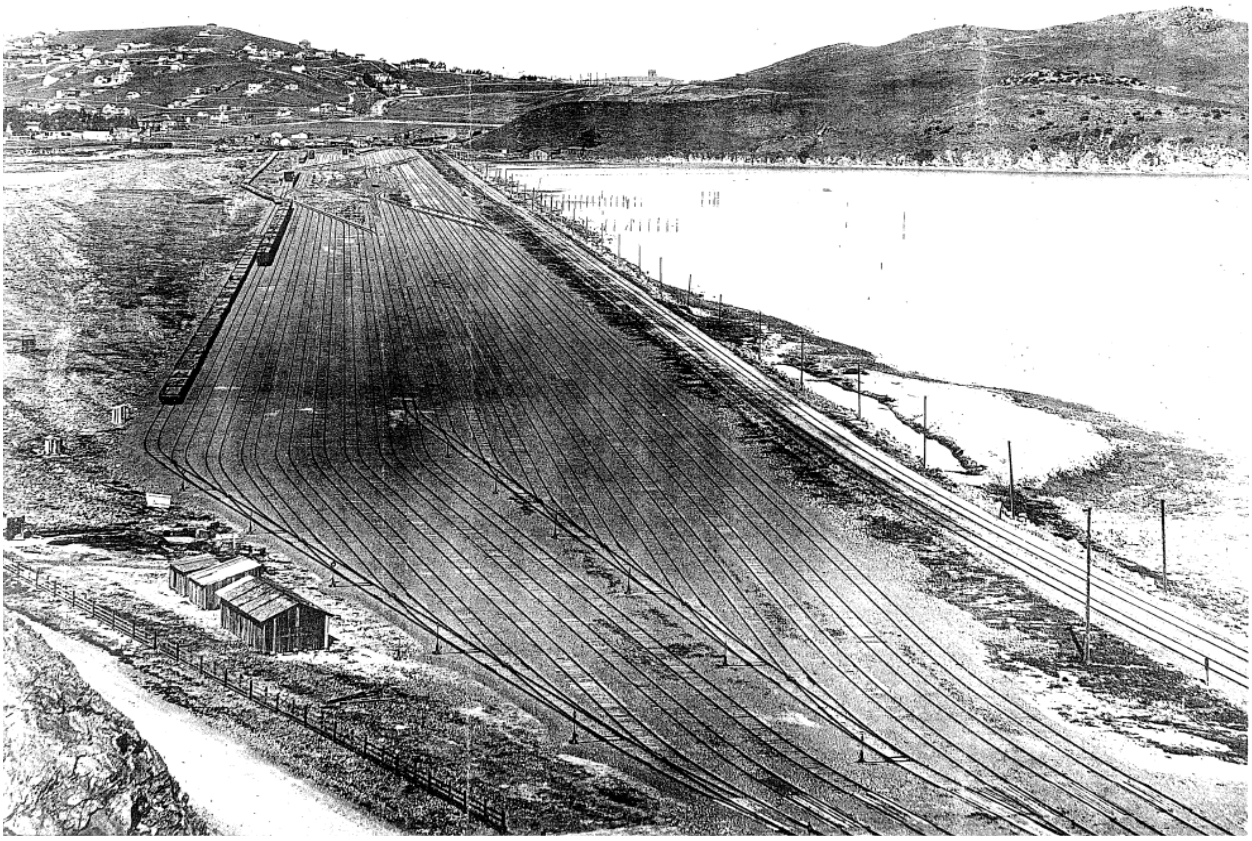


1995
Use of the freight yard ceased in the 1960s, and by 1989 nearly all of the railroad spur tracks and numerous other maintenance shops and smaller support structures had been removed. This 1995 map shows present day conditions and full extent of site fill.

Brisbane Landfill

The area east of the rail corridor was used as a municipal landfill by San Francisco beginning in the 1930s. Starting from the north, dumping continued southward until it was finally stopped in the 1960s at the edge of what is now Brisbane Lagoon. The construction of US 101 in the mid-1950s established the easternmost boundary of the landfill. The former Brisbane Landfill site encompasses an area of approximately 364 acres and is bounded by the Union Pacific/Joint Powers Board railroad corridor (Caltrain tracks) to the west, US 101 to the east, and Brisbane Lagoon to the south. After landfill operations ceased in 1967, the area was buried with a 20- to 30-foot cover of soil and has been used since the 1980s until recently for soil and construction material recycling.

Figure 2-4d: View of Bayshore Railroad Yard from Bayshore Point, February 24, 1911



SOURCE: Collection of Ralph Domenici, sanfranciscotrains.org

The former Champion Speedway, a ⅛-mile oval racetrack, operated on the former landfill from approximately 1963 to 1979 (Justice, no date). The speedway held a number of events during this period, including automobile races and demolition derbies. After closure, the speedway was demolished and covered by fill.

Industrial and Commercial Uses

Simultaneous with landfill operations, various industrial and commercial businesses were established within the Baylands. The Gamerston & Green Lumber Company, Mars Metal Company, and Jones Hardwood Plywood Company are referenced on the 1946 Southern Pacific station plan of the Bayshore freight yard. Two large lumber yards—Van Arsdale Lumber, later Van Arsdale-Harris Lumber Company and Sierra Point Lumber and Plywood Company—appear to have been constructed in the early and late 1960s, respectively. Sierra Point Lumber continues to operate within the Baylands. The Bayshore Industrial Park consists of a series of buildings used for various industrial and service commercial purposes, such as warehousing/storage and auto repair.

2.2.4 EXISTING USES WITHIN THE BAYLANDS

Although the Specific Plan area may appear to be largely vacant at the present time, a large-scale Southern Pacific Railroad maintenance yard and a landfill were previously constructed and operated for decades within the western and eastern portions of the Baylands, respectively. Several remnants from the Southern Pacific Railroad maintenance yard and other uses remain within the Baylands, including small-scale industrial businesses along Industrial Way and Bayshore Boulevard in the northwestern portion of the Baylands; the Machinery & Equipment building associated with former railyard uses; some Recology facilities, the Golden State Lumber, Kinder Morgan Tank Farm, and interim and temporary uses along Tunnel Avenue; North County Fire Authority (Brisbane) Fire Station No. 81; utility facilities; and the Caltrain Bayshore Station. The remains of the historic Roundhouse, associated with the former rail maintenance yard, are proposed to be restored for adaptive reuse as part of the Specific Plan. Other uses include the Mission Blue Nursery, which is proposed to be moved to Icehouse Hill, and a horse boarding stable on the north slope of Icehouse Hill. Municipal waste deposited between 1932 and 1967 in the former Brisbane Landfill east of the Caltrain right-of-way on the Baylands site also remains. Existing uses within the Specific Plan area that are anticipated to continue at their current location and level of operations include:

- Kinder Morgan Energy Tank Farm
- Machinery & Equipment, Inc., equipment manufacturing and distribution
- Bayshore Sanitary District pump station
- Golden State Lumber
- Recology facilities along Tunnel Avenue
- Caltrain Bayshore Station

a. Remaining Railyard Buildings: Roundhouse and the Machinery & Equipment Building

Buildings associated with the former SPRR railyard uses that remain within the Baylands include the Roundhouse and the Machinery & Equipment.[36] Constructed circa 1907, the Roundhouse remains a classic example of a railroad roundhouse, despite being severely damaged by fire in recent years. Fire damage occurred primarily in the western half of the Roundhouse, with portions of its roof now missing, charred timbers, and missing or broken window frames. This abandoned building also shows evidence of vandalism and graffiti, despite the chain-link fencing that encircles the building.

The Visitacion Ice Manufacturing Plant, located at the southern end of the railroad yard, was constructed in 1924 as a Pacific Fruit Express Ice Manufacturing Plant to supply ice to the trains

[36] The Lazzari Fuel building, which served a tank and boiler shop for the SPRR rail maintenance yard and was documented as historic in the Program EIR, was destroyed by fire in March 2024.

of the Pacific Fruit Exchange going in and out of San Francisco. Use of the building as an ice plant was discontinued in 1955. It currently houses Machinery & Equipment, Inc.

b. Brisbane Bayshore Industrial Park

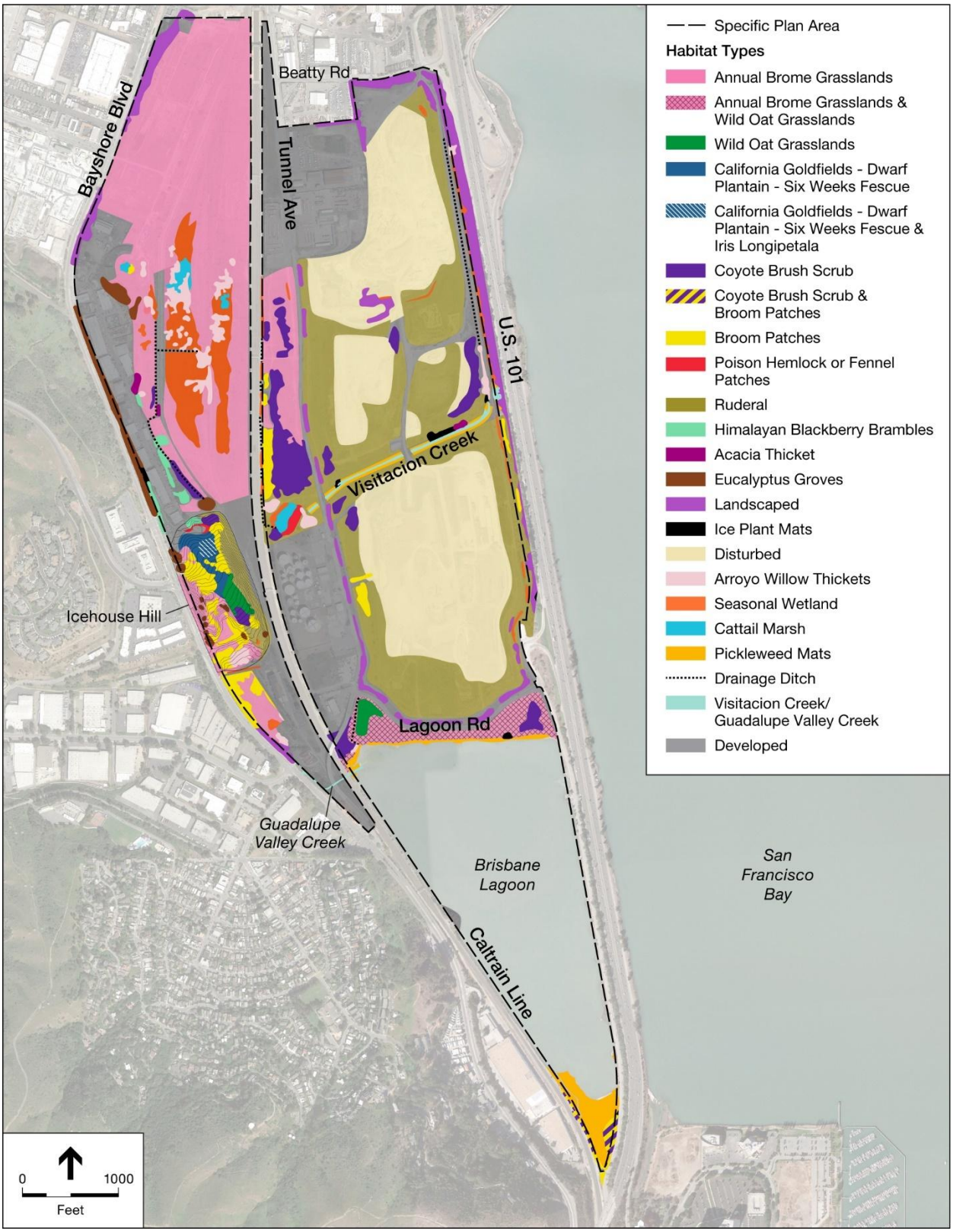
The Brisbane Bayshore Industrial Park is a multi-tenant industrial/warehouse complex with approximately 231,400 sf of building area along Industrial Way in the northwestern portion of the Baylands. Existing businesses range from automotive repairs, engineers, and landscapers to product distributors.

c. Lagoon and Other Natural Resources

The open water/estuarine communities of the Brisbane Lagoon are located at the southern end of the Specific Plan area (see **Figure 2-5**). The lagoon currently encompasses approximately 121.8 acres of open water subject to muted tidal influence from San Francisco Bay via two large (12′ high x 12′ deep), 300-foot long concrete box culverts under US 101, which otherwise separates the lagoon from the Bay. The lagoon's shorelines contain little beach area during high tides and most of the shoreline that is exposed during low tides is protected by riprap. Small areas of mudflats are present along portions of the Bay shoreline and within the lagoon at low tide. Drainages within the Baylands include Guadalupe Valley Creek and manmade Visitacion Creek, while open water occurs within the Brisbane Lagoon. These drainages and open water habitat, including wetlands and marsh habitats, are remnants of extensive wetland and tidal lands that once fringed San Francisco Bay in the Brisbane area.

Vegetation and wildlife habitat have been, and continue to be, highly disturbed within the majority of the Baylands, which is dominated by non-native ruderal and grassland species, with landscaped areas containing non-native trees and shrubs also located in several areas. Icehouse Hill is the only remaining native substrate in the Baylands and is consistent with nearby San Bruno Mountain and supports habitats similar to those found in the San Bruno Mountain Habitat Conservation Plan (HCP) area. Native vegetation types, including coastal scrub and perennial grasslands, are confined to relatively small areas on Icehouse Hill, as well as within the tidal and freshwater wetlands along the edges of drainage channels and Brisbane Lagoon, seasonal wetlands along the edges of drainage channels and Brisbane Lagoon, and seasonal wetlands in the western portion of the site.

Figure 2-5: Baylands Terrestrial Habitats



2.2.5 EXISTING INFRASTRUCTURE, PUBLIC SERVICES, AND FACILITIES SERVING THE BAYLANDS

a. Transportation Facilities

Regional vehicle access to the Baylands is provided by the US 101 freeway and the following key arterial and collector streets within Brisbane and the adjacent cities of San Francisco and Daly City.

- **Bayshore Boulevard**, a four-lane arterial street with left turn lanes at major intersections and striped bicycle lanes throughout the City. Bayshore Boulevard forms the western boundary of the Baylands and is the City's primary north–south roadway, connecting Brisbane to San Francisco, Daly City, and South San Francisco. Together with its connecting minor arterial streets, Bayshore Boulevard also provides linkages to and from US 101. As a result, Bayshore Boulevard's performance affects traffic throughout the City.

  Bayshore Boulevard functions primarily as a regional roadway through Brisbane when congestion causes traffic to be diverted onto Bayshore Boulevard through the City of Brisbane. The majority of traffic on Bayshore Boulevard within Brisbane is between San Francisco and cities to the south, with a smaller amount (approximately 15 percent of all trips) traveling between Daly City and the cities to the south. Depending on the time of day and location, regional through traffic makes up 60 to 80 percent of traffic on Bayshore Boulevard. On a daily basis, only 10 to 15 percent of all trips on Bayshore Boulevard are generated from Brisbane's residential neighborhoods and 15 to 20 percent are generated by Brisbane's employment centers.

- **Geneva Avenue**, a four-lane east–west arterial street running between I-280 (adjacent to the Balboa Park Bay Area Rapid Transit (BART) Station and the City College of San Francisco Phelan Campus) and Bayshore Boulevard, where it currently terminates adjacent to the Baylands. As part of Baylands development, Geneva Avenue will be constructed through the Baylands to provide an important connection to US 101 for traffic generated within both Brisbane and Daly City. Improvements are proposed to replace the current US 101 on- and off-ramps at Alana Way and Harney Way with a new, more efficient configuration at the future Geneva Avenue, known as the "Candlestick Interchange."

- **Guadalupe Canyon Parkway** is a four-lane east–west arterial street near the Baylands that runs from Bayshore Boulevard over the hills to Daly City, where it becomes East Market Street.

- **Valley Drive** is a four-lane east–west collector street between Bayshore Boulevard and West Hill Drive.

- **Sunnydale Avenue** is a two-lane east–west street north of Geneva Avenue that runs between Bayshore Boulevard and Persia Avenue and provides access to the Visitacion Valley neighborhood of San Francisco.
- **Alana Way and Harney Way**, short segments of which are within Brisbane, serve as principal arterials connecting to US 101 from Beatty Avenue in Brisbane and Harney Way at Candlestick Point in San Francisco. Alana Way has a narrow three-lane underpass beneath US 101 with two lanes westbound and one lane eastbound.

Existing roadways that provide internal circulation within the Baylands include the following:

- **Tunnel Avenue** is a two-lane north–south collector street that connects to Bayshore Boulevard (1) to the north in San Francisco and (2) to the south at the Old County Road intersection, forming the entry into Central Brisbane. The Bayshore Caltrain station and a small park-and-ride lot are accessible from Tunnel Avenue.
- **Beatty Avenue** is a two-lane east–west collector street near the northern edge of the Baylands, providing access between Tunnel Avenue and the US 101 interchange at Alana Way and Harney Way.
- **Lagoon Road** is a two-lane collector street that borders the lagoon in the southern portion of the Baylands and runs east–west from Sierra Point Parkway to Tunnel Avenue.
- **Sierra Point Parkway** is a two-lane collector roadway that runs south from the US 101 southbound interchange at Lagoon Road to the US 101 northbound interchange and into the Sierra Point business park southeast of the Baylands.

b. Existing Water Supply

Water service is currently provided to the Baylands by the City of Brisbane, which operates two separate water districts in an integrated system to provide water to residents and businesses throughout the City. Brisbane does not have its own groundwater or surface water supplies and therefore purchases potable water from the San Francisco Public Utilities Commission (SFPUC), which operates the water system for San Francisco and serves as a wholesale water supplier to agencies in San Mateo, Santa Clara, and Alameda counties.

c. Wastewater

Wastewater collection services are provided by the Bayshore Sanitary District (BSD) for all upland areas of the Baylands north of Brisbane Lagoon, and by the City throughout the rest of Brisbane. Both agencies maintain wastewater collection facilities and contract with the SFPUC for wastewater treatment.

Within the Baylands is a 0.1-acre "Carlyle Pump Station" sewer pump station that was built in 1972 and is operated by the BSD. The majority of the BSD's wastewater flows into this station and is pumped to the SFPUC's southeast treatment plant where it receives secondary treatment. The station has a capacity to pump over 5 million gallons per day. Its current average daily pump flows are 380,000 gallons during dry weather and 1.2 million gallons during wet weather.

Existing wastewater flows from the Baylands are collected and conveyed for treatment at the SFPUC's Southeast Water Pollution Control Plant (SEP) through two connections to the existing SFPUC 78-inch-diameter combined sewer/stormwater transmission main located within Sunnydale Avenue and underneath portions of the Recology facility.

Located in the Bayview District of southeastern San Francisco, the SEP is a 250-million-gallon-per-day (MGD) pure-oxygen-activated sludge-treatment facility that provides secondary treatment and serves municipal and industrial customers on the east side of San Francisco, in Brisbane, and within the BSD. The SEP is part of San Francisco's combined sewer system, which allows the collection and treatment of both wastewater and stormwater. The SEP does not currently have the capability to produce recycled water.

d. Solid Waste Management

The Baylands is served by Recology San Francisco. Other portions of Brisbane are served by South San Francisco Scavenger. Recology provides solid waste collection, recycling, and disposal services for residential and commercial customers in San Francisco and the Baylands through a three-cart collection program that requires, under San Francisco's Mandatory Recycling and Composting Ordinance, customers to sort solid waste into recyclables; compostable items, such as food scraps and yard trimmings; and garbage. Materials are collected and hauled to the 60-acre Recology transfer station at 501 Tunnel Avenue, adjacent to the Specific Plan area's northerly boundary, which houses a transfer facility where landfill-bound refuse and composting facility-bound organics are consolidated prior to transportation. An integrated Material Recovery Facility (iMRF) handles construction and demolition (C&D) materials.

Recyclable materials are sent to Recology's recycling center (Recycle Central) at Pier 96 in San Francisco where they are separated and sold to manufacturers that turn the materials into new products. Recycle Central processes up to 700 tons per day, achieving an estimated 80 percent recovery rate with <2 percent contamination for fiber and other commodities.

Recology's Blossom Valley Organics – North composting facility processes in excess of 320,000 tons of organic materials each year, including food scraps, plant trimmings, and food-soiled fiber products. The 126-acre facility is located in the San Joaquin County community of Vernalis.

Solid waste that is not recycled is hauled to Recology's Hay Road Landfill in Solano County (City and County of San Francisco 2015). The Hay Road Landfill is permitted by Solano County and the California Department of Resources Recycling and Recovery (CalRecycle) to accept up to 3,200 tons per day of municipal solid waste for disposal. The Hay Road Landfill had 27,569,000 cubic yards (75 percent) of its permitted capacity remaining as of 2024 and an estimated remaining site life of 38.0 years.

e. Police Services

The Brisbane Police Department provides security and police services within the Brisbane city limits from its headquarters in City Hall, located less than 0.5 miles west of the Baylands. The Brisbane Police Department is staffed with 16 sworn officers and 4 support staff members. The staff is comprised of one chief, one commander, four patrol sergeants, one corporal, and nine patrol officers. Officers are assigned specialty positions; for example, there is one K9 officer, two traffic officers, and one SWAT officer. Current patrol staffing consists of a single beat with a minimum of one sergeant or shift supervisor and two other officers per shift.

The Brisbane Police Department maintains 13 vehicles, including six patrol cars, two motorcycles, one pick-up truck, three unmarked detective vehicles, two unmarked administration vehicles, and one unmarked Code Enforcement vehicle

f. Fire Protection

Fire protection services within Brisbane and the Baylands are provided by the North County Fire Authority (NCFA). The City of Brisbane has entered into an agreement along with other neighboring communities to form the NCFA, a Joint Powers Authority that provides fire protection, emergency medical, and other hazardous assistance and public services to the communities of Brisbane, Daly City, and Pacifica. The NCFA currently operates nine fire companies (eight engines and one ladder truck) in eight fire stations throughout its 60-square-mile service area. NCFA fire stations include:

- City of Brisbane
    - Fire Station No. 81 at 3445 Bayshore Boulevard (engine company)
- City of Daly City
    - Fire Station No. 91 at 151 Lake Merced Boulevard (engine company)
    - Fire Station No. 92 at 18 Bepler Street (engine company)
    - Fire Station No. 93 at 464 Martin Street (engine company)
    - Fire Station No. 94 at 444 Gellert Boulevard (engine company)
    - Fire Station No. 95 at 191 Edgemont Drive (engine and ladder truck company)

- City of Pacifica
    - Fire Station No. 71 at 616 Edgemar Avenue (engine company)
    - Fire Station No. 72 at 1100 Linda Mar Boulevard (engine company)

There are at least three firefighters, including at least one paramedic, assigned to each engine while the aerial ladder truck is staffed with four personnel. In addition, a minimum of two battalion chiefs and one deputy fire chief are on duty 24/7. Currently, the NCFA maintains 30 personnel on duty daily.

The City of Brisbane and the Baylands are served by NCFA Fire Station No. 81 (Brisbane), which is located at 3445 Bayshore Boulevard at the intersection of Bayshore Boulevard and Valley Drive in Brisbane. The station is staffed 24/7 by one three-person engine company. A total of 13 personnel are assigned to Station No. 81, including one Assistant Fire Marshal, three captains, and nine firefighters.

g. Public Schools

The Bayshore Elementary School District (Bayshore ESD), Brisbane Elementary School District (Brisbane ESD), and Jefferson Union High School District (Jefferson UHSD) provide grades pre-kindergarten (PK)–12 public education to Brisbane residents. The majority of the Baylands is within the Bayshore ESD, with the exception of industrial uses along Industrial Way, which are within the Brisbane ESD. The Baylands lies entirely within the Jefferson UHSD.

The Bayshore ESD serves residents in the eastern portion of Daly City and the majority of the portion of the City of Brisbane east of Bayshore Boulevard. The District currently serves grades PK–8 from the Bayshore School located 0.5 miles west of the Baylands at 155 Oriente Street in Daly City. The Bayshore School, which is designed to accommodate 568 students, had an enrollment of 322 students in 2022–2023, down from its peak of 381 in the 2019–2020 school year.

The Brisbane School District is a transitional kindergarten (TK)–8 school district consisting of two elementary schools and one middle school. The district had a combined enrollment of 454 students in the 2022–2023 school year, down from the peak of 475 students in the 2019-2020 school year. Brisbane Elementary School is located less than 1 mile west of the Baylands at 500 San Bruno Avenue. Panorama Elementary School, located at 25 Bellevue Avenue in Daly City, is less than 2 miles west of the Baylands. Lipman Middle School, located at 1 Solano Street, is also less than 1 mile from the Baylands.

Residents within the Bayshore and Brisbane elementary school districts are also residents of the Jefferson Union High School District, which serves approximately 4,330 students in grades 9–12, as well as adults, in the cities of Brisbane, Pacifica, Daly City, Colma, South San Francisco, San Bruno and a portion of unincorporated San Mateo County. Jefferson UHSD operates four high

schools—Jefferson (Daly City), Westmoor (Daly City), Terra Nova (Pacifica), and Oceana (Pacifica)—in addition to the Thornton continuation high school (Daly City). The two Jefferson UHSD schools closest to the Baylands are Jefferson High School, approximately 3 miles west of the Baylands at 6996 Mission Street in Daly City; and Westmoor High School, approximately 4 miles west of the Baylands at 131 Westmoor Avenue in Daly City.

h. Public Libraries

The existing Brisbane Library opened at its new location at 163 Visitacion Avenue in April 2021. A library card issued at the Brisbane Library entitles patrons to easily accessible and online resources as well as to use the resources and services available at all the libraries in the Peninsula Library System, which is a consortium of 35 public and community college libraries working together to provide innovative and cost-effective service.

2.2.6 BAYLANDS LAND OWNERSHIP

As shown in **Figure 2-6**, the vast majority of the upland portion of the Baylands is owned by Sunquest Properties. In addition to Sunquest Properties, there are several smaller ownerships within the upland portions of the Baylands including Recology, Golden State Lumber, Kinder Morgan, and others. The City of Brisbane owns the 60-foot-wide Lagoon Road right-of-way, which crosses the southern end of the Baylands between the existing Sierra Point Parkway freeway off-ramp and Tunnel Avenue. In addition, the Bayshore Sanitation District holds a 60-foot-wide access ("roadway") easement that follows Tunnel Avenue south of the Golden State Lumber site, veering west before reaching Visitacion Creek; this easement provides access to the BSD's pump station. The Caltrain Joint Powers Board holds a 30-foot-wide right-of-way parallel to and west of Tunnel Avenue. Additionally, a drainage easement follows the existing drainage channel, and a water line easement crosses the Brisbane Baylands and terminates near the Kinder Morgan Energy Tank Farm.

Sunquest Properties also owns 75 of the 121.8 acres of the Brisbane Lagoon. The remaining lagoon acreage is owned by the City of Brisbane and other private owners. The lagoon property is separated from Sunquest Properties' upland holdings by a 600-foot-wide strip of lagoon shoreline owned by the State Lands Commission (see **Figure 2-6**).

Figure 2-6: Existing Baylands Ownership



2.3 EXISTING LAND USE REGULATIONS

2.3.1 BRISBANE GENERAL PLAN

The Brisbane General Plan provides for a transit-oriented variety of residential, employment- and revenue-generating uses; habitat management; recreation; and public and semi-public facilities within the Baylands. The General Plan currently designates the Specific Plan area as Baylands Planned Development (Residential Permitted), Baylands Planned Development (Residential Prohibited), Heavy Commercial, Marsh/Lagoon/Bayfront, and Public Facilities and Parks.

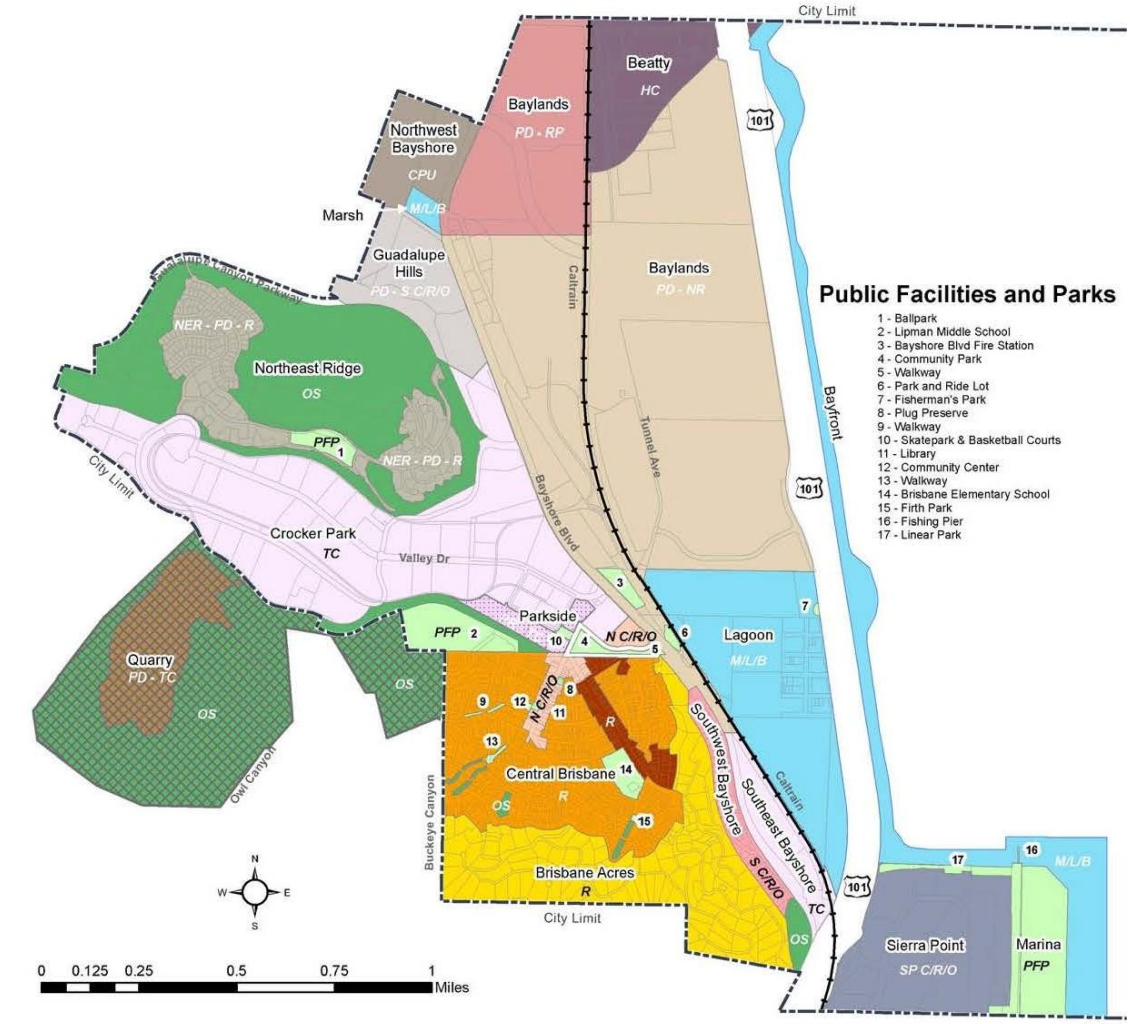
a. General Plan Amendment GP-1-18, Measure JJ

On July 19, 2018, the Brisbane City Council approved General Plan Amendment GP-1-18 permitting development of 1,800 to 2,200 dwelling units (the upper range of which is not to be exceeded when including all units permitted under the state density bonus or other laws providing for affordable housing), up to 6.5 million s.f. of new commercial development, and an additional 500,000 s.f. of hotel development within the Baylands Subarea of the Brisbane General Plan. The General Plan requires non-residential development to be distributed both to the west and east of the Caltrain rail line. Residential uses are permitted only within the northwest quadrant of the site bounded by Bayshore Boulevard on the west, the City and County of San Francisco on the north, the Caltrain rail line on the east, and the line of Main Street (extended) on the south as shown on **Figure 2-7**.

General Plan Amendment GP-1-18, which was submitted to and ratified by the voters via passage of Measure JJ in November 2018, established the following Policy BL.1 for the Baylands:

> Development within the Baylands Subarea shall be subject to the City's approval of a single specific plan for the entirety of the Baylands Subarea and a development agreement that is consistent with General Plan policies, incorporates all applicable EIR mitigation measures, and is consistent with the following standards:
>
> A. The single specific plan and development agreement subject to City review and approval referenced above shall include:
>
> - Detailed plans for Title 27 compliant closure of the landfill and Remedial Action Plans for OU-1 and OU-2 that have been approved by all appropriate regulatory agencies, which include, but shall not be limited to, CalRecycle, the San Mateo County Environmental Health Department, the California Department of Toxic Substances Control, and the California Regional Water Quality Control Board (RWQCB);

Figure 2-7: Existing Brisbane General Plan Land Use Diagram



Residential
- Brisbane Acres Residential (0-2 DU/Acre) ***R***
- Central Brisbane Residential (2.5-14 DU/Acre) ***R***
- Central Brisbane Residential (15-30 DU/Acre) ***R***

Other
- Commercial Public Utilities ***CPU***
- Public Facilities and Parks ***PFP***
- Open Space ***OS***
- Marsh/Lagoon/Bayfront ***M/L/B***

Mixed Use
- Neighborhood Commercial/Retail/Office ***N C/R/O***
- Parkside Residential - Trade Commercial (20-28 DU/Acre)* ***PR - TC***
- Subregional Commercial/Retail/Office ***S C/R/O***

Commercial
- Sierra Point Commercial/Retail/Office **SP C/R/O**
- Trade Commercial ***TC***
- Heavy Commercial ***HC***

Planned Development
- Quarry Planned Development - Trade Commercial ***PD - TC***
- Guadalupe Hills Planned Development - Subregional Commercial/Retail/Office ***PD-S C/R/O***
- Baylands Planned Development - NonResidential ***PD - NR***
- Baylands Planned Development - Residential Permitted ***PD - RP***
- Northeast Ridge Planned Development - Residential** ***NER - PD - R***
  (Landmark: 5 DU/Acre, Viewpoint: 10 DU/Acre, Altamar: 15 DU/Acre)

- Brisbane City Limits
- Sphere of Influence **Outside Brisbane City Limit**

* Parkside residential density is by Precise Plan, as an overlay district within Crocker Park.
** Northeast Ridge residential density is as established in the Planned Development Permit

DU/Acre = Dwelling Units per Acre

September 5, 2019

- A specific schedule establishing the time frames by which (i) the landfill must be closed in full compliance with Title 27 and (ii) the remediation of OU-1 and OU-2 must be completed; and
- Specific means by which the City may enforce the applicant's adherence to the schedule for closure and remediation and specific consequences, e.g., monetary penalties, suspension of building permits, etc., that the City may impose on the applicant for failing to adhere to the schedule.

B. A reliable water supply approved by the City of Brisbane to support proposed uses within the Baylands shall be secured prior to site development.

C. All residential development shall be designed and remediated to accommodate ground level residential uses and ground level residential-supportive uses such as daycare, parks, schools, playgrounds, and medical facilities.

D. Each increment of development shall be provided with appropriate transportation related and other infrastructure, facilities, and site amenities as determined by the City. Such transportation related and other infrastructure, facilities, and site amenities (e.g., parks, open space preservation, habitat enhancement) shall be provided at the developer's cost.

E. Baylands development shall be revenue positive to the City on an annual basis where all City costs (e.g., annual operating costs, maintenance and replacement of equipment, facilities, infrastructure, cultural resource and habitat protection and management etc.) are exceeded by project-generated revenues to the City (e.g., to the City's General Fund, enterprise funds, special funds, etc.) during all phases of development and upon final buildout.

F. Sufficient assurances for the satisfactory ongoing performance of site remediation and site development (e.g., site monitoring, performance bonds, environmental insurance) shall be provided as determined by the City.

G. The required specific plan for the Baylands shall include a sustainability program for new development consistent with the principles of the Sustainability Framework for the Brisbane Baylands, Final Report accepted by the City Council on November 5, 2015. Baylands development shall be designed so as to be energy neutral on an ongoing basis.

H. Key habitat areas, including Icehouse Hill and Brisbane Lagoon and adjacent habitat as identified in the 2001 City Open Space Master Plan shall be preserved, enhanced, and protected.

I. The historic Roundhouse shall be protected and preserved. The required specific plan shall ensure rehabilitation of the Roundhouse for adaptive reuse at the developer's cost.

J. Development shall be designed to protect uses from the 100-year flood, including 100 years of projected sea level rise as determined based on regulatory standards or guidelines in effect at the time of project construction, with the reference to guidelines and sea level rise projections approved by the Director of Public Works/City Engineer based on context-specific considerations of risk tolerance and adaptive capacity.

K. Prior to the issuance of a grading permit to export soil or move soil from the existing landfill area for incorporation in a remediation or grading plan, the soil shall be tested in a manner approved by the City.

b. Housing Element

As required by state law, Brisbane's 2023–2031 Housing Element sets forth the City's plan to meet Brisbane's housing needs for all economic segments of the community from 2023 through 2031. The Housing Element establishes a quantified objective of establishing zoning to accommodate 1,588 dwelling units by January 2026.

The Specific Plan area represents approximately 81 percent of Brisbane's available inventory for the production of housing. As shown in Table 3-2 of the City's 2023–2031 Housing Element, Baylands development represents 45.7 percent of the City's quantified objective for very low-income housing, along with 44.8 percent of its low-income housing objective, 94.7 percent of its moderate-income housing objective, and 90.6 percent of the City's quantified objective for above moderate-income housing.

2.3.2 EXISTING ZONING

Six zoning districts currently apply within the Baylands Specific Plan area. The southern and eastern parts of the site are zoned Marsh Lagoon Bayfront (MLB), and the northern and western parts are zoned Commercial Mixed-Use (C-1). Lands along Industrial Way are currently zoned Manufacturing (M-1), and lands in the northeastern portion of the Baylands are zoned Heavy Commercial (C-3). **Figure 2-8** illustrates the current zoning of the Baylands.

- **Marsh Lagoon Bayfront District (MLB):** The MLB District was established to protect areas with unique aquatic resources, distinguish uses that rely on adjacency and access to aquatic and riparian areas, and establish application requirements to assure that proposed projects address the City's environmental goals for aquatic areas. The district requires a conditional use permit for all allowed uses, which include commercial recreation, personal services, retail sales and rental, educational facilities, scientific research, habitat restoration and wildlife protection, transit/transportation facilities, and marinas. Development regulations are determined by the use permit.

- **Commercial Mixed-Use District (C-1):** The purpose of the C-1 District is to (A) "provide a suitable environment for the development of tax revenue-producing commercial enterprise and to encourage the orderly development of the area so that opportunities are present to establish a mix of uses that support, enhance, and otherwise encourage the success of the district. There shall be no fabrication, manufacture, processing, or treatment of materials in this district other than that which is clearly incidental to a business where all products there from are sold on the premises;" and (B) "establish procedures to integrate commercial mixed-uses and structures that produce an attractive and safe environment which are superior to those which would result from standard district regulations."

  The C-1 District (Section 17.12.030 of the Brisbane Municipal Code) requires a conditional use permit for all development, with allowable conditional uses including retail sales, offices, residential uses, bulk sales, open space, recreational facilities, statuary, public and quasi-public facilities, service and utility uses, commercial services, hotels, research and development, and educational facilities. Under Section 17.13.040 of the Municipal Code, any development and design standards within an area zoned C-1 must be established in a specific plan adopted by resolution of the City Council for the parcels proposed for development. Section 17.13.040 states that to the extent that standards in the specific plan are inconsistent with other zoning regulations, the standards in the specific plan shall prevail.

- **Manufacturing District (M-1):** The M-1 District permits research and development, light manufacturing, assembling, processing, offices, warehousing, printing, and accessory retail uses. Conditional uses, which would require a use permit, include restaurant and bars connected with restaurant use, outside storage of trucks and equipment when properly screened, service stations, and destination retail uses. The district establishes a maximum floor area ratio of 2.0 and a maximum building height of 50 feet. Additional development regulations for the M-1 District are provided in Municipal Code Section 17.20.030.

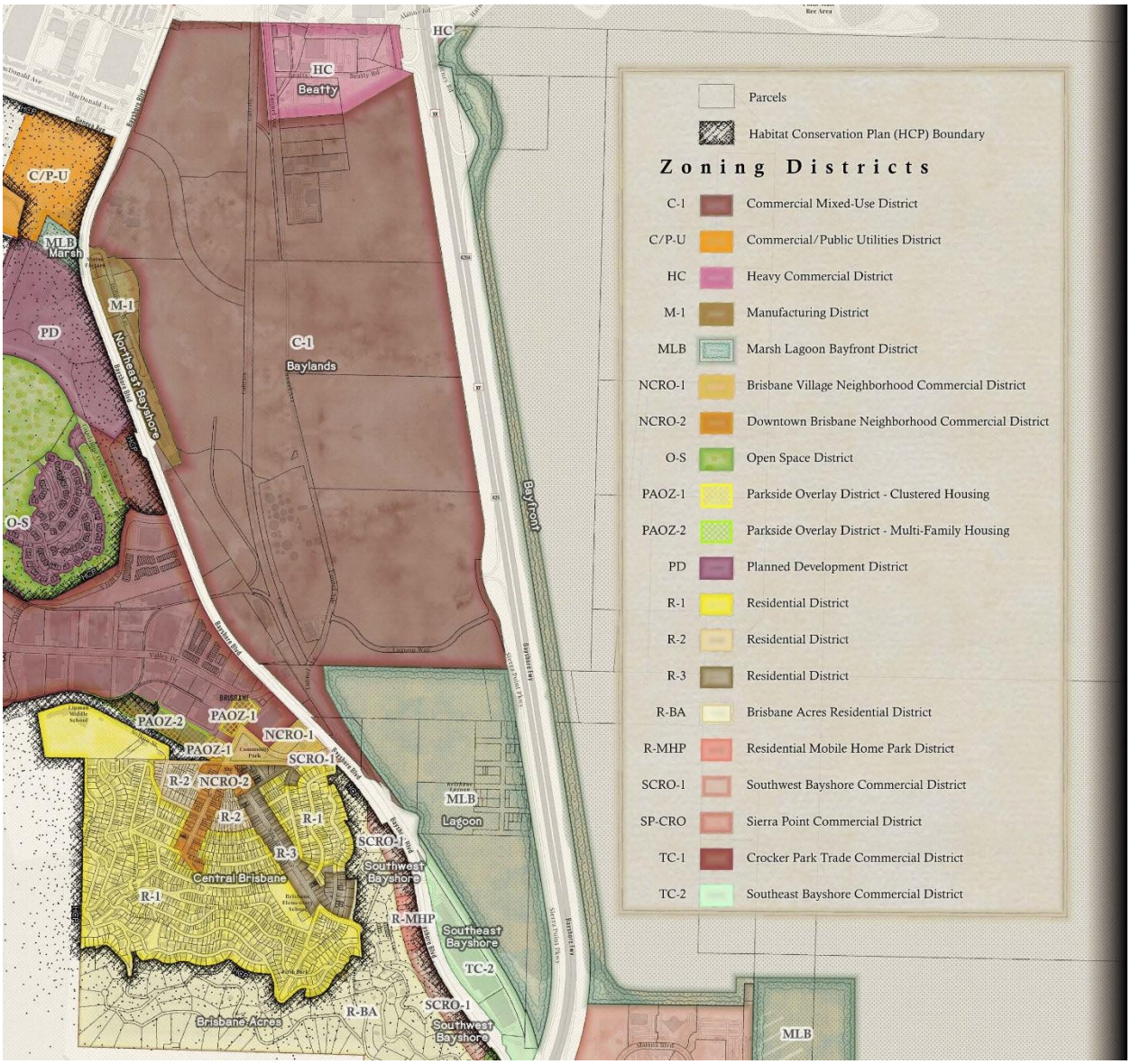
- **Heavy Commercial District (C-3):** The purpose of the C-3 District is to:

  A. "create a zoning district for the Beatty subarea that serves to protect and enhance its character and provide for orderly development consistent with the direction in the city's general plan;"

  B. "establish an attractive and safe environment for heavy commercial uses that is superior to that which would result from standard district regulations;"

  C. "provide a buffer between the industrial uses on adjacent properties in San Francisco and the planned development-trade commercial uses of the Baylands subarea;"

Figure 2-8: Existing City of Brisbane Zoning



D. "provide for heavy commercial uses that need large areas of land to accommodate outdoor storage of goods and equipment;"

E. "maintain a scale, character and intensity of use that can accommodate the desired uses for the district and be compatible with development in the other subareas of the city;" and

F. "protect the community health and safety by establishing permit requirements and performance standards that address potential impacts of heavy commercial activity."

The C-3 District requires a specific plan to be prepared and approved prior to development and a conditional use permit for all uses. Conditionally permitted uses include heavy equipment repair, meeting halls, offices, organics reload operations, outdoor storage of vehicles and equipment, outdoor storage of materials only in association with bulk sales, and plastic pipe sales.

2.4 HISTORY OF THE BAYLANDS SPECIFIC PLAN AND ENVIRONMENTAL REVIEW

2.4.1 SUBMITTAL OF THE BRISBANE BAYLANDS SPECIFIC PLAN

The initial Baylands Specific Plan application was filed in 2005 by the landowner, Sunquest Properties, Inc., requesting approval of a General Plan Amendment and a "Phase I Specific Plan" for development of approximately 449 acres of the Baylands site. The 2005 "Phase I Specific Plan," as it was then referred to, included a detailed plan for development of the western portion of the current Specific Plan area along with a "framework plan" addressing basic parameters for development of the eastern portion of the Baylands.

In 2011, the applicant submitted a revised Brisbane Baylands Specific Plan proposing 4,434 residential units, approximately 7 million sf of office/retail/industrial/institutional uses, approximately 169.7 acres of "open space/open area," and approximately 135.6 acres of "lagoon" area, with approximately 12.1 million sf of total building area within a 684-acre site. The 2011 Specific Plan also included a "variant" under which retail and office/research and development (R&D) uses in the northeast portion of the site would be replaced with entertainment-oriented uses, including a 17,000- to 20,000-seat sports arena, a 5,500-seat concert theater, a multiple-screen cinema, and more conference/exhibition space and hotel rooms.

2.4.2 BRISBANE BAYLANDS PROGRAM EIR (SCH #2006022136)

The Draft Brisbane Baylands Program EIR was circulated for public review from June 11, 2013, to January 24, 2014, and addressed:

- **Concept Plans** for the development of the Baylands at an equal level of detail for the following four scenarios:
    - ***Developer-Sponsored Plan (DSP)*** as defined in the 2011 *Draft Brisbane Baylands Specific Plan*, encompassing a 684-acre Specific Plan area. The DSP scenario proposed approximately 7 million sf of office/retail/industrial/institutional uses, 4,434 residential units, approximately 169.7 acres of "open space/open area," and approximately 135.6 acres of "lagoon" area.
    - ***Developer-Sponsored Plan – Entertainment Variant (DSP-V)***, which was similar to the DSP scenario, but replaced retail and office/R&D uses in the northeast

portion of the site with entertainment-oriented uses, including a 17,000- to 20,000-seat sports arena, a 5,500-seat concert theater, a multiple-screen cinema, and more conference/exhibition space and hotel rooms than were proposed under the DSP. New development under the DSP-V also included 4,434 residential units.

- ***Community Proposed Plan (CPP).*** The CPP scenario provided for approximately 7.7 million s.f. of office, industrial, commercial, hotel, R&D, and institutional uses, along with approximately 330 acres of open space/open area and the 135.6-acre lagoon, with no residential development. In addition to the 684-acre area included in the DSP scenario, the CPP scenario included the Recology site and adjacent roadway rights-of-way for a total area of 733 acres.
- ***Community Proposed Plan – Recology Expansion Variant (CPP-V).*** The CPP-V scenario encompassed the same 733-acre area as the CPP scenario and differed from the CPP scenario by proposing a substantial expansion of the existing Recology facility within the Baylands from 260,000 sf to 1,011,000 sf, replacing the hotel and R&D uses proposed under the CPP north of Geneva Avenue and east of Tunnel Road.

- **Amendments to the Brisbane General Plan** as needed to ensure consistency of proposed development with the provisions of the General Plan.
- The 2011 **Brisbane Baylands Specific Plan** detailing development for DSP and DSP-V Concept Plan scenarios.
- **Relocation of the two then-existing lumberyards** to a different location within the Baylands.
- **Remediation of hazardous materials** contamination within the former railyard and **Title 27 Final Landfill Closure** for landfill portion of the Baylands.
- **Importation of water supply of up to 2,400 acre-feet per year** (AFY) for the Baylands and City of Brisbane via a water transfer agreement with the Oakdale Irrigation District (OID).
- Construction and operation of an on-site **recycled water facility**, which would provide tertiary treatment of wastewater for recycled water re-use within the Baylands.

Subsequent to the Draft Program EIR public review period, a Final Program EIR was prepared consisting of:

- The Draft EIR and proposed revisions to the Draft EIR;
- Comments received on the Draft EIR during the public review period;
- The City's responses to the significant environmental issues raised in these comments; and
- A Mitigation Monitoring and Reporting Program.

The Draft and Final Program EIR certified by the City of Brisbane is available at:

- Draft EIR: https://archive.brisbaneca.org/baylands-deir
- Full set of comments on the Draft EIR: https://archive.brisbaneca.org/deir-comments
- Final EIR: https://archive.brisbaneca.org/baylands-final-eir-0

The Brisbane Planning Commission and City Council held public hearings to consider the Program EIR and the 2011 Specific Plan. In March 2018, the City Council directed City staff to draft for Council consideration a General Plan Amendment covering the Baylands area, including a range of 1,800 to 2,200 dwelling units and additional non-residential development, along with changes to General Plan policies governing development of the Baylands. These changes to the General Plan and its policies were adopted as General Plan Amendment GP-1-18 in August 2018.

a. Subsequent EIR: Relationship of the Baylands Specific Plan EIR to the Previous Program EIR

Under CEQA Guidelines Section 15162, when an EIR has been certified or a negative declaration adopted for a project, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in the light of the whole record, one or more of the following:

(1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;

(2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or

(3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete, or the negative declaration was adopted, shows any of the following:

> (A) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;
>
> (B) Significant effects previously examined will be substantially more severe than shown in the previous EIR;

(C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or

(D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

The updated analyses provided in Chapter 4 evaluate the extent to which implementation of Program EIR mitigation measures would reduce the significant environmental effects of the 2025 Specific Plan project. Where application of Program EIR mitigation measures would not reduce impacts to less than significant, additional measures are provided to mitigate the new and substantially more severe impacts of the 2025 Specific Plan.

Chapter 9, "Subsequent EIR Analysis and Findings," analyzes whether the 2025 Specific Plan project would in any:

- New significant impact that was not previously identified in the Program EIR; or
- Substantially more severe significant impact than was previously identified in the Program EIR.

A complete listing of the mitigation measures from the adopted 2018 Mitigation Monitoring and Reporting Program (MMRP) is provided in Section 4.21, which indicates whether each Program EIR mitigation measure has been implemented by the 2025 Specific Plan project, carried forward from the Program EIR, or not carried forward from the Program EIR into this EIR.

2.4.3 GENERAL PLAN AMENDMENT GP-1-18 AND MEASURE JJ APPROVAL

When the Brisbane City Council certified the Baylands Program EIR, approved General Plan Amendment GP-1-18 (Resolution 2018-62), and submitted GP-1-18 to the voters for approval, the Brisbane City Council took no action on the 2011 Specific Plan, providing the applicant with the opportunity to revise the Specific Plan to conform to the provisions of GP-1-18. The full text of GP-1-18 (Measure JJ) is provided above in Section 2.3.1a.

2.4.4 GENERAL PLAN AMENDMENT GP-1-19

In adopting GP-1-18, Resolution 2018-62 directed City staff to "prepare for Council's consideration any other amendments to the General Plan or zoning ordinance as may be needed" to implement GP-1-18. In response, a set of revisions to Chapters II, V, VI, and XII of

the Brisbane General Plan (The Planning Area, Land Use, Circulation, and Policies and Programs by Subarea, respectively), was prepared to implement GP-1-18 by:

(1) Making revisions that clarified existing General Plan provisions and updated factual information in the General Plan, which was originally adopted in 1994.

(2) Incorporating GP-1-18 and Measure JJ into the General Plan and ensuring GP-1-18's consistency with the General Plan; and

(3) Revising roadway Level of Service (LOS) standards within the City in compliance with EIR Mitigation Measure 4.I-1.[37]

Because the General Plan revisions included in GP-1-19 were previously described and analyzed in the Brisbane Baylands Program EIR, the City determined that no additional environmental documentation in the form of a Subsequent or Supplemental EIR would be required and an addendum to the Baylands Final Program EIR was prepared pursuant to California Environmental Quality Act (CEQA) Guidelines Sections 15162 and 15164 to support adoption of General Plan amendment GP-1-19. On January 16, 2020, the City Council approved the Addendum and GP-1-19 in Resolution 2020-1.[38]

a. Revisions that Clarified General Plan Provisions and Updated Factual Information in the General Plan

General Plan Amendment GP-1-19 updated factual information and clarified existing provisions of the General Plan to correctly reflect the current name of landowners and describe current land uses and land use trends. GP-1-19 also reflected changes in state law that occurred subsequent to adoption of the General Plan in 1994. Historical discussion of the alternatives that were considered when the General Plan was adopted in 1994 were also deleted from the General Plan, along with historical discussion of the differences in land use designations between the previously adopted 1980 General Plan and the General Plan.

b. General Plan Revisions that Incorporated GP-1-18 and Measure JJ into the General Plan

GP-1-19 incorporated the previously adopted GP-1-18 and Measure JJ into the General Plan by inserting their specific text and graphics. This included deleting policies that were superseded by GP-1-18 and Measure JJ, revising policies for the Baylands Subarea to reflect the

[37] Recognizing that current roadway level of service standards (LOS D) would be exceeded due to future development in other cities even if no development within the Baylands would occur, Mitigation Measure 4.I-1 required General Plan roadway level of service standards (Policy 38.1, roadway level of service standards) be modified to accommodate the level of development approved for the Baylands.

[38] Resolution 2020-1 adopting General Plan amendment GP-1-19 can be found at ~~https://www.brisbaneca.org/media/5396~~ https://www.brisbaneca.gov/DocumentCenter/View/2633/City-Of-Brisbane-City-Council-Special-Meeting-Agenda---January-16-2020.

requirements of GP-1-18 and Measure JJ, and making text and graphic revisions needed to merge the Northeast Bayshore Subarea into the Baylands Subarea as required by GP-1-18 and Measure JJ.

c. Revisions to General Plan Level of Service (LOS) Standards for Bayshore Boulevard and Freeway Off-Ramp Intersections

Revisions to General Plan Chapter VI (Circulation) also modified General Plan Policy C.1 (*roadway level of service standards*) to ensure precise consistency between the Land Use and Circulation Elements, as required by Brisbane Baylands Program EIR Mitigation Measure 4.I-1, which states:

> **4.I-1:** Recognizing that General Plan roadway level of service standards will be exceeded due to development in other cities even if no development within the Baylands occurs, General Plan Policy C.1 (*roadway level of service standards*) shall be amended to reflect current traffic conditions; developments approved by the cities of San Francisco, Daly City, and South San Francisco that exceed long-term traffic projections set forth in the 1994 Brisbane General Plan; and the land use program approved in the Baylands General Plan Amendment.

The revisions to General Plan Policy C.1 (*roadway level of service standards*):

- Created a new category of roadways, Regional Routes,[39] designated Bayshore Boulevard and Geneva Avenue as Regional Arterial Routes, and set forth the rationale for distinguishing these roadways from other principal and minor arterial roadways within the City.
- Replaced existing LOS standards for intersections along Bayshore Boulevard and Geneva Avenue with:
    - Preparation and implementation of a mobility plan for Bayshore Boulevard from Geneva Avenue to San Bruno Avenue.
    - A requirement for new development within the City generating more than 50 peak hour trips on Bayshore Boulevard or Geneva Avenue to comply with the applicable multi-modal mobility plan(s) by either providing physical improvements consistent with the plan(s) or making a fair share payment for plan improvements pursuant to a citywide traffic impact fee program to be adopted by the City.[40] As part of the mobility plan for Bayshore Boulevard, the City would develop citywide traffic impact fees based on a nexus study.

[39] "Regional Routes," as used in proposed revisions to the General Plan, refers to US Highway 101 (Freeway) and Bayshore Boulevard (Regional Arterial).

[40] Compliance with the provisions of the required mobility plan for Bayshore Boulevard by Baylands development would replace the LOS-based mitigation requirements set forth in the Program EIR.

- Replaced existing LOS standards at intersections with freeway off-ramps along US 101 with a new Policy C.3 addressing queueing of vehicles along freeway off-ramps and at intersections to prevent traffic on a freeway off-ramp from backing up onto the freeway mainline or traffic at an intersection from backing up into another intersection.
- Maintained the current standard of LOS D at all other intersections along principal and minor arterials (i.e., all existing arterial roadways within Brisbane other than those along Bayshore Boulevard, Geneva Avenue, and at freeway interchanges).
- Reorganized Chapter VI (Circulation) and modified or added policies and programs to put greater emphasis on multi-modal mobility for Brisbane residents and businesses, accommodation of bicycles and pedestrians in addition to vehicular movement, and provisions for comfortable and safe travel from within the community to shopping, employment, recreation, transit, and US 101.
- Established criteria defining when traffic impact analyses would be required to confirm compliance of proposed development projects with the City's LOS standard.

2.4.5 SUBMITTAL AND MODIFICATIONS TO THE 2025 BAYLANDS SPECIFIC PLAN PROJECT

In January 2023, the applicant resubmitted its proposed Specific Plan to modify and replace the 2011 Specific Plan with the intent of complying with GP-1-18 and Measure JJ. While the 2023 Specific Plan included all lands owned by the applicant within the Baylands, it excluded lands not owned by the applicant, identifying them as "not a part." To provide for adoption of a single specific plan for the entirety of the Baylands as required by the General Plan, modifications were proposed to the Specific Plan submitted by the applicant and other project components were proposed by the City. Together, the 2023 Specific Plan submitted by the applicant (Appendix A.1), as modified in 2025 (see Appendix A.2), and additional components proposed by the City are referred to as the "2025 Specific Plan project," which is analyzed in this EIR (see **Table 2-1**, **Figure 2-9**, and **Figure 2-10**). Areas added to the applicant's 2023 Specific Plan include the following existing uses:

- Recology parcels along Tunnel Avenue
- Golden State Lumber Company
- Kinder Morgan Tank Farm
- City of Brisbane Corporation Yard
- Bayshore Sanitary District pump station
- Machinery & Equipment Building
- Brisbane Fire Station No. 81

These areas are assumed in this EIR to retain their existing use and development intensity. The existing Brisbane Fire Station No. 81 is proposed, however, to be relocated to 140 Valley Drive and the existing site will be used by the North County Fire Authority for training purposes once the relocated station is operational.

Table 2-1: Comparison of Land Use Acreage between the Specific Plan Submitted by the Applicant and Baylands Development Analyzed in this EIR

Land Use	2023 Specific Plan as Submitted by the Applicant			Proposed 2025 Specific Plan for the Entirety of the Baylands Analyzed in this EIR		
	Area West of Caltrain (in acres)[a]	Area East of the Caltrain (in acres)[a]	Baylands Total	Area West of Caltrain (in acres)[a]	Area East of the Caltrain (in acres)[a]	Baylands Total
Land Area						
Residential	52.8	0.0	**52.8**	52.8	0.0	**52.8**
Commercial	48.8	78.3	**127.1**	48.8	78.3	**127.1**
Amenities Area	2.6	0.0	**2.6**	2.6	0.0	**2.6**
Existing Use Areas[b]	0.0	0.0	0.0	5.8[c]	32.5[d]	**38.3**
Open Space/Open Area	59.4	97.6	**157.0**	59.4	97.6	**157.0**
Sustainable Infrastructure	0.0	90.8	**90.8**	0.0	90.8	**90.8**
Roadway Rights-of-Way	37.4	26.3	**63.7**	37.4	26.3	**63.7**
Subtotal	*201.0*	*293.0*	*494.0*	*206.8*	*325.5*	*532.3*
Water						
Brisbane Lagoon	0.0	121.8	**121.8**	0.0	121.8	**121.8**
Existing Land Area that will be Inundated on a Daily Basis due to Sea Level Rise by 2100	0.0	26.0	**26.0**	0.0	26.0	**26.0**
Subtotal	*0.0*	*147.8*	*147.8*	*0.0*	*147.8*	*147.8*
TOTAL	**201.0**	**440.8**	**641.8**	**206.8**	**473.3**	**680.1**

SOURCES: The Baylands Specific Plan, 2023; City of Brisbane 2024.

NOTES:

a. Acreages are based on Year 2100 land area following approximately 83 inches of sea level rise.
b. Represents lands not owned by the applicant.
c. Includes Machinery & Equipment building (2.2 acres) and existing fire station site (3.6 acres).
d. Includes Recology Facilities (3.6 acres), Golden State Lumber (5.3 acres), Bayshore Sanitation Pump Station (0.1 acres), and Kinder Morgan Tank Farm/City Corporation Yard site (23.5 acres).

Figure 2-9: Baylands Land Use Proposed by the Applicant in its 2023 Specific Plan



Figure 2-10: Proposed 2025 Specific Plan Land Use Analyzed in this EIR



2.5 SITE REMEDIATION AND TITLE 27 LANDFILL CLOSURE

Implementation of remedial actions and final landfill closure is proposed to occur within the Baylands on a phased basis. As a result, construction of Baylands buildings and infrastructure within areas subject to remediation or landfill closure is permitted to proceed only after the appropriate regulatory agency certifies completion of remedial actions or final landfill closure for the construction site. **Figure 2-11** illustrates agency regulatory responsibilities for site remediation and landfill closure. Remediation within the western portion of the Baylands (former rail yard) would occur subject to the regulatory oversight of the State of California. Operable Unit 1 (OU-SM), in the northern portion of the former railyard, is under the jurisdiction of the California Department of Toxic Substances Control (DTSC); Operable Unit 2 (OU-2), in the southern portion of the former railyard, is under the jurisdiction of the RWQCB. Final landfill closure would be subject to the regulatory authority of the RWQCB and San Mateo County Environmental Health Agency. Remediation of the adjacent Schlage Lock site in San Francisco is subject to DTSC's regulatory oversight.

a. Remedial Action Plan for Operable Unit-SM

DTSC approved a Feasibility Study/Remedial Action Plan (FS/RAP) and accompanying Human Health Risk Assessment (HHRA) for the portion of the Baylands known as Operable Unit-SM (OU-SM) in October 2021.[41] The OU-SM site is approximately 35 acres in size and occupies the northern portion of the former railyard within the Baylands (see **Figure 2-9**).

The FS/RAP establishes remedial action objectives consisting of site-specific, quantitative goals that define the extent of cleanup required to achieve the appropriate level of protectiveness for human health and the environment along with media-specific cleanup levels for:

- **Soil:** Arsenic, lead, mercury, carcinogenic PAHs, naphthalene, TPH-d, and Aroclor-1260.
    - *Remedial Action Objective:* Prevent exposure to soil with constituents of concern exceeding cleanup levels by eliminating the exposure pathway for future receptors, which include incidental ingestion, inhalation of windblown dust particles, and dermal contact.

[41] The approved Feasibility Study/Remedial Action Plan and RWQCB approval letter can be found at https://www.baylandsou2.com/.

Figure 2-11: Agency Regulatory Responsibilities for Baylands Site Remediation and Landfill Closure



2.5.2 SITE REMEDIATION

- **Soil vapor:** Chlorinated volatile organic compounds (CVOCs) (1,1-dichloroethene; cis-1,2-dichloroethene; trans-1,2-dichloroethene; tetrachloroethene; trichloroethene, and vinyl chloride).
    - *Remedial Action Objective:* Prevent exposure to CVOCs in soil vapor at concentrations that exceed the cleanup levels for soil vapor by either demonstrating through a site-specific risk assessment that no significant risk is present, or by blocking or minimizing the vapor intrusion pathway from CVOCs in soil vapor that originate from the Schlage OU groundwater plume.
- **Groundwater:** CVOCs (1,1-dichloroethene; cis-1,2-dichloroethene; trans-1,2-dichloroethene; tetrachloroethene; trichloroethene, and vinyl chloride).
    - *Remedial Action Objective:* Prevent exposure to CVOCs in groundwater associated with the Schlage OU CVOC plume by eliminating inhalation risks through the vapor intrusion pathway where significant risk exists, preventing ingestion and dermal contact through the use of groundwater for potable and agricultural purposes, and minimizing dermal exposure of CVOCs and metals in groundwater to construction workers. Treatment of CVOCs in groundwater that migrated beneath the site from the Schlage OU will continue, as directed in the Schlage OU RAP, until the cleanup levels established for the Schlage OU cleanup have been met.

Required Remedial Actions

Placement of Soil Cap

Fill soil will be imported to the site to raise the elevation to the final grade and cap the existing soil containing constituents of concern above cleanup levels. Prior to constructing the clean soil cap, a demarcation layer consisting of a bright-colored geotextile fabric will be placed atop the existing soil to indicate the contact between the clean soil cap and the underlying material. Imported fill material for the soil cap will be required to satisfy criteria established by DTSC in Appendix D of the FS/RAP.

Following clean soil cap placement, utility trenches/corridors that require excavation into the existing soil will be excavated, followed by installation of a demarcation geotextile fabric along the bottom and sides of the utility trench to indicate the contact between the clean utility trench backfill and the existing soil and permit trenches/corridors to be re-excavated in the future for utility repair or additional utility installation without coming into contact with residual contamination in the existing underlying soil.

All earthwork at the site will be conducted in accordance with a dust control plan to be approved by DTSC that will define methods to be used for dust monitoring and procedures for minimizing dust emission. The generation of airborne dust is to be controlled by one or more of the following methods:

- Dampening active earthwork areas with clean water;
- Installing rumble strips or similar to prevent site soils from being tracked out of the site and onto public roads;
- Decontaminating haul trucks and equipment prior to their leaving the site;
- Covering/stabilizing soil stockpiles;
- Restricting the height from which soil can be dropped from an excavator bucket into a haul truck; and
- Stopping work if wind speeds exceed a pre-determined threshold.

All earthwork will also be required to be conducted in accordance with a stormwater pollution prevention plan (SWPPP) to minimize impacts to the local stormwater conveyance system and receiving waters. The SWPPP will identify best management practices for controlling stormwater and preventing sediment transport in run-off at the site during construction.

Excavation with Partial On-Site Relocation and Partial Off-Site Disposal of Soils

In areas where impacted soil cannot be capped in-place with hardscape or a minimum of 5 feet of clean fill, such as along Bayshore Boulevard, the impacted soil will be excavated and either relocated on-site beneath a cap (e.g., roadways, building foundations, concrete areas, asphalt parking lots, or 5 feet of clean soil) or transported off-site to an appropriate disposal facility. All soil excavation, stockpiling, relocation, and/or off-site hauling will be conducted in accordance with the Dust Control Plan and SWPPP to be approved by DTSC.

Soil Vapor Mitigation

After the site has been capped and regraded to the new development elevation, and after soil vapor concentrations have reached steady state at the target sample depth(s), soil vapor sampling will be conducted at proposed building locations to assess, at a screening level, the potential need for vapor mitigation systems in buildings planned for construction. The soil vapor sampling plan will be prepared in accordance with applicable DTSC guidance documents on evaluating vapor intrusion and will be submitted to DTSC for approval in advance of field work. If CVOC concentrations in soil vapor in areas where buildings are planned exceed the screening levels, either DTSC-approved vapor mitigation systems will be included in the design of those buildings, or a site-specific risk assessment will be prepared. The design and installation of vapor intrusion mitigation systems, or demonstration that site conditions pose no significant risk to human health based on the site-specific risk assessment, will be the

responsibility of the developer or property owner and will require DTSC approval. In areas where CVOC concentrations in soil vapor exceed risk-based site-specific cleanup levels, two rounds of indoor air sampling will be conducted post-construction to verify attenuation factor assumptions and test for seasonality. Additional indoor air sampling may be required based on exceedance of health-based screening levels.

Land Use Restrictions

One or more land use covenants will be recorded on the title to the properties within OU-SM with restrictions to limit human exposures to contaminants left in place in soil, soil vapor, and groundwater above levels considered protective of unrestricted use of the site. The Land Use Covenant(s) will include the following restrictions:

- No occupied buildings, including sensitive uses, where CVOC concentrations in soil vapor exceed cleanup levels without DTSC approval based on either (1) a risk assessment demonstrating site conditions pose no significant risk to human health, or (2) engineering controls, such as building design or gas intrusion mitigation systems, that will reduce the risk to an acceptable level;
- No growing produce or vegetables for human consumption in native soil. Plants for human consumption may be grown if they are planted in raised beds (above the approved cover) containing non-native soil. Trees producing edible fruit (including trees producing edible nuts) may also be planted provided they are grown in containers with a bottom that prevents the roots from penetrating the native soil;
- No extraction or use of underlying groundwater is allowed without a Groundwater Management Plan pre-approved by DTSC;
- No drilling for any water, oil, or gas, or extraction or removal of groundwater may occur without a DTSC-approved Groundwater Management Plan and prior written approval by DTSC;
- No interference with, or modification of, a vapor mitigation system shall be permitted without prior written approval by DTSC, and future tenants must provide reasonable access for operations and maintenance (O&M) of vapor mitigation systems;
- All excavation into the cap shall comply with the DTSC-approved Soil Management Plan;
- Contaminated soils brought to the surface by grading, excavation, trenching, or backfilling shall be managed in accordance with all applicable provisions of state and federal law and a DTSC-approved Soil Management Plan; and
- All uses and development of the site shall preserve the integrity and effectiveness of the cap.

Operations and Maintenance (O&M)

Site inspections are to be conducted on an annual basis to evaluate the effectiveness of the cap and ensure compliance with the Land Use Covenant(s). The O&M program will be detailed in a plan to be approved by DTSC and will generally consist of annual inspections to verify that the soil cap is not eroding, that engineered cap materials are in good condition, that unauthorized wells providing access to restricted groundwater or unauthorized excavations into impacted soil have not been constructed, and that vapor intrusion mitigation systems are operating as designed. A Soil Management Plan will also be prepared that will specify the protocols to be followed for excavating into and beneath the cap. An inspection report will be submitted to DTSC for review and approval on an annual basis. All O&M activities will be the responsibility of the site owner and will be governed by an O&M Agreement with DTSC.

Remedial Design and Implementation Plan

Prior to physical site remediation, preparation of one or more Remedial Design and Implementation Plans (RDIPs) for DTSC review and approval is required. The RDIP(s) will contain a detailed description of the remedial work to be performed as well as the plan for implementation. The RDIP(s) will include design drawings, a health and safety plan, procedures for minimizing fugitive dust emission, the program for monitoring air and dust during remedial construction, procedures for managing stormwater during remedial construction, an adaptive management strategy for sea level rise that provides technical justification for year 2100 protective strategies, a traffic plan for the import and off-haul of soil, and a plan for restricting site access to authorized personnel only.

It is anticipated that the remedial action activities for OU-SM will be phased, and that separate RDIPs and Remedial Action Completion Reports would be prepared for each phase after completion of the remedial action. However, if the remedy is implemented at one time, a single Remedial Action Completion Report would be prepared. After each remedial action is completed, a location-specific O&M plan will be prepared, and land use covenant(s) will be recorded. The Completion Reports will provide a description of work completed, a summary of any deviations from the FS/RAP, and verification that cleanup levels were met or site protectiveness was achieved. Each Completion Report will also include a request that DTSC certify the completion of the remedial actions once the O&M plan and land use covenants are in place.

b. Remedial Action Plan for Operable Unit-2

The San Francisco Bay RWQCB approved a Feasibility Study/Remedial Action Plan (FS/RAP) and accompanying Human Health Risk Assessment (HHRA) for the portion of the Baylands known as Operable Unit-2 (OU-2) in December 2021.[42] The OU-2 site is approximately 130 acres in size and occupies the southern portion of the former railyard within the Baylands (see **Figure 2-9**).

The FS/RAP establishes remedial action objectives for OU-2 that consist of site-specific, quantitative goals defining the extent of cleanup required to achieve the appropriate level of protectiveness for human health and the environment along with media-specific cleanup levels for:

- **Soil:** Arsenic, lead, TPH-d in Zones 1, 2, 3, 5, and 6; lead and TPH-d in Zone 4; and PCE, TCE, cis-1.2-DCE, and vinyl chloride in soil in CVOC area.
    - *Remedial Action Objective:* Prevent exposure to soil with constituents of potential concern[43] (COPCs) at concentrations exceeding cleanup levels by eliminating the exposure pathway for future receptors, which include incidental ingestion, inhalation of windblown dust particles, and dermal contact.
- **Soil vapor (based on groundwater evaluation):** Benzene and vinyl chloride sitewide, and PCE, TCE, cis-1.2-DCE, and vinyl chloride in CVOC area, and CVOCs (1,1-dichloroethene; cis-1,2-dichloroethene; trans-1,2-dichloroethene; tetrachloroethene; and trichloroethene, and vinyl chloride).
    - *Remedial Action Objective:* Prevent exposure to volatile organic compounds (VOCs) in soil vapor at concentrations that exceed the cleanup levels for soil vapor by blocking or minimizing the vapor intrusion pathway.
- **Groundwater (vapor intrusion pathway only):** Benzene and vinyl chloride sitewide, and PCE, TCE, cis-1.2-DCE, and vinyl chloride in CVOC area groundwater.
    - *Remedial Action Objective:* Prevent exposure to VOCs in groundwater by eliminating inhalation risks through the vapor intrusion pathway and preventing ingestion and dermal contact through the use of groundwater for potable and agricultural purposes.

The FS/RAP approved by the RWQCB involves "pre-development" and "remediation/ mitigation" activities that the FS/RAP permits to be "conducted prior to or concurrent with development activities." These required activities are described below.

[42] The approved Feasibility Study/Remedial Action Plan can be found at https://www.baylandsou2.com/.

[43] Also called "chemicals of potential concern" in EPA guidance, are defined as "chemicals that are potentially site-related and where data are sufficient quality for use in the quantitative risk assessment." https://semspub.epa.gov/work/11/176250.pdf.

Soil Assessment Following Demolition of Existing Buildings

Following abatement of any hazardous materials and demolition of structures within OU-2, a post-demolition soil assessment will be undertaken, targeting areas where chemical releases would have an elevated likelihood of occurrence, such as sumps and floor drains. Shallow soil samples will also be collected from the area of the former hide and glue factory to be analyzed for pentachlorophenol (PCP).

Decommissioning of Existing Groundwater Wells

Existing groundwater wells will be decommissioned prior to soil import and grading. All well decommissioning is required to be completed pursuant to a permit from San Mateo County Environmental Health in accordance with an RWQCB-approved work plan.

Excavation with Partial On-Site Relocation and Partial Off-Site Disposal of Soils

In areas where soil cannot be capped in-place with a minimum of 5 feet of clean fill, such as along Bayshore Boulevard, the impacted soil will be excavated and either relocated beneath roadways, hardscape (e.g., building foundations, concrete areas, asphalt parking lots), or a minimum of 1 foot beneath clean utility corridors. Alternatively, impacted soil may be transported off-site to an appropriate disposal facility. The FS/RAP anticipates that up to 10,000 bank (12,000 bulk) cubic yards of soil will be excavated and relocated on-site and another 10,000 bank (12,000 bulk) cubic yards of soil excavated for off-site hauling and disposal. All soil excavation, stockpiling, relocation, and/or off-site hauling will be conducted in accordance with the Dust Control Plan and SWPPP to be approved by the RWQCB as part of a required Remedial Design and Implementation Plan (RDIP).

Excavation and On-Site Ex Situ Treatment and Relocation of Soils

In areas where Total Petroleum Hydrocarbon (TPH) concentrations exceed cleanup levels, the FS/RAP states that "free-phase petroleum is potentially mobile within the soil matrix, and off-site disposal would not be cost-effective." As a result, the FS/RAP retains on-site treatment of TPH-impacted soil as an option.

Placement of Soil Cap

Fill soil will be imported to OU-2 to raise the elevation to the final grade and cap the existing soil containing constituents of concern above cleanup levels. Prior to constructing the soil cap, a bright-colored demarcation geotextile fabric will be placed above the existing soil to indicate the contact between the clean soil cap and the underlying material wherever constituents of concern exceed cleanup levels. Imported fill material for the soil cap will be required to satisfy criteria established by DTSC in Appendix F of the FS/RAP.

Following clean soil cap placement, planned utility trenches/corridors that require excavation into the existing soil will be excavated, followed by installation of a demarcation geotextile fabric along the bottom and sides of the utility trench to indicate the contact between the clean utility trench backfill and the existing soil and permit trenches/corridors to be re-excavated in the future for utility repair or additional utility installation without coming into contact with residual contamination in the existing underlying soil.

All earthwork at the site will be conducted in accordance with a dust control plan to be approved by the RWQCB as part of the RDIP that will define methods to be used for dust monitoring and procedures for minimizing dust emission. The generation of airborne dust is to be controlled by one or more of the following methods:

- Dampening active earthwork areas with clean water;
- Installing rumble strips or similar to prevent site soils from being tracked out of the site and onto public roads;
- Decontaminating haul trucks and equipment prior to their leaving the site;
- Covering/stabilizing soil stockpiles;
- Restricting the height from which soil can be dropped from an excavator bucket into a haul truck; and
- Stopping work if wind speeds exceed a pre-determined threshold.

All earthwork will also be required to be conducted in accordance with a SWPPP to minimize impacts to the local stormwater conveyance system and receiving waters. The SWPPP will identify best management practices for controlling stormwater and preventing sediment transport in run-off at the site during construction.

Groundwater Remediation Program

The FS/RAP states that in situ groundwater remediation will be implemented "to reduce Volatile Organic Compounds in groundwater to below clean-up levels for the vapor intrusion pathway to the extent practicable" and that groundwater remedial action "will be planned and implemented to achieve groundwater clean-up levels to the extent practicable."

Groundwater Monitoring Program

Groundwater monitoring will be implemented. The specific design of the well network and frequency of monitoring is to be determined in the RDIP to be approved by the RWQCB. Groundwater monitoring wells will be placed within OU-2 after installation of the soil cap.

Soil Vapor Mitigation

After the site has been capped and regraded to the new development elevation, and the groundwater remedy has been implemented, soil vapor sampling will be conducted in accordance with RWQCB soil vapor guidance to determine the necessity of a vapor mitigation system.

Land Use Restrictions

One or more land use covenants will be recorded on the title to the properties within OU-2 with restrictions to limit human exposures to contaminants left in place in soil, soil vapor, and groundwater above levels considered protective of unrestricted use of the site. The Land Use Covenant(s) will include the following restrictions:

- No occupied buildings, including sensitive uses, where CVOC concentrations in soil vapor exceed cleanup levels without RWQCB approval based on either (1) a risk assessment demonstrating site conditions pose no significant risk to human health, or (2) engineering controls, such as building design or gas intrusion mitigation systems, that will reduce the risk to an acceptable level;
- No growing produce or vegetables for human consumption in native soil. Plants for human consumption may be grown if they are planted in raised beds (above the approved cover) containing non-native soil. Trees producing edible fruit (including trees producing edible nuts) may also be planted provided they are grown in containers with a bottom that prevents the roots from penetrating the native soil;
- No extraction or use of underlying groundwater is allowed without a Groundwater Management Plan pre-approved by the RWQCB;
- No drilling for any water, oil, or gas, or extraction or removal of groundwater may occur without an RWQCB-approved Groundwater Management Plan and prior written approval by the RWQCB;
- No interference with, or modification of, a vapor mitigation system shall be permitted without prior written approval by DTSC, and future tenants must provide reasonable access for O&M of vapor mitigation systems;
- All excavation into the cap shall comply with the RWQCB-approved Soil Management Plan;
- Contaminated soils brought to the surface by grading, excavation, trenching, or backfilling shall be managed in accordance with all applicable provisions of state and federal law and an RWQCB-approved Soil Management Plan; and
- All uses and development of the site shall preserve the integrity and effectiveness of the cap.

2.5.3 TITLE 27 LANDFILL CLOSURE

Consistent with landfill practices at that time it was operational, no liner was installed at the Brisbane Landfill prior to waste placement. Instead, the waste material was placed directly into the water on top of the Young Bay Mud. Also consistent with landfill practices at that time, leachate collection and removal systems were not utilized. Upon completion of disposal operations, waste material was covered with earth fill and other inert materials. In accordance with Section 20260 of Title 27 of the California Code of Regulations (hereafter referred to as Title 27), the Brisbane Landfill is classified by the RWQCB as a closed, unlined Class III landfill (BKF 2022).

a. Title 27 of California Code of Regulations, Solid Waste

The California Department of Resources Recycling and Recovery (CalRecycle) (formerly the California Integrated Waste Management Board) regulates the closure and post-closure activities at landfill sites through Title 27 of the California Code of Regulations (CCR). A Local Enforcement Agency (LEA) is designated by CalRecycle to perform oversight of post-closure land uses at disposal sites.

For the Brisbane Landfill, regulatory authority for closure and post-closure activities rests with the Regional Water Control Board – San Francisco Region and the San Mateo County Environmental Health Services Division, which serves as the Local Enforcement Agency (LEA). The California Air Resources Board (CARB), which regulates stationary and mobile air emission sources, also has enforcement authority. Landfill gas is regulated by CARB through the Bay Area Air Quality Management District (BAAQMD).

The requirements for post-closure land use of solid waste disposal sites are described in CCR Title 27, Section 21190, which requires that the proposed post-closure land use be designed and maintained to:

- Protect public health and safety and prevent damage to structures, roads, utilities, and gas monitoring and control systems;
- Prevent public contact with waste, landfill gas (LFG), and leachate; and
- Prevent landfill gas explosions.

Although the regulatory requirements described in CCR Title 27, Section 21190, apply to landfills that were operating on or after January 1, 1988, the LEA Advisory #51 dated July 22, 1998, states:

> If a significant change in post-closure land use is proposed for these sites (sites that ceased operating prior to January 1, 1988), a post-closure land use proposal should be submitted to the LEA to address compliance with 27 CCR 21190. The LEA is required to

approve the proposed post-closure land use if the project site development involves structures within 1,000 feet of the disposal area, structures on top of waste, modification of the low permeability layer, or irrigation over waste (27 CCR 21190(c)).

The provisions of CCR Title 27, Section 21090, applicable to the former Brisbane Landfill include:

- **Final Cover Requirements**
    - **Slopes.** Final cover slopes are generally not permitted to be steeper than a 1:1.75 horizontal to vertical ratio and are to have a minimum of one 15-foot-wide bench for every 50 feet of vertical height. The RWQCB can require flatter slopes or more benches where necessary to ensure preservation of the integrity of the final cover.
    - **Cover Layers**
        - *Foundation Layer.* Closed landfills are to be provided with not less than 2 feet of appropriate materials as a foundation layer for the final cover. These materials may be soil, contaminated soil, incinerator ash, or other waste materials, provided that such materials have appropriate engineering properties to be used for a foundation layer, which is to be compacted to the maximum density obtainable at optimum moisture content using methods that are in accordance with accepted civil engineering practice. A lesser thickness may be allowed for units if the RWQCB finds that differential settlement of waste, and ultimate land use, will not affect the structural integrity of the final cover.
        - *Low-Hydraulic-Conductivity Layer.* In order to protect water quality by minimizing the generation of leachate and landfill gas, closed landfills are to be provided with a low-hydraulic-conductivity (or low through-flow rate) layer, consisting of not less than 1 foot of soil containing no waste or leachate, that is placed on top of the foundation layer and compacted to prevent percolation of water.
        - *Erosion-Resistant Layer.* The low-hydraulic-conductivity layer of a closed landfill is to be directly overlain by an erosion-resistant uppermost cover layer consisting of either:
            - A vegetative layer[44] or

[44] The species mix for such vegetation is required to harmonize with the proposed post-closure land use and need as little long-term maintenance as feasible by virtue of its tolerance of the vegetative layer's soil conditions (e.g., the presence of landfill gas [LFG]), its resistance to foreseeable adverse environmental factors (e.g., climate, disease, and pests), its rapidity of germination and growth, its persistence and ease of self-propagation, its high percentage of surface coverage (sufficient to prevent surface erosion), and its minimal need for irrigation and maintenance.

- A mechanical erosion and ultraviolet light-resistant layer, consisting of not less than 1 foot of soil that contains no waste, covers the entire low-hydraulic-conductivity layer, and is initially planted—and is later replanted as needed to provide effective erosion resistance—with native or other suitable vegetation having a rooting depth not exceeding the depth to the top of the low-hydraulic-conductivity layer.

- **Cover Maintenance Plan**
    - The Final Closure and Post-Closure Maintenance Plan is to incorporate a cover-integrity monitoring and maintenance program that includes at least the following components:
        - *Periodic Leak Search* – a schedule for carrying out periodic monitoring of the integrity of the low-hydraulic-conductivity layer, including a method for effectively identifying and repairing breaches in that layer;
        - *Periodic Identification of Other Problem Areas* – a schedule for periodically identifying and addressing other cover problems;
        - *Prompt Cover Repair* – a plan for repairing, in a timely manner, any breach or other cover problem that is discovered; and
        - *Vegetation Maintenance* – a plan for maintaining vegetative cover, including fertilization, irrigation, elimination of species that violate the rooting depth limit, replanting, and irrigation system maintenance.
- **Leachate and Landfill Gas Control System**
- **Grading and Drainage Plan to Prevent Ponding and Erosion**
- **General Post-Closure Duties**
    - Maintain the structural integrity and effectiveness of all containment structures, and maintain the final cover as necessary to correct the effects of settlement or other adverse factors;
    - Continue to operate the leachate collection and removal system as long as leachate is generated and detected;
    - Maintain monitoring systems and monitor the groundwater, surface water, and the unsaturated zone;
    - Prevent erosion and related damage of the final cover due to drainage; and
    - Protect and maintain surveyed monuments.

Under these requirements, the RWQCB can allow any alternative final cover design that it finds will continue to isolate the waste from precipitation and irrigation waters and complies with the applicable prescriptive standards listed above.

Final Landfill Closure and Post-Closure Maintenance Plan for Former Brisbane Landfill

The RWQCB adopted Waste Discharge Requirements in 2001 to bring the landfill into compliance with the appropriate portions of Title 27 and to establish a discharge monitoring program for the landfill. Since the issuance of the Waste Discharge Requirements in 2001, the RWQCB has required periodic monitoring of groundwater and leachate conditions. No notices of violation have been issued by the RWQCB during this time. Groundwater monitoring and landfill gas (LFG) monitoring continue on an annual basis as required by the Waste Discharge Requirements. Remedial activities to date have included installation of a gas collection and controls system and construction of a leachate seep collection and transmission system to address Brisbane Lagoon shoreline seeps.

A Closure and Post-Closure Maintenance Plan was prepared in accordance with Title 27 and the RWQCB waste discharge requirements and approved by the RWQCB and San Mateo County Environmental Health Services Division. In addition to the submittals to the RWQCB, San Mateo County Environmental Health Services, and CalRecycle, the Landfill Gas Collection and Control System Design Plan (a component of the Closure and Post-Closure Maintenance Plan) is required to be separately submitted to the BAAQMD for review and approval. This plan will identify how remaining subsurface gas (i.e., methane) generated by the closed landfill will be collected, treated, and monitored.

The maximum extent of the Brisbane Landfill that requires closure is approximately 364 acres. However, the Closure and Post-Closure Maintenance Plan applies only to the approximately 319-acre portion of the landfill owned by the Baylands landowner (see **Figure 2-12**), excluding areas of the lumber yard and portions of the land currently under the ownership and control of others. Subsequent to approval of the San Francisco Bay RWQCB, the Landfill Closure Plan could be amended to include additional portions of the landfill. **Figure 2-13** illustrates proposed Specific Plan lands uses overlying the landfill.

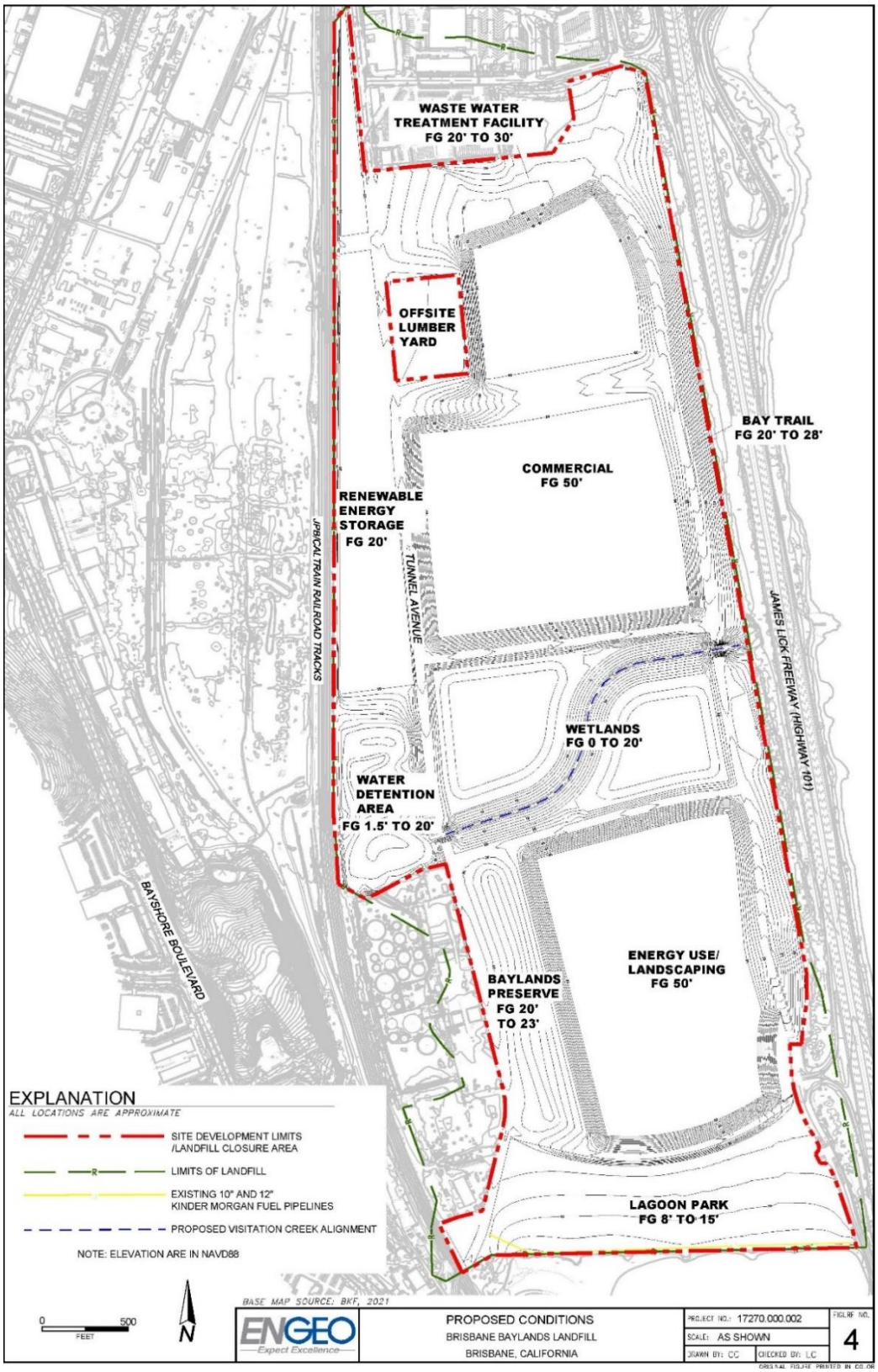
The goal of the Closure and Post-Closure Maintenance Plan is to appropriately close, mitigate, and manage the landfill so that it does not pose an unacceptable risk to human health and the environment and supports the intended development land uses. The primary components of the landfill closure will include decommissioning of existing systems, an engineered cap, leachate collection system, landfill gas collection, geotechnical stabilization, and a long-term monitoring and maintenance program, described in more detail below (ENGEO 2022).

Figure 2-12: Landfill Closure Plan Boundary



SOURCE: ENGEO, 2022

Figure 2-13: Proposed Development Overlying the Former Brisbane Landfill



SOURCE: ENGEO, 2022

Closure activities will commence following the removal of stockpiled soil for reuse in the western portion of the Baylands under a Soil Management Plan to be approved by the RWQCB.

All such reuse soil will meet applicable import criteria specified in Appendix H of the Closure and Post-Closure Maintenance Plan.

The applicant anticipates the landfill closure to be completed within approximately 10 years from the date when soil is first removed. Landfill closure will commence with initial preparation of the site, including removal of existing soil stockpiles, followed by implementation of geotechnical site mitigation.

Geotechnical improvements for each phase of work will follow the following sequence:

1. Earthwork site preparation
2. Installation of wick drains
3. Performance of deep dynamic compaction
4. Placement of civil fill, landfill cover, and surcharge fill
5. Removal of surcharge fill
6. Movement of excess surcharge fill to next phase

After geotechnical mitigation is complete, the landfill cover and control systems are proposed to be constructed with mass grading in sequence with Specific Plan phasing. Following the implementation of the landfill cover and control systems (i.e., compliance with Section 21090 of CCR Title 27) for each completed development area, or part thereof, closure will be sought for that area.

Decommissioning of Environmental Control Systems

Structures, including the existing leachate management and landfill gas extraction systems, will be demolished prior to site grading or prior to or during decommissioning of environmental control systems. The transition of operations from the existing systems to the new systems required under the Landfill Closure Plan is discussed below.

Final Landfill Cover

Future development that will require capping include:

- Commercial buildings
- Impervious pavement
- Vegetated landscaped areas
- Utilities

- Solar array fields
- Wetlands and open space.

The landfill cover will terminate north of an existing Kinder Morgan pipeline, along with the leachate management system barrier. A buffer of 20 feet will be maintained to minimize construction impacts on the pipeline.

The Title 27 Landfill Closure Plan states that soil improvements and construction techniques to support the buried Kinder Morgan pipes will be implemented to mitigate potential impacts during landfill closure and construction of the shoreline improvements and could include relocating the pipeline to the north of its existing location.

The various layers of the final landfill cover are described below from the bottom up.

Foundation Layer

In accordance with Title 27 requirements, the foundation layer may consist of soil, contaminated soil, incinerator ash, or other waste materials, provided that such materials have appropriate engineering properties to be used for a foundation layer. The foundation layer must be a minimum of 2 feet over the last lift of waste with appropriate engineering properties to provide low permeability. The existing cover soil may require stripping, scarification, and re-compaction to obtain strength and compressibility in accordance with geotechnical recommendations.

Low-Hydraulic-Conductivity Layer

Prior to installation of the low-hydraulic-conductivity layer, the upper 6 inches of the minimum 2-foot soil existing foundation layer material would be scarified, moisture conditioned, and compacted in accordance with the Landfill Closure Geotechnical Report (Appendix K.3). All low-hydraulic-conductivity layer alternatives must be placed at a minimum of a 2 percent slope to mitigate drainage above the cap. The low-hydraulic-conductivity layer elevation will vary across the landfill depending on proposed utility and building foundation penetrations. Utilities will likely remain mostly above the low-hydraulic-conductivity layer where possible. Transitional areas between different low-hydraulic-conductivity layer alternatives will require a minimum of 3 feet of overlap.

Different alternatives for the low-hydraulic-conductivity layer may be implemented for each of the future development areas (see Closure and Post-Closure Maintenance Plan, Appendix K.3 for more details). The primary engineered cap across the landfill site will include a geosynthetic liner, a compacted clay liner or geomembrane, compliant with Title 27 requirements. Low-permeability pavement for hardscaped areas will be used in the commercial areas, outside of building footprints. A multi-layer geosynthetic liner will be placed beneath Visitacion Creek and the surrounding restored wetlands, as an additional preventative measure for leachate seeps into overlying wetlands.

Drainage Layer

A drainage layer will be placed on top of the low-hydraulic-conductivity layer. This drainage layer will facilitate drainage of water infiltrating from above the final cover and convey it to wetland areas or drainage facilities. This may consist of a drainage geocomposite or granular material (e.g., crushed rock or gravel). Drainage piping may be necessary to collect and drain infiltrated water. The final construction drawings and specifications to be approved by state regulatory authorities will show the final material selection, final cover grading, the location of the drainage layer based on final design details, and drainage pipes.

Erosion-Resistant Layer

Engineered fill consisting of primarily on-site material will be placed above the low-hydraulic-conductivity and drainage layers at varying thicknesses greater than 1 foot. This erosion-resistant layer will accommodate appropriate root depths, utilities, and shallow foundations where possible. A stormwater drainage system will be installed on top or within this layer for runoff from impervious portions of the landfill. All irrigated portions of the landfill are required to contain a subdrain beneath the vegetative layer of the final cover.

Leachate Management System

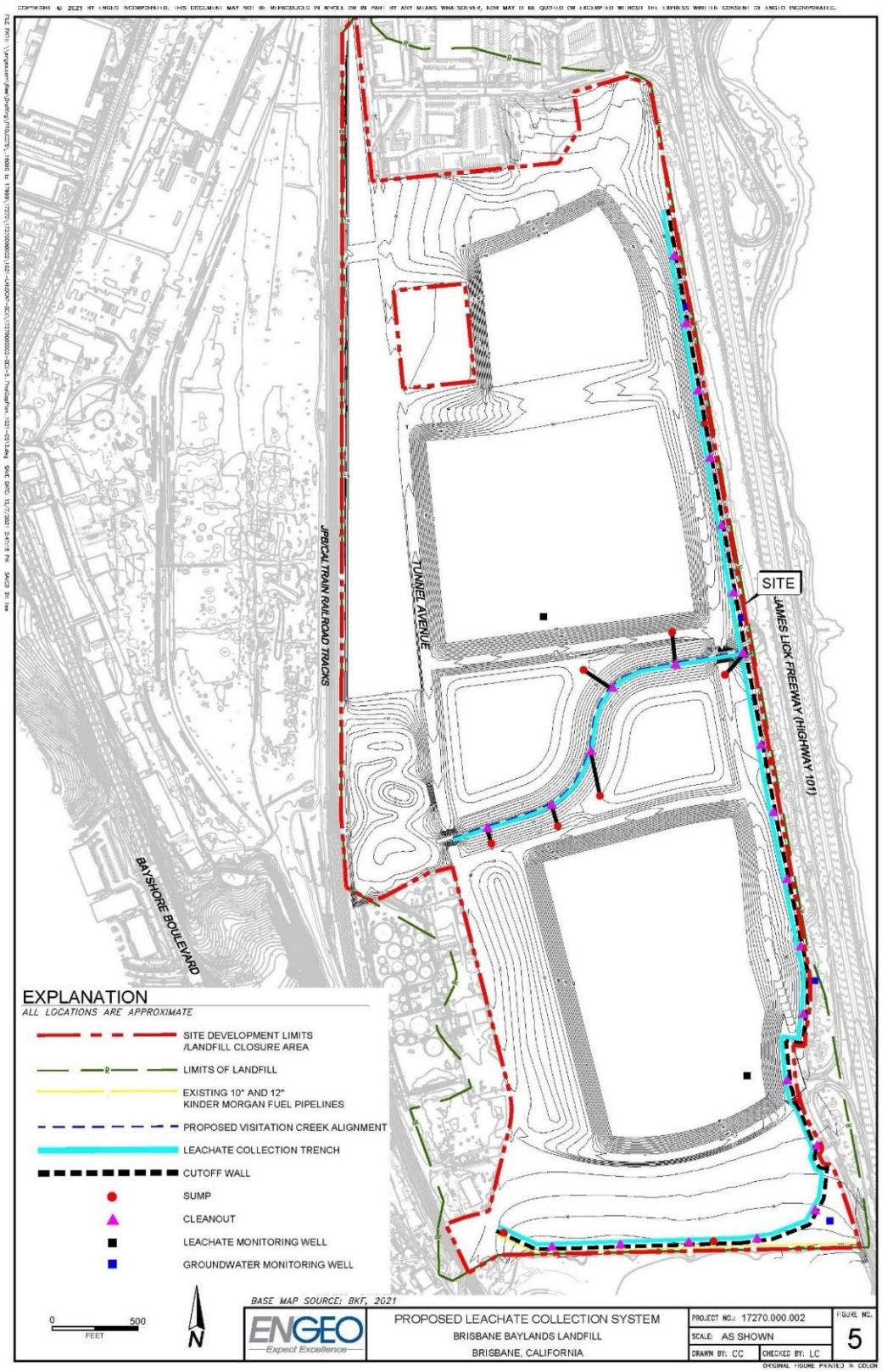
The existing leachate management system limits seepage of leachate along a portion of the southern boundary, reducing leachate entering the Brisbane Lagoon. A more robust leachate management system is required to be installed to prevent leachate migration off the landfill site following landfill closure. Because landfill closure and subsequent proposed development is proposed to occur in phases, the existing leachate management system will remain in place until the southern portion of the landfill is closed, at which time:

- Existing leachate management system components will be demolished;
- The pumps will be removed from the extraction wells and the compressor and air lines will be decommissioned; and
- The five extraction wells and four piezometers located along the Brisbane Lagoon will be abandoned under permit, in accordance with San Mateo County requirements.

The existing system will continue to be operated until either the seeps in that area can be eliminated with grading or the new leachate system is installed.

A leachate collection and removal system collection trench will be installed with a low-permeability cut-off wall. As shown in **Figure 2-14**, the future leachate collection and removal system will extend across most of the eastern and southern landfill boundaries. Additionally, the alignment of leachate collection system components will be designed to reduce static water pressure under the landfill cap.

Figure 2-14: Proposed Leachate Collection System



SOURCE: ENGEO, 2022

A low-permeability cut-off wall and leachate collection and removal system trench is proposed to work in concert to minimize off-site migration through restricting lateral movement and by continuously collecting, removing, and conveying leachate to the Bayshore Sanitary District (BSD) sewer line. The cut-off wall would extend from the landfill cover to the top of the Young Bay Mud layer. Additional details on the specific components of the leachate collection and removal system can be found in the Closure and Post-Closure Maintenance Plan (Appendix K.3).

Landfill Gas Collection and Control System

A new landfill gas management system will be installed during site grading, and temporary piping will be used to maintain operation of the existing system during the transition period (to the extent practicable).

During closure and future Specific Plan development, the existing landfill gas extraction system will continue to operate in accordance with Section 20920 of Title 27 and BAAQMD permit, whenever possible. Because landfill closure and Specific Plan development will take place in phases, the existing landfill gas system will be modified to allow for the continuous operation and eventual transfer of operation to the new system. Existing horizontal extraction wells will be abandoned in place or removed during the grading and deep dynamic compaction efforts. These wells will first be isolated from the rest of the system. **Figure 2-15** shows the existing and proposed landfill gas system. Based on the need for ground improvement (e.g., deep dynamic compaction, surcharge program) and the expected site settlement, the proposed landfill gas system will consist of vertical extraction wells only.

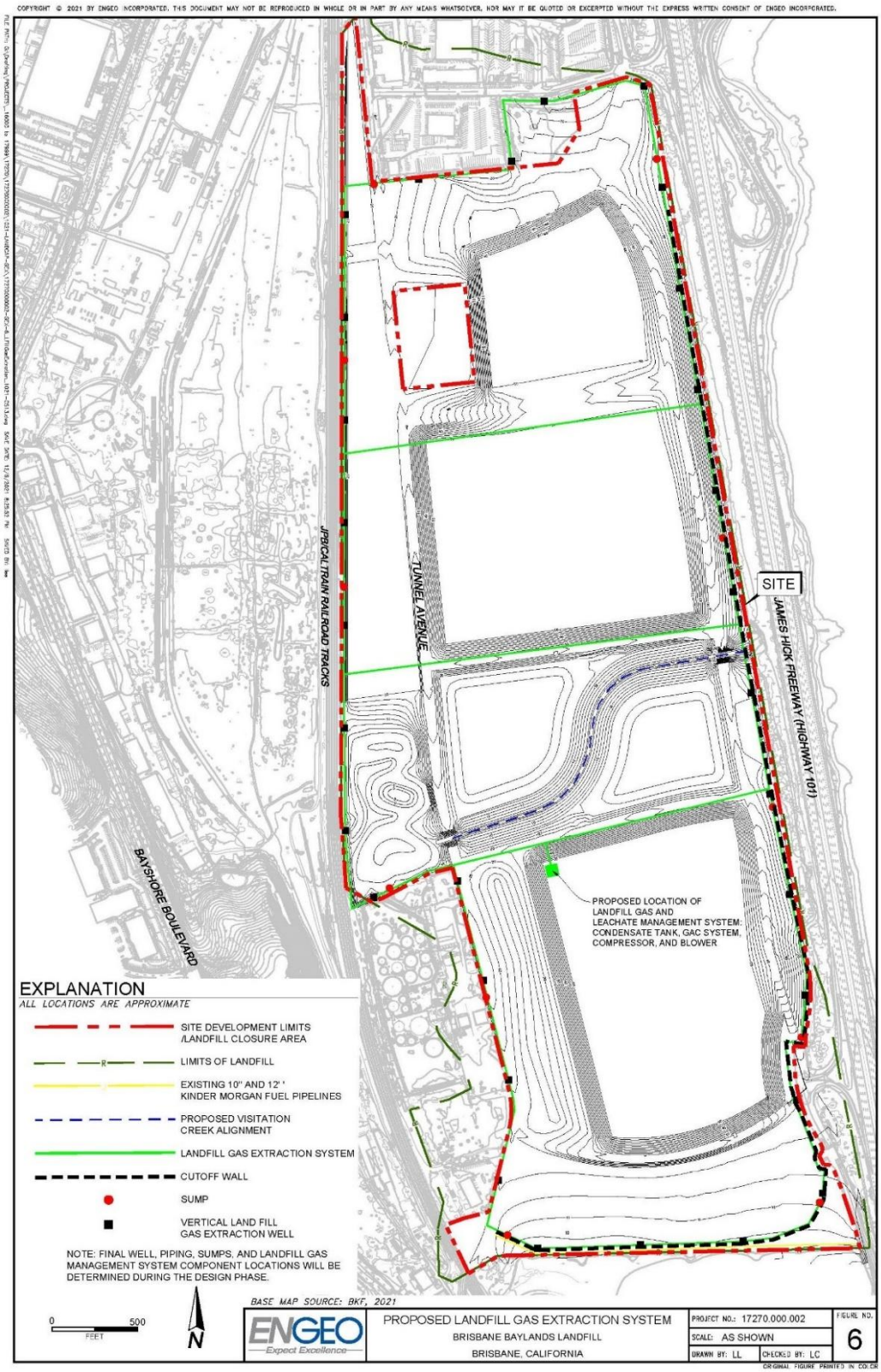
The existing landfill gas management system uses a flare station to combust the extracted gases. Based on the low landfill gas production rates that have been observed at the landfill in recent years, transition to a granular activated carbon system is anticipated.

Vertical landfill gas extraction wells will need to be installed through the proposed clay landfill cap. As a result, construction of a robust annular seal will be accomplished via hydrated bentonite and/or cement grout installed at depths corresponding to the final cover design elevation. The proposed lateral collection piping will be placed above the final landfill cover layer (wherever possible), to facilitate maintenance and sampling without disturbing the barrier layer.

Groundwater Monitoring Wells

Many of the groundwater monitoring wells within the landfill footprint will be removed under state regulatory oversight. Four perimeter wells will be installed along the perimeter of the landfill, downgradient of the leachate collection system, with two wells along the eastern boundary and two along the southern boundary. Wells will be installed to a sufficient depth to monitor shallow groundwater conditions and will be monitored semi-annually to ensure the leachate collection system is performing. However, well monitoring may move to a less than semi-annual basis once post-closure conditions have been established.

Figure 2-15: Landfill Gas Extraction System



SOURCE: ENGEO, 2022

Landfill Gas Intrusion Mitigation System

A landfill gas intrusion mitigation system consisting of a vapor barrier and a gas venting system layer will underlay commercial building footprints. The general conceptual design for the landfill gas intrusion mitigation system is included in the Closure and Post-Closure Maintenance Plan (see Appendix K.3). Methane detection alarms will be implemented throughout the buildings. If necessary, the venting system will be designed so that it can be converted and operated as an active venting system to more systematically extract and release sub-slab gas to the atmosphere if methane is detected within indoor air.

Construction Quality Assurance Plan

In accordance with Title 27 requirements, a Construction Quality Assurance Plan is required for construction and any repairs of the low-hydraulic-conductivity layer. Prior to initiating final landfill closure activities, a Construction Quality Assurance Plan is required to be prepared by a registered Civil Engineer or Certified Engineering Geologist for review and approval by the RWQCB and San Mateo County Environmental Health Services Division. The Construction Quality Assurance Plan will include the following elements:

- Final construction drawings and technical specifications.
- Procedures to be implemented during final cover and collection systems construction.
- Testing for quality assurance of constructed final cover and collection system component.
- Designated construction quality assurance officer in charge of observing installation of work, evaluating materials for conformance with plans and specifications, and testing.
- Daily recordkeeping and reporting of inspections and construction activities.

Final Landfill Cap and Certification of Closure and Recording

Title 27 requirements and the Waste Discharge Requirements require a minimum of two surveyed permanent monuments near the landfill from which the location and elevation of waste, containment structures, and monitoring facilities can be determined throughout the post-closure maintenance period. Upon construction of these monuments, a certification of closure will be prepared by a professional civil engineer or certified engineering geologist and submitted to the RWQCB, CalRecycle, and the Local Enforcement Agency (LEA) for approval.

Monitoring, Inspections, and Reporting

The final Landfill Closure Plan includes inspection and reporting requirements for each of the main components of the closure plan including the final cover, leachate management system, landfill gas collection and control system, stormwater control systems, groundwater and leachate monitoring wells, and building landfill gas intrusion mitigation systems. Additional

inspections will be completed in the event of a catastrophic occurrence such as an earthquake, flood or major storm event, fire, or damage sustained by high winds, facility, or vehicular accidents.

Indoor Continuous Methane Monitoring

The Landfill Closure Plan also includes requirements for indoor continuous methane monitoring. Section 20921 of CCR Title 27 requires landfill gas controls to maintain the following conditions:

- Periodic methane gas monitoring shall be conducted inside all buildings and underground utilities.
- Methane gas concentrations shall not exceed 1.25 percent volume in air within on-site structures.
- Concentrations of methane gas migrating from the landfill property shall not exceed 5 percent by volume in air at the facility property boundary.
- Trace gases shall be controlled to prevent adverse acute and chronic exposure to toxic and/or carcinogenic compounds.
- Automatic methane gas sensors shall be installed within the permeable gas layer within building footprints, and inside the building to trigger an audible alarm when methane gas concentrations are detected (ENGEO 2022).

A continuous methane monitoring system will be implemented within the buildings to ensure that there is no hazard due to the accumulation of levels of landfill methane gas above 5,000 parts per million by volume (ppmv). This goal is accomplished by using workspace sensors, which will be set to sound an audible and visual alarm at 20 percent of the lower explosive limit of methane gas (10,000 ppmv). A system inspection, maintenance, calibration, and sampling will be performed on a quarterly basis for each building within the landfill footprint. Testing and calibration will be performed in accordance with the manufacturer specifications for the selected methane detection system on at least a semi-annual basis.

Security

Site security is required to be implemented to ensure care and prevent public access to the leachate collection system and landfill gas extraction system components. Security fencing, access gates, and signs will be installed around major system components such as the landfill gas management station.

ISO-Settlement Maps/Tracking Differential Settlement

A geotechnical ground improvement program will be implemented as part of the landfill closure activities to reduce post-construction settlement of the soil. As part of the ground improvement program, regular monitoring of settlement will be performed to evaluate the efficacy of the ground improvement technique and provide information to estimate future post-construction settlement. The frequency of settlement monitoring throughout grading construction will be performed bi-weekly for the first 3 months after the surcharge height has been reached and then monthly for the subsequent 3 to 6 months, depending on settlement progress. The initial survey and map will be used as a baseline condition for the landfill at closure.

In accordance with Title 27 requirements, an iso-settlement map will be produced at least every 5 years to depict the estimated total change in elevation at each portion of the final cover's low-hydraulic-conductivity layer. Prior to conducting periodic grading operations, the contractor will note on a map the approximate location and outline of areas where differential settlement is visually obvious. As part of post-closure maintenance, inspections will be performed to record areas where differential settlement is observed. Areas of differential settlement that affect the final cover integrity will require repair in accordance with the Landfill Closure Plan.

Completion of Post-Closure Maintenance Period

As stated in Title 27 Section 21900(a), "The operator of a solid waste landfill may be released from post-closure, after a minimum period of thirty (30) years upon demonstration to and approval by CalRecycle, the Local Enforcement Agency, and the RWQCB that the solid waste landfill no longer poses a threat to the public health and safety and the environment." The Brisbane Landfill stopped receiving waste in 1967 and has implemented landfill gas, leachate, and landfill cover controls, but not under a formal Closure and Post-Closure Maintenance Plan. The ongoing need for the leachate management system, landfill gas collection and control system, and groundwater and leachate monitoring may be reevaluated after the first year of operation.

2.6 CALIFORNIA HIGH SPEED RAIL LIGHT MAINTENANCE FACILITY WITHIN THE BAYLANDS

The California High-Speed Rail Authority (Authority) completed a Final Environmental Impact Report/Environmental Impact Statement and approved the San Francisco to San Jose segment of the state-wide high-speed rail system in 2022. Included along this segment was a light maintenance facility (LMF) that would be constructed and operated on approximately 121 acres of the Baylands Specific Plan area, east of the Caltrain right-of-way.

In September 2024, the Authority and the City of Brisbane reached an agreement wherein the Authority would pursue a smaller (approximately 45-acre) LMF within the eastern portion of the Baylands once preparation of updated environmental documentation was completed.[45]

As the result of a September 2024 agreement between the City of Brisbane and the California High-Speed Rail Authority, an alternative is analyzed in Chapter 8, wherein Tunnel Avenue would be realigned to the east, providing a 45-acre site within which the Authority would develop a 45-acre LMF (see **Figure 2-16**). While the impacts of Baylands development around an operating 45-acre LMF are addressed in Chapter 8, impacts associated with LMF construction and operation would be the responsibility of the Authority. In addition, the analysis of cumulative environmental effects of Baylands development in combination with other past, present, and reasonably foreseeable future projects in Chapter 7, *Cumulative Environmental Effects*, includes a 45-acre LMF as a reasonably foreseeable future project.

2.7 PROJECTED SEA LEVEL RISE

At the time the Specific Plan was being developed, the 2018 State of California Sea Level Rise Guidance[46] (Sea Level Rise Guidance), developed by the Ocean Protection Council (OPC), provided a framework for state agencies and local governments to factor sea level rise impacts into planning decisions. The Sea Level Rise Guidance summarizes the best available science on sea level rise and encourages agencies to select a sea level rise projection for planning purposes based on multiple factors, such as the location of a facility, its expected lifespan, sea level rise exposure and associated impacts, adaptive capacity, and risk tolerance/aversion. California updated its sea level rise planning guidance[47] in 2024 (OPC 2024). Therefore, as discussed below, sea level rise is analyzed in this EIR based on the updated 2024 guidance. The Sea Level Rise Guidance is expected to continue being revised about every 5 years.

[45] The September 2024 agreement can be found at: ~~https://www.brisbaneca.org/city-attorney/page/california-highspeed-rail-authority-and-city-brisbane-reach-settlement~~ https://www.brisbaneca.gov/750/California-High-Speed-Rail-Authority-and.

[46] Ocean Protection Council. 2018. State of California Sea-Level Guidance.

[47] Ocean Protection Council. 2024. State of California Sea-Level Guidance: 2024 Science & Policy Update.

Figure 2-16: Location of a 45-Acre High-Speed Rail Light Maintenance Facility in Relation to the Baylands Specific Plan Land Use Plan



Because future GHG emissions depend on future actions that are not yet known, and because the climate response to these emissions is not precisely known, the sea level rise scenario that will occur cannot be precisely known at this time. To accommodate this uncertainty, the OPC (OPC 2018, 2024) recommends considering a range of scenarios for climate change adaptation planning. OPC (2018) recommends using the low risk aversion scenario for open space, such as along Visitacion Creek and Brisbane Lagoon. They also recommend using the medium-high risk aversion scenario for occupied residential and commercial buildings, such as proposed for much of the Specific Plan area. For OPC (2024), the derivation and terminology of the sea level rise scenarios was modified to be consistent with those in the nationwide update (Sweet et al., 2022[48]). The 2024 scenario recommended for open space, corresponding to low risk aversion, is the Intermediate Scenario. The 2024 scenario recommended for residential and commercial buildings with lifespan to 2075 and beyond is the Intermediate-High Scenario. The 2024 scenario recommended for critical infrastructure (such as roads and landfills) and for lifespans beyond 2100 is the High Scenario. **Table 2-2** compares the sea level rise projections from OPC (2018) and OPC (2024) for Year 2050 and Year 2100. All of these projections are relative to sea level in Year 2000. For this report, the bracketing OPC (2024) Intermediate Scenario of 3.1 feet and the High Scenario of 6.5 feet is considered reasonably foreseeable and used to assess the Specific Plan.

Table 2-2: Sea Level Rise Projections, in Feet

	OPC 2018 Guidance		OPC 2024 Guidance Scenarios		
	Low Risk Aversion	**Medium-High Risk Aversion**	**Intermediate**	**Intermediate-High**	**High**
	Likely Range 66% probability sea level rise is …	*1-in-200 Chance 0.5% probability sea level rise meets or exceeds …*	*5% exceedance probability for 3°C warming*	*0.1% exceedance probability for 3°C warming*	*<0.1% exceedance probability for 3°C warming*
	To Be Applied to:		*To Be Applied to:*		
	Open space	*Residential & commercial buildings*	*Open space*	*Residential & commercial buildings, lifespan beyond 2075*	*Critical infrastructure, lifespan beyond 2100*
2050	1.1	1.9	0.8	1.0	1.3
2100	3.4	6.9	3.1	4.8	6.5

SOURCE: OPC 2018 (high emissions scenario), OPC 2024 (for San Francisco)

Following this guidance, the Specific Plan's development area, including residential, commercial, and public facilities, are located outside of the area that would be subject to 6.5 feet

[48] Sweet, W.V., B.D. Hamlington, R.E. Kopp, C.P. Weaver, P.L. Barnard, D. Bekaert, W. Brooks, M. Craghan, G. Dusek, T. Frederikse, G. Garner, A.S. Genz, J.P. Krasting, E. Larour, D. Marcy, J.J. Marra, J. Obeysekera, M. Osler, M. Pendleton, D. Roman, L. Schmied, W. Veatch, K.D. White, and C. Zuzak. 2022. Global and Regional Sea Level Rise Scenarios for the United States: Updated Mean Projections and Extreme Water Level Probabilities Along U.S. Coastlines. NOAA Technical Report NOS 01. National Oceanic and Atmospheric Administration, National Ocean Service, Silver Spring, MD, 111 pp. https://oceanservice.noaa.gov/hazards/sealevelrise/noaa-nos-techrpt01-global-regional-SLR-scenarios-US.pdf.

of sea level rise. The Specific Plan also designs areas along Visitacion Creek and Brisbane Lagoon based on 3.1 feet of sea level rise.

2.8 BAY-DELTA PLAN AMENDMENT

2.8.1 BAY-DELTA PLAN

The San Francisco/Sacramento-San Joaquin Delta Estuary (Bay-Delta) is an important estuary that provides an essential water source for major users to the south and west. As competition over water supply between in-basin and export users grew, in 1978, the State Water Resources Control Board (SWRCB) adopted the Bay-Delta Plan to establish water quality objectives for designated beneficial uses of water in the Bay-Delta watershed and an implementation program to meet those objectives. State Board regulations and decisions can affect the availability of water for Bay-Delta exporters, including State Water Project (SWP) contractors like SFPUC. Currently, many of the Bay-Delta Plan's water quality objectives are achieved through flow requirements; the SWP and Central Valley Project (CVP) are the main sources of these flows. The Bay-Delta Plan was amended in 1991 and 1995, with minor changes in 2006.

In December 2018, the SWRCB adopted amendments related to lower San Joaquin River flows and southern Delta salinity—the first phase of the Bay-Delta Plan update. Some of the flow objectives would be implemented by requiring the maintenance of unimpaired flows in the winter and spring.[49] The new requirements are estimated to result in a 12 to 16 percent average reduction in surface water diversions. The SWRCB is also developing Bay-Delta Plan updates for the Sacramento River and Delta eastside tributaries, as well as Delta outflows and interior flows, in a second phase based on a July 2018 framework.

If implemented, the Bay-Delta Plan Amendment could significantly reduce water available from the Tuolumne River, which is the source of 85% of the water for the SFPUC's regional water system.

Following the SWRCB's adoption of the Bay-Delta Plan Amendment, there were over a dozen active lawsuits challenging the Bay-Delta Plan Amendment given its potential to significantly reduce water supply available to the Bay Area. However, in March 2024, the Sacramento County Superior Court ruled in the SWRCB's favor on all claims. In May 2024, the City and County of San Francisco and other water suppliers filed an appeal on this decision.

Since 2019, SFPUC has participated in negotiations with the state and other stakeholders to reach a compromise wherein a voluntary agreement could be adopted as an alternative or substitute for the Bay-Delta Plan Amendment that would minimize the impacts to the Regional Water System. In March 2019, SFPUC submitted a proposed voluntary agreement (Proposed

[49] Unimpaired flow is defined as the natural water production of a river basin without any upstream diversions, storage, exports, or imports.

Voluntary Agreement) to the state, and a non-binding memorandum of understanding (MOU) was signed between SFPUC and state representatives outlining conceptual deal points for a Tuolumne River Voluntary Agreement, described in further detail in Section 6.1.1.2 of the Baylands Water Supply Assessment (Appendix P). As of January 2025, the MOU remains in effect, while the Proposed Voluntary Agreement is currently undergoing review and evaluation by the SWRCB (SFPUC 2023b; BAWSCA 2024b).

Given the ongoing negotiations, litigation, and regulatory proceedings surrounding the Bay-Delta Plan Amendment, the SFPUC uses three scenarios to analyze water supply and demand in its Water Supply Assessments to account for the uncertainty regarding the extent and timing of the Bay-Delta Plan Amendment's implementation. Based on this and additional information provided by the Bay Area Water Supply and Conservation Agency (BAWSCA), the Baylands Water Supply Assessments analyze water supply and demands through 2045 under the three scenarios recommended by SFPUC:

- Scenario 1: Implementation of the Bay-Delta Plan Amendment
- Scenario 2: Without implementation of the Bay-Delta Plan Amendment or the Proposed Voluntary Agreement
- Scenario 3: Implementation of the Proposed Voluntary Agreement

These scenarios account for the uncertainty regarding the extent and timing of the Bay-Delta Plan Amendment's implementation. As such, these three scenarios were evaluated in the water supply assessment to analyze water supply and demands through 2045.

Scenario 1 represents "worst-case" supply scenario in which the Bay-Delta Plan Amendment is implemented as adopted without accounting for implementation of actions identified as part of the Settlement Agreement, SFPUC's Alternative Water Supply Planning Program (AWSP), BAWSCA's 2015 Strategy, or Cal Water's Bay Area Regional Water Supply Reliability Study (WSRS). Under this scenario, shortfalls of up to 53% are projected during drought years.

A significant source of uncertainty identified in the Water Supply Assessment was whether the Water Quality Control Plan for the Bay-Delta Plan Amendment will be implemented and how it would affect the supply reliability of the City and County of San Francisco's Regional Water System, which is Cal Water's major source of supply. However, as described in the Water Supply Assessment, Cal Water expects that SFPUC's level of service goals will be met and assumes its contract with SFPUC will be honored as written. If drought conditions should arise, Cal Water would meet its demands through the implementation of its Water Shortage Contingency Plan, as described in detail in the water supply assessment (Draft EIR Appendix P). Recycled water supply from the Baylands water recycling facility would reduce potable water supply shortfalls relative to total demands during normal year, single dry year, and multiple dry year hydrologic scenarios by eliminating use of potable water for non-potable purposes within the Baylands, as quantified in Draft EIR Appendix P. In addition, Cal Water,

through local and regional efforts, is also striving to increase its water supply portfolio for the three Peninsula Districts. Cal Water's adopted Water Shortage Contingency Plan is presented as Appendix L of its 2020 Urban Water Management Plan and can be found at https://www.calwater.com/docs/uwmp2020/SSF_2020_UWMP_FINAL.pdf.

2.9 REFERENCES – ENVIRONMENTAL AND PLANNING CONTEXT

Association of Bay Area Governments. 2021. Metropolitan Transportation Commission. Final Plan Bay Area 2050. https://planbayarea.org/finalplan2050.

Association of Bay Area Governments. 2021. Plan Bay Area 2050 Regional Growth Forecast: https://planbayarea.org/sites/default/files/documents/Plan_Bay_Area_2050_Forecasting_Modeling_Report_October_2021.pdf.

Association of Bay Area Governments. 2021. Plan Bay Area 2050 Growth Pattern: https://planbayarea.org/sites/default/files/FinalBlueprintRelease_December2020_GrowthPattern_Jan2021Update.pdf.

BCDC (Bay Conservation and Development Commission). 2021. *San Francisco Bay Plan Climate Change Policy Guidance*. July 2021.

California Department of Finance. 2024. *E-1 Cities, Counties, and the State Population Estimates with Annual Percentage Change – January 1, 2023 and 2024*. Accessed May 16, 2024. https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fdof.ca.gov%2Fwp-content%2Fuploads%2Fsites%2F352%2FForecasting%2FDemographics%2FDocuments%2FE-1_2024_InternetVersion.xlsx&wdOrigin=BROWSELINK.

CPUC (California Public Utilities Commission). 2006. *EMF Design Guidelines for Electrical Facilities*. July 21, 2006. Accessed August 9, 2024. https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/infrastructure/emfs/ca_emf_design_guidelines.pdf.

CPUC. 2023. *Estrella Substation and Paso Robles Area Reinforcement Project Final EIR*. Accessed October 17, 2023. ia.cpuc.ca.gov/environment/info/horizonh2o/estrella/docs/feir/Vol3/CPUC_Estrella_Public_FEIR_Vol.3_March2023.pdf.

City and County of San Francisco, Department of the Environment. 2015. Landfill Disposal Agreement. July 22, 2015. Accessed August 9, 2024. https://sfpublicworks.org/sites/default/files/Ex.%2013%20-%202015%20Landfill%20Agreement.PDF.

City of Brisbane, Baylands Program Draft and Final EIR, Baylands 2018 MMRP, and Addendum/GP-1-19 Resolution 2020-1 and/or Minutes.

EKI Environment & Water. *Water Supply Assessment for the Baylands Specific Plan*, S*outh San Francisco District, California Water Service*. January 2025.

Justice, Stephen. No Date. Jim McLennan: Businessman, Racer, Promoter – A Photo Flashback. Accessed August 9, 2024. http://www.wediditforlove.com/Champion-1.html.

National Institute of Environmental Health Sciences. 2024. *Electric & Magnetic Fields*. Accessed August 9, 2024. https://www.niehs.nih.gov/health/topics/agents/emf/index.cfm.

National Institute of Environmental Health Sciences. 1999. *Health Effects from Exposure to Power-Line Frequency Electric and Magnetic Fields*. May 4, 1999. Accessed August 9, 2024. https://www.niehs.nih.gov/sites/default/files/health/assets/docs_p_z/report_powerline_electric_mg_predates_508.pdf.

OneShoreline. 2023. *Planning Guidance Policy to Protect and Enhance Bay Shoreline Areas of San Mateo County, (Public Draft)*. June 2023. Accessed August 9, 2024. https://oneshoreline.org/wp-content/uploads/2023/09/OneShoreline-Planning-Policy-Guidance-Final-June-21-2023-For-Print.pdf.

Sweet, W.V., B.D. Hamlington, R.E. Kopp, C.P. Weaver, P.L. Barnard, D. Bekaert, W. Brooks, M. Craghan, G. Dusek, T. Frederikse, G. Garner, A.S. Genz, J.P. Krasting, E. Larour, D. Marcy, J.J. Marra, J. Obeysekera, M. Osler, M. Pendleton, D. Roman, L. Schmied, W. Veatch, K.D. White, and C. Zuzak. 2022. *Global and Regional Sea Level Rise Scenarios for the United States: Up- dated Mean Projections and Extreme Water Level Probabilities Along U.S. Coastlines. NOAA Technical Report NOS 01*. National Oceanic and Atmospheric Administration, National Ocean Service, Silver Spring, MD, 111 pp. February 2022. Accessed August 9, 2024. https://oceanservice.noaa.gov/hazards/sealevelrise/noaa-nos-techrpt01-global-regional-SLR-scenarios-US.pdf.

CHAPTER 3 PROJECT DESCRIPTION

The purpose of this chapter is to provide the public, reviewing agencies, and decision-makers with a description of the Baylands Specific Plan ("Specific Plan") along with the development it permits, related components, required approvals, and a description of how this EIR is intended to be used.

CEQA Guidelines Section 15124: Requirements for an EIR Project Description

"The description of the project shall contain the following information but should not supply extensive detail beyond that needed for evaluation and review of the environmental impact.

(a) The precise location and boundaries of the proposed project shall be shown on a detailed map, preferably topographic. The location of the project shall also appear on a regional map.

(b) A statement of the objectives sought by the proposed project. A clearly written statement of objectives will help the lead agency develop a reasonable range of alternatives to evaluate in the EIR and will aid the decision makers in preparing findings or a statement of overriding considerations, if necessary. The statement of objectives should include the underlying purpose of the project and may discuss the project benefits.

(c) A general description of the project's technical, economic, and environmental characteristics, considering the principal engineering proposals if any and supporting public service facilities.

(d) A statement briefly describing the intended uses of the EIR.

(1) This statement shall include, to the extent that the information is known to the Lead Agency,

(A) A list of the agencies that are expected to use the EIR in their decision making, and

(B) A list of permits and other approvals required to implement the project.

(C) A list of related environmental review and consultation requirements required by federal, state, or local laws, regulations, or policies. To the fullest extent possible, the lead agency should integrate CEQA review with these related environmental review and consultation requirements.

(2) If a public agency must make more than one decision on a project, all its decisions subject to CEQA should be listed, preferably in the order in which they will occur. On request, the Office of Planning and Research will provide assistance in identifying state permits for a project."

3.1 PROJECT LOCATION

The Baylands Specific Plan area ("Specific Plan area," "Baylands," "Baylands site," or "site") and the City of Brisbane lie within the nine-county San Francisco Bay area region in the northeastern corner of San Mateo County, immediately south of the City and County of San Francisco (see **Figure 3-1**). Municipalities adjoining Brisbane include San Francisco to the north, Daly City and an unincorporated portion of San Mateo County to the west, and South San Francisco to the south.

The US Highway 101 freeway ("US 101") forms the Baylands' eastern boundary and runs immediately adjacent to the west shore of San Francisco Bay, placing the Specific Plan area approximately 250 feet west of the Bay. San Bruno Mountain, whose slopes form the western edge of Brisbane, provides a dramatic backdrop to the City when it is viewed from the north and east.

The Baylands Specific Plan area is bounded to the east by US 101 and to the west and south by Bayshore Boulevard (see **Figure 3-2**). The site's northern boundary is formed by the San Francisco County line and the portion of the existing Recology waste management facilities that is within the City

of Brisbane. The Baylands includes approximately 680.1 acres (558.3 acres of existing land area and 121.8 acres of existing lagoon[50]).

Figure 3-1: Baylands Specific Plan Location



[50] Approximately 26 acres of existing land area within the Baylands is projected to be inundated on a daily basis as the result of projected sea level rise through the Year 2100. Thus, by the Year 2100, the Baylands Specific Plan area is projected to consist of 532.3 acres of land area and 147.8 acres of open water within the Brisbane Lagoon and Visitacion Creek.

Figure 3-2: Baylands Specific Plan Area



3.2 PROJECT OBJECTIVES

The following identifies the project objectives of the 2025 Baylands Specific Plan project, including its underlying purpose pursuant to California Environmental Quality Act (CEQA) Guidelines Section 15124(b), which requires an EIR to include a "statement of objectives sought by the proposed project" and "should include the underlying purpose of the project and may discuss the project benefits."

The **underlying purpose of the Baylands Specific Plan** and related project components is to provide for the productive reuse of this brownfield site in a manner that eliminates ongoing ecological damage and ensures the safety of all who will use the Baylands.

Project objectives for the Baylands are to:

- Implement the City's Housing Element by providing a mix of housing types, sizes, and densities that contributes to local and regional housing needs for all economic segments of the community, as well as for families and individuals of all ages and physical abilities.
- Implement the Brisbane General Plan, including General Plan Amendments GP-1-18 (Measure JJ) and GP-1-19.
- Preserve and enhance the site's natural resources and historic features within a system of permanent open space that:
    - Restores, and enhances wetlands and natural habitats within the Baylands;
    - Promotes visual connectivity between the Baylands, San Bruno Mountain, and San Francisco Bay;
    - Adapts to climate change and sea level rise; and
    - Provides a range of recreational opportunities and open space experiences for Baylands residents and workers, as well as for the larger Brisbane community.
- Enhance Brisbane's economic vitality by ensuring that Baylands development will be revenue positive for the City.
- Establish the Baylands as a leading model of sustainable development consistent with the principles of the City's Sustainability Framework for the Baylands (Integral Group 2015).
- Attract office-based employment to the Baylands that provides a broad range of high-paying jobs as well as training and advancement opportunities for the community's young adults.
- Enable residents, workers, and visitors to be less dependent on cars.

3.3 PROJECT TECHNICAL, ECONOMIC, AND ENVIRONMENTAL CHARACTERISTICS

The applicant, Sunquest Properties Inc. ("Sunquest") and its development manager, Baylands Development Inc. ("BDI"), collectively referred to as the "applicant," are proposing a Specific Plan for development of 2,200 dwelling units, 6.5 million square feet of commercial office development, and an additional 500,000 square feet of hotel use; resource conservation and outdoor recreational areas; acquisition of a water supply by establishing the California Water Service Company as the water service agency for the Baylands, Sierra Point, and Beatty subareas of the City of Brisbane; and construction of associated on-site and off-site infrastructure. To accomplish this development, the Baylands project consists of the six major components described below.

- Amendment of the General Plan Land Use and Circulation Elements.
- Baylands Specific Plan.
- Relocation of the existing North County Fire Authority Brisbane Fire Station No. 81, conversion of the existing station for use as a training facility, and establishment of a new station within the Baylands.
- Bayshore Mobility Plan.
- Construction of a Middle School within the Baylands and conversion of the existing Bayshore School to an Elementary School.
- Development Agreement.

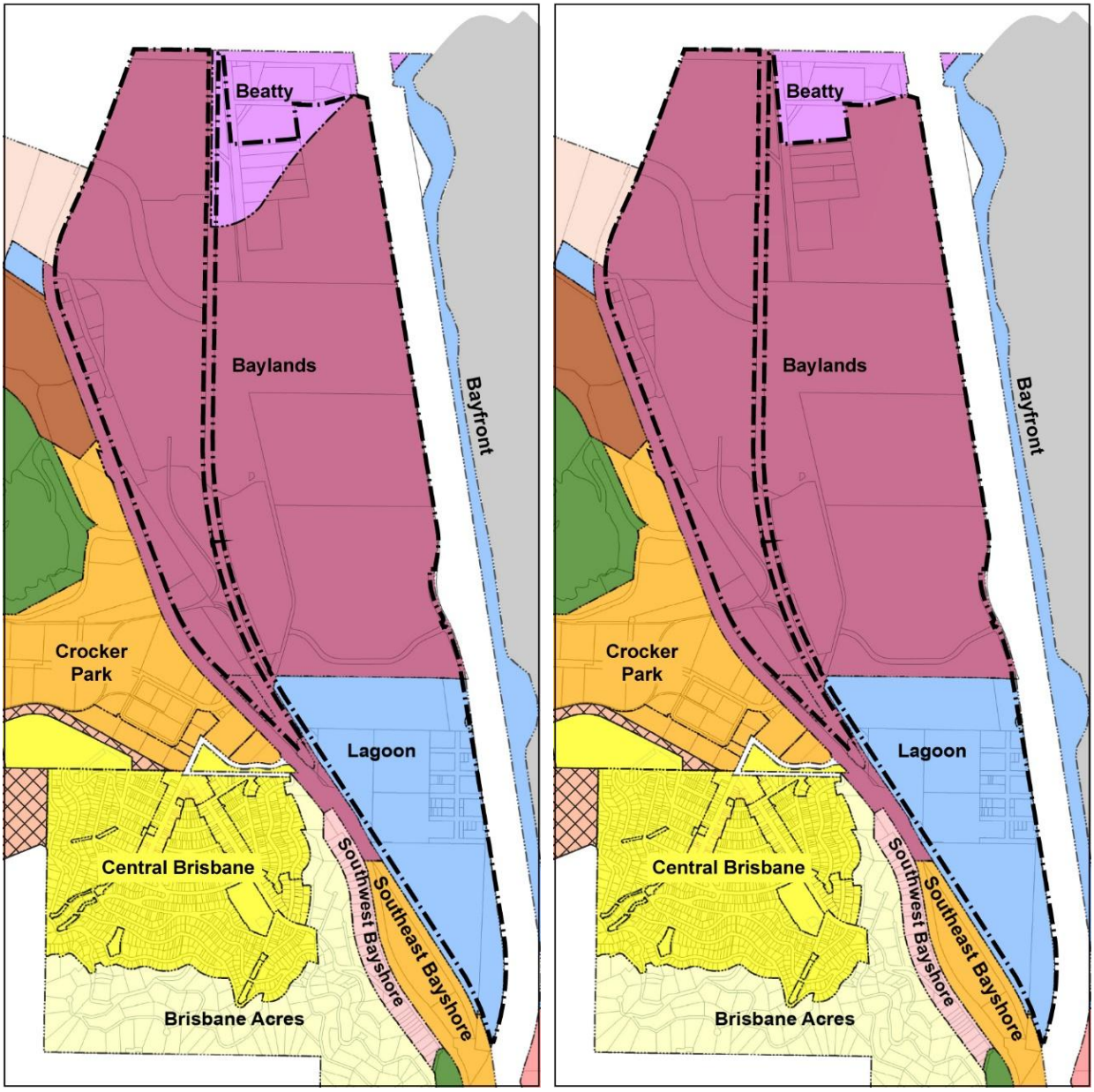
3.3.1 GENERAL PLAN AMENDMENT

Currently, the Baylands Specific Plan area encompasses the Baylands General Plan Subarea and a portion of the Beatty General Plan Subarea. An amendment to the Brisbane General Plan is proposed to modify the General Plan land use map to include the entirety of the Baylands Specific Plan and land owned by the applicant within the Baylands Subarea (see **Figures 3-1**, **3-2**, and **3-3**). The land use designation for the portion of the Baylands Specific Plan currently within the Beatty Subarea would be modified from Heavy Commercial to Baylands Planned Development, Residential Prohibited.

In addition, as shown in **Figure 3-4a** and **Figure 3-4b**, the Brisbane General Plan Circulation Element is proposed to be amended to:

- Realign Lagoon Road to directly access the southbound US 101 freeway ramps at Sierra Point Parkway;

Figure 3-3: Proposed General Plan Land Use Element Amendment



EXISTING PROPOSED

Figure 3-4a: Existing General Plan Circulation Element as Amended by GP-1-19 in January 2020

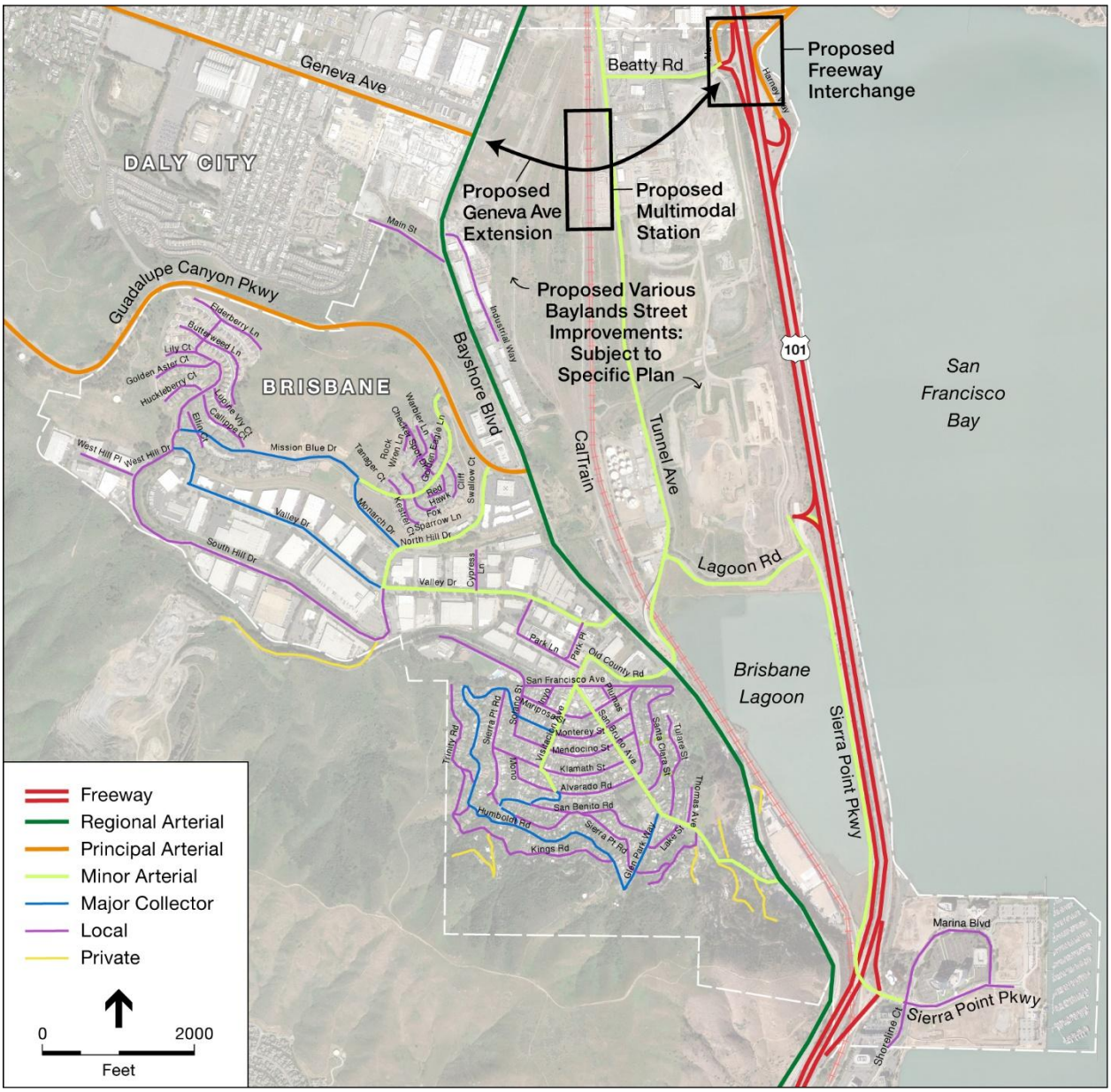
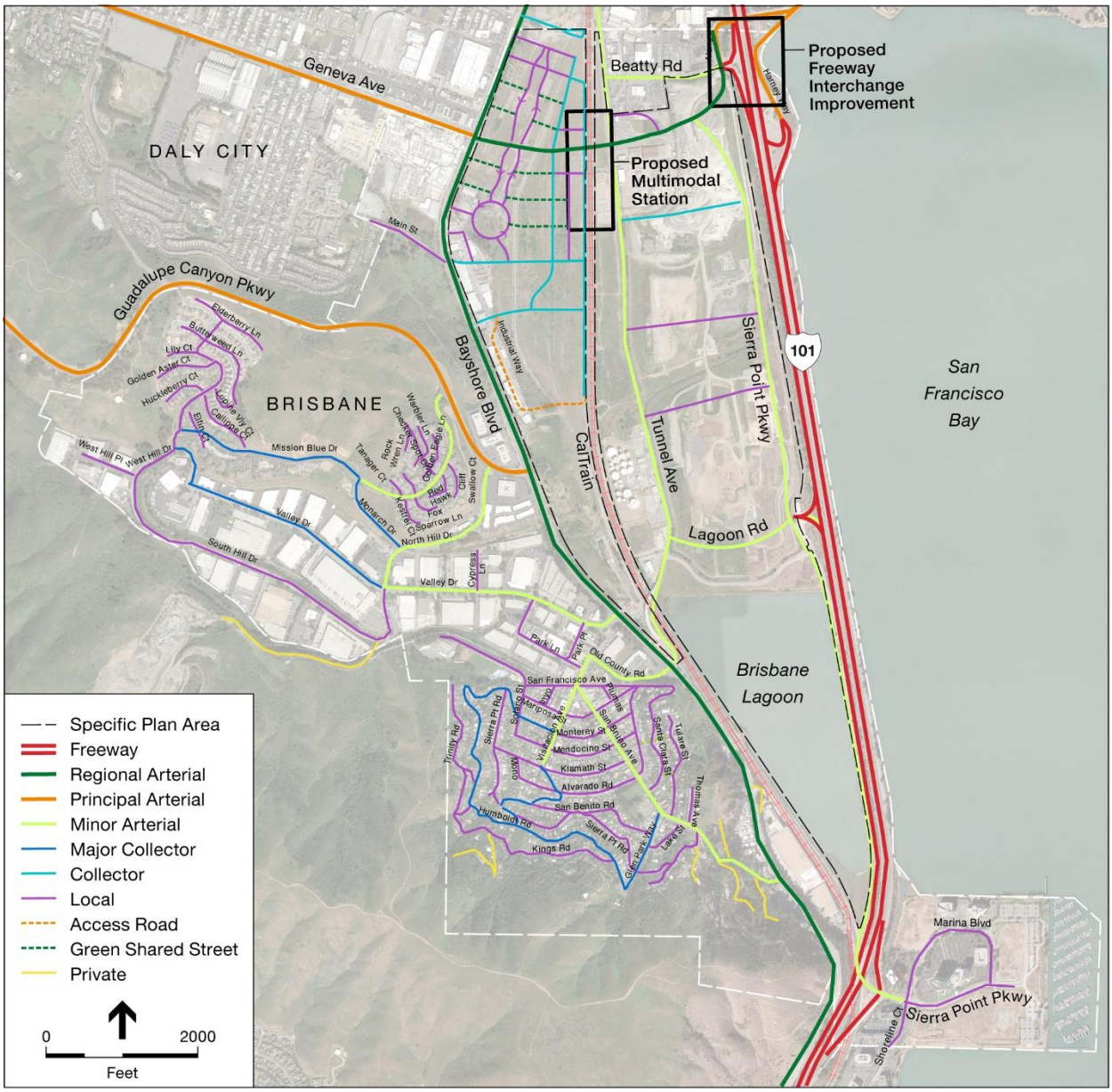


Figure 3-4b: General Plan Circulation Element as Proposed



NOTE: "Multimodal Station" refers to a possible future expansion of the existing Bayshore Caltrain Station to serve as a transfer point between Caltrain rail service and future bus rapid transit (BRT) service along Geneva Avenue, and the potential for southerly extension of Muni light-rail service, as well as with Baylands bicycle, pedestrian, and shuttle systems.

- Extend Sierra Point Parkway from its current terminus at the southbound US 101 freeway ramps north to Geneva Avenue;
- Add proposed Baylands roadways to the General Plan circulation map;
- Designate the Geneva Avenue extension through the Baylands as a Regional Arterial;
- Add "Green Shared Street" to the General Plan as a roadway type; and
- Abandon the Industrial Way right-of-way following removal of existing industrial buildings.

3.3.2 BAYLANDS SPECIFIC PLAN AND PROPOSED DEVELOPMENT

a. Purpose of a Specific Plan

A specific plan is a tool for the systematic implementation of a community's general plan. It is intended to provide for the orderly and efficient development of an area, covering land use and design requirements for private development, public services and facilities, and circulation and streetscape improvements in public areas.

The Baylands Specific Plan is therefore intended to implement the Brisbane General Plan by allowing site-specific development of residential, office, retail, and recreational uses within the Baylands over the next 20 years along with habitat restoration and enhancement. The Baylands Specific Plan will serve as the zoning for the Specific Plan area.

b. Contents of the Baylands Specific Plan

The Baylands Specific Plan includes a comprehensive plan for development of the 680.1-acre Baylands site, including goals, policies, and development standards and plans to guide future development actions. The Specific Plan also identifies necessary infrastructure and circulation improvements to accommodate proposed growth, and a strategy intended to ensure coordinated implementation.

The Specific Plan consists of the following chapters:

- **Vision and Executive Summary** provides an overview of the applicant's plan for the Baylands, including the guiding principles identified by the applicant that underlie the applicant's vision. This chapter also describes the applicant's planning and design process leading to preparation of the Specific Plan and its submittal to the City of Brisbane.
- **Introduction** describes the overall purpose of the Specific Plan and the legal requirements for a specific plan. This chapter describes the character of the Specific Plan area and its surroundings, land ownerships, and key factors that influence the Specific Plan's form and provisions.

- **Land Use Program and Definitions** describes the overall land use and development program for the Baylands, including land use goals and policies. This chapter also describes proposed land use and building types and the intensity of proposed development within the Baylands.
- **Development Standards and Controls** sets forth zoning and development standards at a district, block, and building level. This chapter also provides design guidelines for future development within the Baylands.
- **Sustainability Framework** describes strategies and standards for: creating "zero carbon buildings" and a "zero waste" development that conserves energy and water, increases transit accessibility and use of non-motorized transportation modes, enhances habitats and the site's natural environment, establishes resiliency in light of projected sea level rise adaptation, provides for sustainable infrastructure development, and addresses other sustainability factors.
- **Conservation and Open Space** describes the Baylands proposed open space/open area[51] program, including habitat conservation, restoration, and enhancement, as well as active and passive parks and recreational improvements. This chapter also

California Government Code: Specific Plan Content Requirements

Government Code Section 65451 sets forth the following requirements for specific plans:

(a) A specific plan shall include a text and a diagram or diagrams, which specify all of the following in detail:
  (1) The distribution, location, and extent of the uses of land, including open space, within the area covered by the plan.
  (2) The proposed distribution, location, and extent and intensity of major components of public and private transportation, sewage, water, drainage, solid waste disposal, energy, and other essential facilities proposed to be located within the area covered by the plan and needed to support the land uses described in the plan.
  (3) Standards and criteria by which development will proceed, and standards for the conservation, development, and utilization of natural resources, where applicable.
  (4) A program of implementation measures including regulations, programs, public works projects, and financing measures necessary to carry out paragraphs (1), (2), and (3).

(b) The specific plan shall include a statement of the relationship of the specific plan to the general plan.

Government Code Section 65452 states that a specific plan "may address any other subjects which in the judgment of the planning agency are necessary or desirable for implementation of the general plan."

[51] *Open Space*, as used in this EIR, refers to lands the Specific Plan designates for parks and recreation facilities that would be available to the public along with lands designated for the preservation or enhancement of biological resources.

Open Area, as described in the Brisbane General Plan Land Use Element, consists of land, primarily in private ownership, which serves to soften the impacts of urban development by providing primarily green areas and a feeling of "openness" to the overall development pattern. Open areas include, but are not limited to, setbacks and easements that are landscaped or characterized by native vegetation, gardens, and landscaped vegetation. Open areas might also include golf courses, private parks, and recreation areas within private developments. An open area may consist of a combination of hardscape and landscape, typical of plazas, sculpture gardens, and gathering places. Streets, sidewalks, parking lots, and similar improvements, although not covered by structures, are not included in the definition of an "open area."

outlines vegetative landscaping and planting guidelines for proposed recreational and habitat areas.

- **Circulation** describes the proposed circulation network and identifies the components and design standards for movement of vehicles, pedestrians, and bicyclists; access to transit; transportation connections to adjacent systems; improvements to existing transportation infrastructure within Brisbane; and development of new facilities.
- **Infrastructure** describes proposed infrastructure improvements to provide sewer, potable and recycled water, storm drainage, and energy and telecommunications infrastructure for the Baylands.
- **Public Facilities Financing** identifies the applicant's proposed public financing strategies and mechanisms, along with ownership and maintenance responsibilities for Specific Plan facilities and infrastructure.
- **Implementation** identifies key implementing actions and subsequent approvals for Baylands development needed from the City and other regulatory agencies. This chapter describes the proposed system for City review and approval of site-specific development projects within the Baylands.

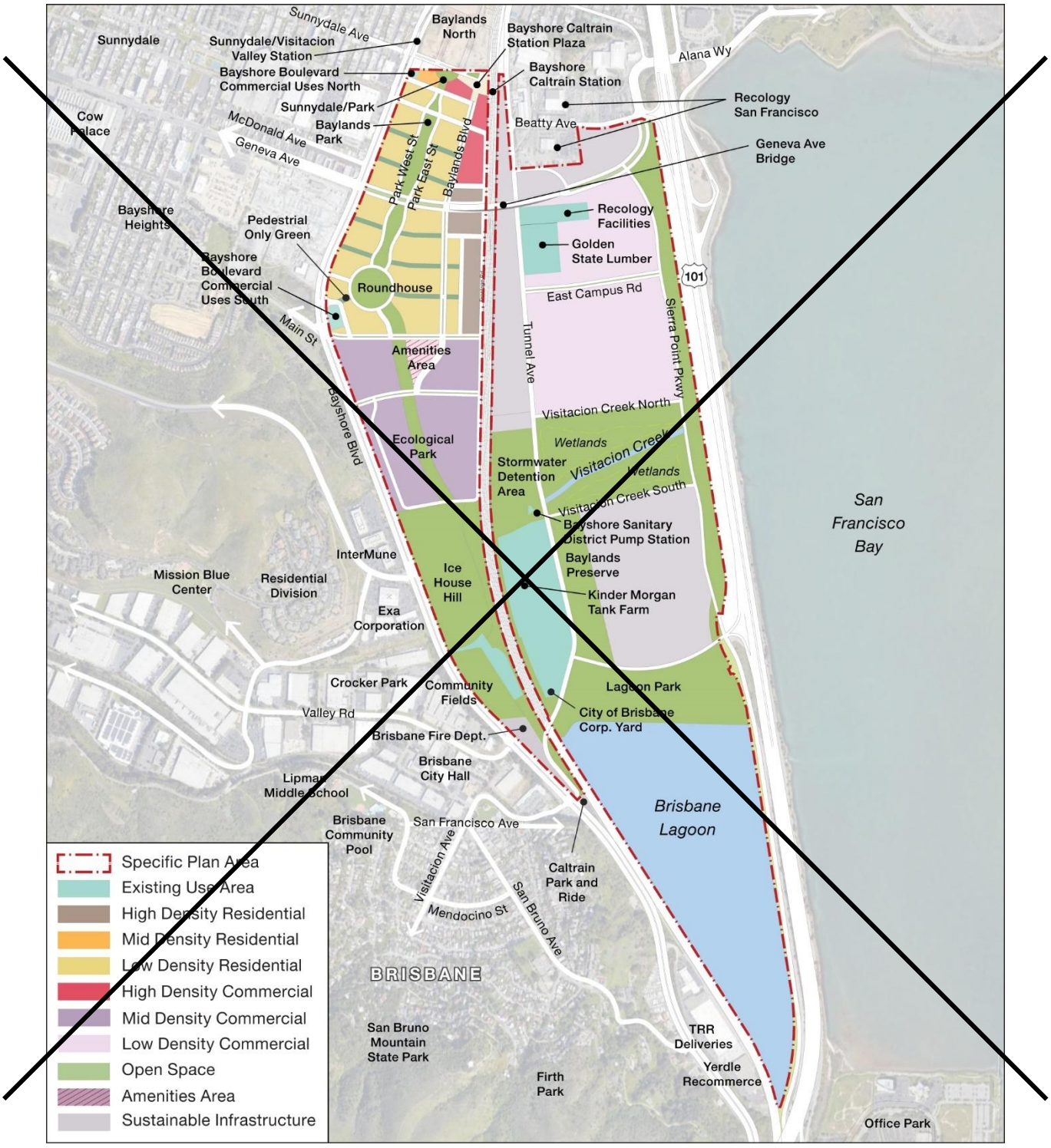
c. Land Use Program

The Baylands Specific Plan proposes development of 2,200 residential units and 6.5 million square feet of retail, commercial, office, conference, research and development ("R&D"), and campus uses; 500,000 square feet of hotel use; and a middle school, open space, and parks and trails within the 680.1-acre Specific Plan area. Per the requirements of the Brisbane General Plan, residential uses are clustered in the northwestern portion of the site in proximity to the Bayshore Caltrain station. **Figure 3-5**, **Table 3-1a**, and **Table 3-1b** identify the Specific Plan's proposed land use plan and development statistics.

Table 3-1c and **Table 3-1d**, below, identify the reasonable assumptions for Baylands development needed for EIR analyses, such as population and employment at buildout and the breakdown of residential building types and commercial use types.

Figure 3-5: Proposed Land Use





SOURCE: The Baylands Specific Plan, 2025.

Table 3-1a: Proposed Land Use Program by Acreage

Land Use	Area West of the Caltrain Right-of-Way (in acres)[a]	Area East of the Caltrain Right-of-Way (in acres)[a]	Specific Plan Total
Land Area			
Residential	52.8	0.0	**52.8**
Commercial	48.8	78.3	**127.1**
Amenities Area	2.6	0.0	**2.6**
Existing Use Areas[b]	5.8[c]	32.5[d]	**38.3**
Open Space/Open Area	59.4	97.6	**157.0**
Sustainable Infrastructure	0.0	90.8	**90.8**
Roadway Rights-of-Way	37.4	26.3	**63.7**
Subtotal	*206.8*	*325.5*	***532.3***
Water			
Brisbane Lagoon	0.0	121.8	**121.8**
Existing Land Area that will be Inundated on a Daily Basis Due to Sea Level Rise by 2100	0.0	26.0	**26.0**
Subtotal	*0.0*	*147.8*	*147.8*
TOTAL	**206.8**	**473.3**	**680.1**

SOURCES: The Baylands Specific Plan, 2025; City of Brisbane 2024.

NOTES:

a. Acreages are based on Year 2100 land area following approximately 83 inches of sea level rise.
b. Represents lands not owned by the applicant.
c. Includes Machinery & Equipment building (2.2 acres) and existing fire station site (3.6 acres).
d. Includes Recology Facilities (3.6 acres), Golden State Lumber (5.3 acres), Bayshore Sanitation Pump Station (0.1 acres), and Kinder Morgan Tank Farm/City Corporation Yard site (23.5 acres).

Table 3-1b: Land Use Program by Dwelling Units and Building Square Footage

	Maximum Permitted		
	Dwelling Units	**Commercial Building Area (in square feet)**	**Hotel Building Area (in square feet)**
West of the Caltrain Right-of-Way	2,200	4,000,000	500,000
East of the Caltrain Right-of-Way	—	2,500,000	—
TOTAL	**2,200**	**6,500,000**	**500,000**

NOTES: The Specific Plan permits a portion of the maximum permitted 6.5 million square feet of commercial use to be located within areas designated residential in the form of:

- "**Active Ground Floor**" uses including retail, restaurants, commercial services, offices, and public/semi-public uses permitted along specified street frontages within Low-, Mid-, and High-Density Residential areas. Active Ground Floor commercial uses are limited to 25,000 square feet of space within the Bayshore District.
- An unspecified amount of commercial and public/semipublic uses are permitted as "**Residential Flex Space**" (RFS) on the ground floor of residential units within Low-Density Residential areas where AGF is not allowed or required.

Table 3-1c: Baylands Land Use Program Assumed for Environmental Analysis Purposes

	West of Caltrain Right-of-Way	East of Caltrain Right-of-Way	Off-Site	Total
Dwelling Units[a]	***2,200***			***2,200***
Attached Single Family	1,159			1,159
Multifamily Housing Low Rise	95			95
Multifamily Housing Mid Rise	347			347
Multifamily Housing High Rise	599			599
Resident Population	4,905			4,905
Commercial Building Square Footage[b]	***4,000,000***	***2,500,000***		***6,500,000***
General Office	3,897,800	2,500,000		6,397,800
Retail	102,200			102,200
Baylands Employment	13,915	5,565		19,480
Hotel Rooms	***800***			***800***
Infrastructure and Amenities				
Middle School	350 students			
Amenities Building	20,000 s.f.			
Open Space/Open Area Improvements	See Table 3-1d			
Fire Station		House a ladder truck company + squad	10,000 s.f.	
Water Storage Tank Capacity		3,160,000 gal		
Water Recycling Facility Capacity		1.0 mgd		
On-Site Energy Generation		92,445 MWh		
Solar Farm		55 acres		
Switching Substation		2.0–3.0 acres		
Distributed Battery Storage		30 MW		30 MW
Utility Scale Battery Storage		250 MW		250 MW
Off-Site Potable Water Lines			1,000 feet	
Off-Site Recycled Water Lines			5.5 miles	

SOURCES: Baylands Specific Plan, 2025; Desert Shores Consulting, 2025.

NOTES:

a. The breakdown of Baylands' 2,200 dwelling units and 6.5 million square feet of commercial use by residential and commercial type represents reasonably foreseeable Baylands development based on the various provisions of the Specific Plan, including provisions that provide flexibility in the mix of residential and commercial building and use types and development intensities for future site-specific development projects throughout the Baylands. These breakdowns are intended for analytical purposes and are not intended to be used as regulatory maximums or requirements.

b. The Baylands Specific Plan requires that a minimum of 85,000 MWh of renewable electricity be generated within the Baylands. Based on the reasonably foreseeable mix of building types anticipated within the Baylands, actual renewable energy generation would be 92,445 MWh annually.[52]

[52] Thornton Tomasetti Inc. 2021. *The Baylands Energy Plan*. May 2021.

Table 3-1d: Breakdown of Proposed Open Space/Open Area Functions and Types

Specific Plan Open Space Typologies	Acreage	Functions	Open Space/Open Area Type and Acreage	
Urban Plazas				
Bayshore Station Plaza	1.4	Gathering place for Caltrain riders, including seating, public art, and information signage.	Park	1.4
Active Recreation Areas				
Community Fields	7.4	Recreational lawn and youth sports field(s), picnicking, playground, fitness path, dog park.	Park	7.4
Bay Trail	20.0	Extension of the San Francisco Bay Trail for use by pedestrians and bicyclists.	Park	20.0
Community Greens				
Baylands Park	5.8	Passive recreation, dog park, formal and natural gardens.	Park	5.8
Sunnydale Park	0.8	Passive recreation, gathering place.	Park	0.8
Roundhouse Park	3.9	Passive recreation, historic preservation, outdoor dining and picnicking, gathering place.	Park	3.9
Ecological Greenspaces				
Lagoon Park	15.4	Habitat restoration and enhancement, trails, and passive recreation.	Park Habitat	5.3 10.1
The Ecological Park	7.3	Habitat restoration and enhancement, stormwater treatment, trails, picnicking.	Park	7.3
Visitacion Creek	30.8	Habitat restoration and enhancement, trails.	Park Habitat	3.1 27.7
Icehouse Hill	24.3	Habitat restoration and enhancement, trails.	Park Habitat Resource Production	2.1 21.8 0.4
Baylands Preserve	14.1	Habitat connectivity, restoration, and enhancement; trails.	Park Habitat	7.7 6.4
Stormwater Detention	13.8	Stormwater detention, water quality management	Public Safety	13.8
Green Edges				
West Rail Trail	8.5	Habitat connectivity, integrated stormwater treatment.	Habitat	8.5
East Rail Green Edge	3.5	Habitat restoration and enhancement, visual screening	Habitat	3.5
OPEN SPACE/OPEN AREA TOTAL	**157.0**		**Park** **Habitat** **Public Safety** **Resource Production**	**64.8** **78.0** **13.8** **0.4**

SOURCES: Baylands Specific Plan, 2025; Desert Shores Consulting.

Land Use Designations and Building Types

Each of the 10 land use designations identified in the Specific Plan's land use plan (**Figure 3-5**) and the specific types of development permitted within these designations are described below.

Residential Land Use Designations

- Low-Density Residential areas consist of a mix of the following building types:
    - Duplex/Single Family units have a maximum height of 50 feet. They are freestanding or paired units, 3 stories with an allowed 4th-story deck and penthouse space that must not exceed half the size of the 3rd story. These units have individual at-grade garages and are only permitted in Low-Density Residential areas.
    - Townhome units have a maximum height of 50 feet, 3 stories with an allowed 4th-story deck and penthouse space that must not exceed half the size of the 3rd story. These units have varying lot widths and depth, as well as individual at-grade garages. They are distinguished from Duplex/Single Family buildings in that Townhome units are attached with three or more units per building. They are permitted in Low-, Mid- and High-Density Residential areas.
    - Multi-Family Low includes buildings with a maximum height of 50 feet and with no more than 22 units per building. These may be designed as townhome units over single-story flats or as stacked townhomes. These units are 3 stories with an allowed 4th-story deck and penthouse space that must not exceed half the size of the 3rd story. Parking is to be provided at-grade or in a below-grade parking structure. This building type is only permitted within Low-Density Residential areas.

  An unspecified amount of commercial and public/semi-public uses are permitted as "Residential Flex Space" on the ground floor of residential units within Low-Density Residential building types where active ground floor uses are not allowed or required provided that all revenue generated by such businesses are distributed to the owner of the residential dwelling unit above.
- Mid-Density Residential consists of a mix of the following building types:
    - Multi-Family Mid includes mid-rise buildings up to a maximum height of 110 feet (which would typically allow a 9-story building). This type of housing is generally located along Sunnydale Avenue and Geneva Avenue. Parking is proposed to be provided at-grade or in a below-grade parking structure. This building type is proposed to have active ground floor retail and active pedestrian environments as specified for each District.

      This building type is permitted within both Mid- and High-Density Residential areas.
    - Townhome units as described above.

- High-Density Residential consists of a mix of the following building types:
    - Multi-Family High provides for residential towers with a maximum height of 270 feet (which would typically allow 22-story buildings). This building type is located west of the Caltrain rail right-of-way. Parking is proposed within structures accessed from Frontage Road. Multi-Family High buildings may have ground floor retail and active pedestrian environments at locations specified in Development District, below.
    - Multi-Family Mid units as described above.
    - Townhome units as described above.

Commercial Land Use Designations

- Low-Density Commercial areas consist of a mix of the following building types:
    - Campus Low-Rise buildings have a maximum height of 100 feet (which would typically allow 6- to 8-story buildings). Designed primarily for office use, these buildings may also provide ground floor retail and public services uses. Parking will consist of at-grade lots or above-grade parking structures.
- Mid-Density Commercial areas consist of a mix of the following building types:
    - Campus Low-Rise buildings as described above.
    - Campus Mid-Rise buildings have a maximum height of 150 feet (which would typically allow 10- to 12-story buildings), providing for a range of commercial uses, such as R&D, laboratory, and general office. These buildings may also have active ground floor retail and public services uses. Campus Mid-Rise buildings are proposed to face open space areas in a campus-like setting. Parking structures or podiums for these buildings are accessed primarily via Frontage Road and Campus Parkway.
- High-Density Commercial areas consist of a mix of the following building types:
    - TOD[53] Commercial buildings have a maximum height of 260 feet (which would typically allow a 20-story building). This type is located near the Bayshore Caltrain Station Plaza and is designed to have a variety of commercial uses. Designed primarily for office use, these buildings may also have active ground floor retail and public services uses. Parking structures or podiums for these buildings will be primarily accessed from Frontage Road.
    - Hospitality development consists of hotel buildings with a maximum of 240 feet (which would typically allow a 20-story building). This building type is intended

[53] Transit-oriented development (TOD) refers to high-intensity residential, commercial office, and mixed-use development that is within walking distance (generally less than ½ mile) to transit.

for use around the Bayshore Caltrain Transit Plaza. Parking structures or podiums for these buildings are accessed primarily via Frontage Road. These buildings comprise the 500,000 square feet of hotel use in the Baylands.

Specific Plan Amenities, Open Space/Open Area, and Infrastructure Land Use Designations

- Amenities Area
    - Amenities buildings are proposed to have a maximum height of 60 feet (which would typically allow a 3- to 5-story building) and are intended for indoor and outdoor gathering spaces, recreation, fitness, food and beverage, and clubhouse uses. The Specific Plan would not count Amenities buildings that are provided for the exclusive use of residents and guests of residents for recreation or social purposes, as part of the 6.5 million square feet of commercial development.
- Open Space/Open Area
    - Open Space/Open Area encompasses lands proposed for a variety of recreational, resource conservation, and resource production purposes (e.g., Mission Blue Nursery). The Specific Plan proposes that cultural, public, semi-public facilities and accessory-use buildings necessary to support operation and maintenance of designated Open Space areas would not be included in the 6.5 million square feet of commercial development floor area.
- Sustainable Infrastructure
    - Sustainable Infrastructure areas provide space for renewable energy generation facilities, battery energy storage, and other developing technologies. These areas also include water recycling and storage facilities and other infrastructure uses such as the existing North County Fire Station site. The Specific Plan proposes that buildings needed to support operations of Sustainable Infrastructure areas would not be considered part of the maximum 6.5 million square feet of commercial development floor area.

Land Use Designations for Existing Use Areas

Because the Brisbane General Plan requires development within the Baylands Subarea "be subject to the City's approval of a single specific plan for the entirety of the Baylands Subarea," the Specific Plan encompasses properties with existing uses that are not owned by the applicant and are not expected to change or expand over time. The Specific Plan designates each such site as "Existing Use Area" and provides site-specific permitted use and development zoning regulations that codify existing uses and development. The Specific Plan requires site-specific

development review and environmental documentation for any change in site development for the following existing uses:

- Recology parcels within the Baylands Subarea;
- Golden State Lumber along the east side of Tunnel Avenue;
- Kinder Morgan tank farm;
- Machinery & Equipment Company site;
- Bayshore Sanitary District facilities; and
- Two small commercial areas along Bayshore Boulevard, including parcels in the northwestern corner of the Specific Plan area and at Main Street.

Because the sites identified above are not expected to change their use or expand over time, the environmental analysis undertaken for the Baylands Specific Plan assumes that the above uses would maintain their current configuration and continue operating at current levels. While conversion of the existing Fire Station No. 81 site to a fire training facility would change its use, no new facilities or other physical changes to the site are proposed.

Based on the land use designations identified in **Figure 3-5**, the Specific Plan identifies maximum building heights permitted throughout the Baylands (see **Figure 3-6**).

Development Districts

As shown in **Figure 3-7**, the Baylands Specific Plan organizes proposed development into five districts, each of which is described below. As shown for each District, the Baylands Specific Plan sets a maximum number of dwelling units and commercial square footage that may be permitted within any individual block, provided that the maximum permitted number of units and commercial square footage within each District and the Specific Plan area are not exceeded.

Figure 3-6: Proposed Maximum Permitted Building Heights

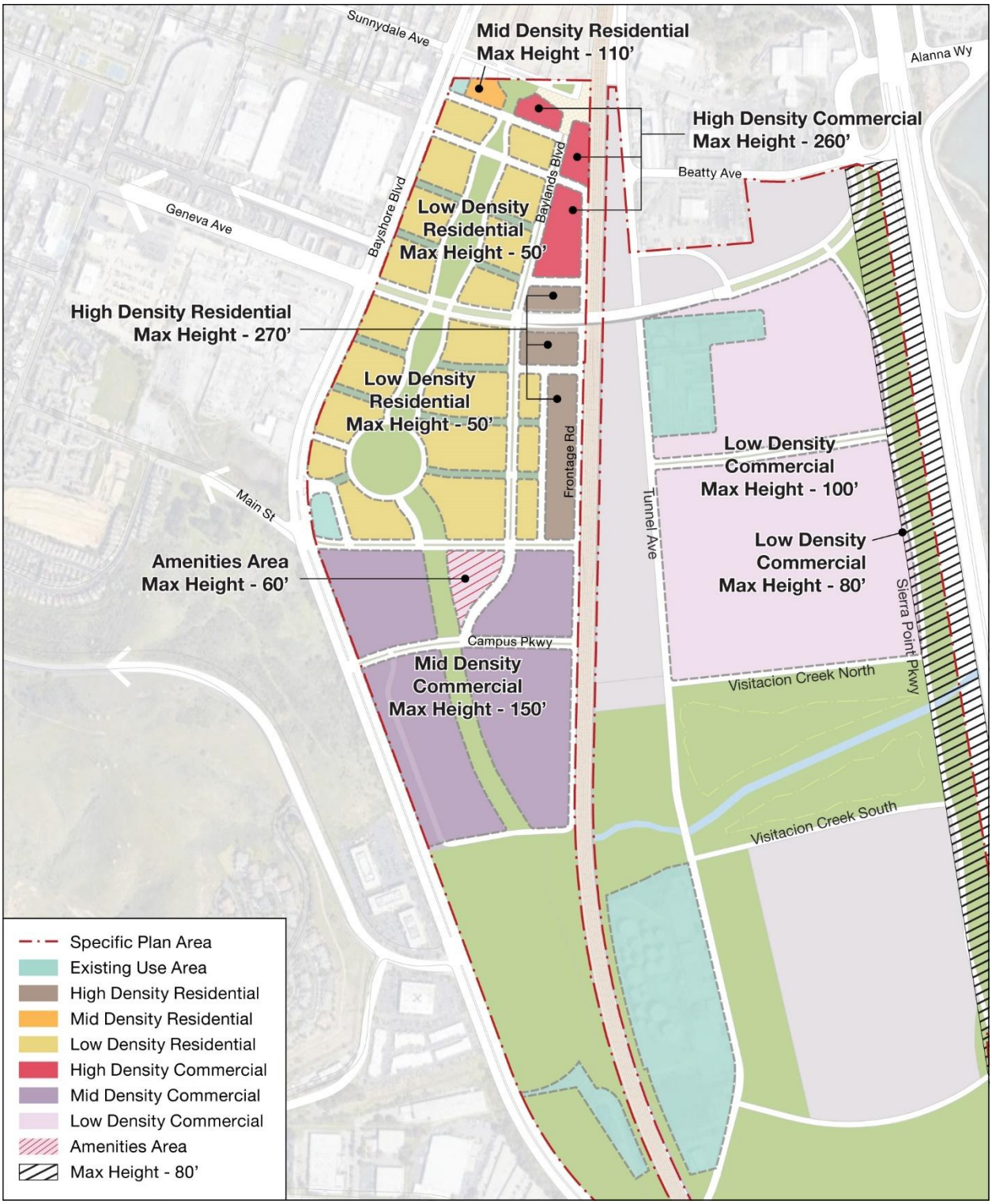
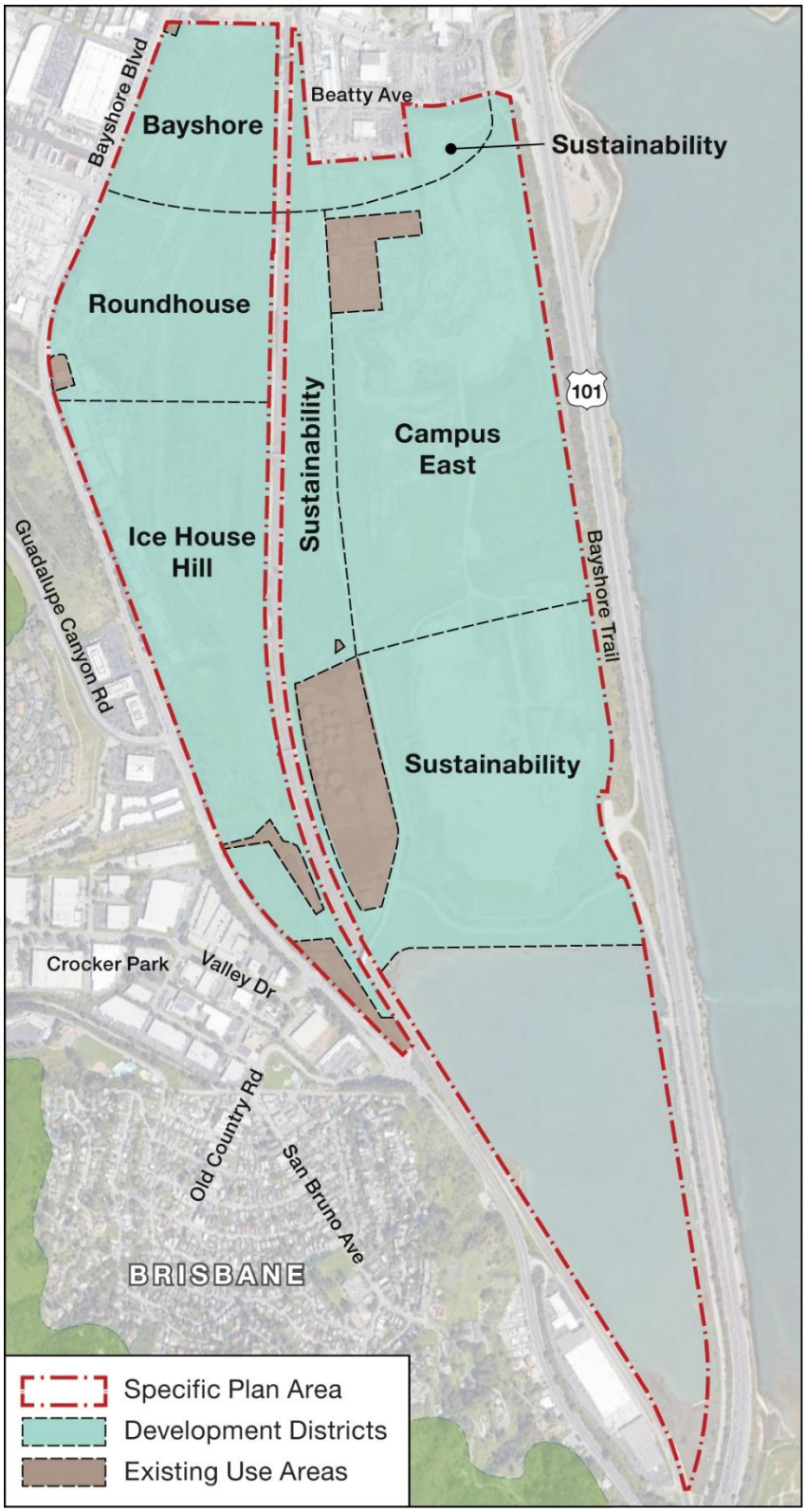


Figure 3-7: Specific Plan Districts

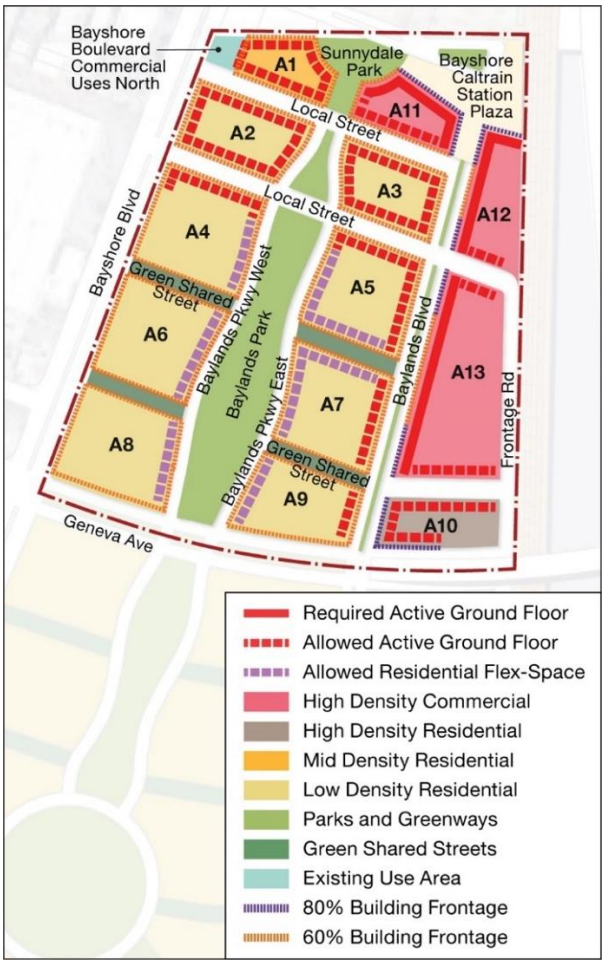


Bayshore District

The Bayshore District is located in the northwest corner of the Specific Plan area, bounded by Bayshore Boulevard, the Caltrain right-of-way, Sunnydale Avenue, and Geneva Avenue. A maximum of 730 dwelling units and 1.1 million square feet of commercial development are permitted (see **Figure 3-8**). High-density commercial uses are proposed adjacent to the Bayshore Caltrain station and Caltrain right-of-way. High-density commercial development is proposed to consist of office towers up to 260 feet high (typically 20+ stories). A high-density residential tower (up to 270 feet high, typically 20+ stories) is proposed along the north side of Geneva Avenue west of the Caltrain right-of-way. Lower density residential blocks predominantly consisting of 50-foot-high (typical 3- to 5-stories) residential structures are oriented along a central open space area consisting of Baylands Park and Sunnydale Park (see Draft EIR Section 3.3.2 d for a description of these parks).

A maximum of 1,150 off-street parking spaces are permitted within this District.

Figure 3-8: Bayshore District Development Plan



Block Number	Land Use	DUs per Block (max.)
A1	Mid Density Res.	170
A2	Low Density Res.	55
A3	Low Density Res.	45
A4	Low Density Res.	70
A5	Low Density Res.	65
A6	Low Density Res.	65
A7	Low Density Res.	65
A8	Low Density Res.	80
A9	Low Density Res.	70
A10	High Density Res.	200

Buildings where "Active Ground Floor**" is required must have retail, restaurants, commercial, or other pubic/semi-public services or uses on the ground floor building frontage. Where "allowed," these uses may be provided.**

80% or 60% Building Frontage **indicates the minimum % of the building that must be placed at the minimum required setback in order to encourage pedestrian activity.**

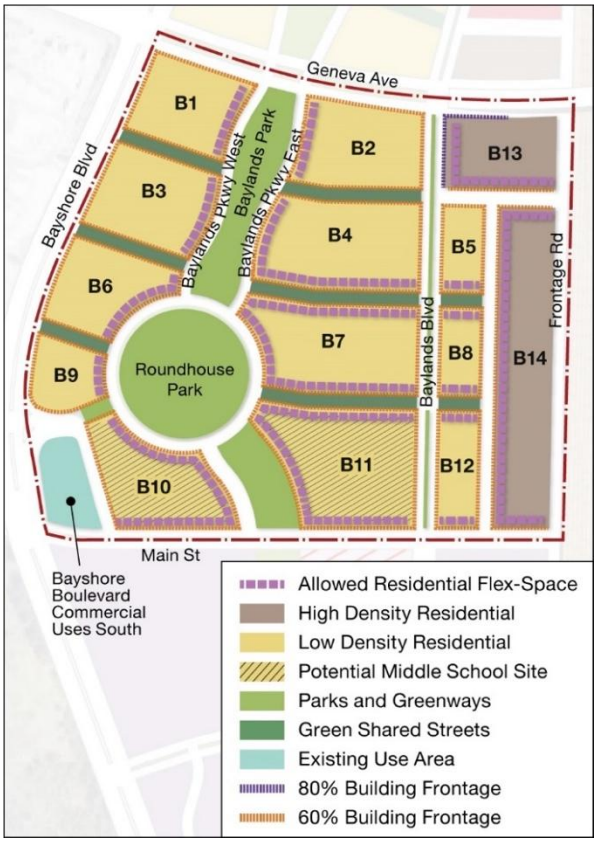
Block Number	Land Use	Max. Commercial Floor Area (ft²)
A11	High Density Comm.	250,000
A12	High Density Comm.	450,000
A13	High Density Comm.	550,000

Block Number	Max. Active Ground Floor Commercial Floor Area (ft²)
A1-A3, A5, A7, A9-A10	25,000

Roundhouse District

The Roundhouse District is located in the western portion of the Specific Plan area, bounded by Bayshore Boulevard, Geneva Avenue, the Caltrain right-of-way, and Main Street (see **Figure 3-9**). The focal point of this district is Roundhouse Park, which includes adaptive use of the historic roundhouse for an open-air theater with flexible seating and stage, community space, a café, and other community-oriented uses.

Figure 3-9: Roundhouse District Development Plan



Block Number	Land Use	DUs per Block (max.)
B1	Low Density Res.	75
B2	Low Density Res.	75
B3	Low Density Res.	80
B4	Low Density Res.	110
B5	Low Density Res.	35
B6	Low Density Res.	65
B7	Low Density Res.	115
B8	Low Density Res.	40
B9	Low Density Res.	40
B10	Low Density Res.	70
B11	Low Density Res.	130
B12	Low Density Res.	50
B13	High Density Res.	185
B14	High Density Res.	700

80% or 60% Building Frontage **indicates the minimum % of the building that must be placed at the minimum required setback in order to encourage pedestrian activity.**

The High-Density Residential uses proposed for Blocks B-13 and B-14 provide for residential towers with a maximum height of 270 feet (typically up to 20 stories). Thus, 20-story residential towers are anticipated along the west side of the Caltrain right-of-way from Geneva Avenue to Main Street. The balance of this District would be designated Low-Density Residential for single family and duplex residential buildings up to 4 stories in height fronting on open space areas, including Baylands Park and Roundhouse Park.[54] A middle school (grades 6–8) site is proposed in the vicinity of Main Street within the Bayshore School District portion of either Block 6, 9, or 10, or to the south of Main Street within the Icehouse Hill District.

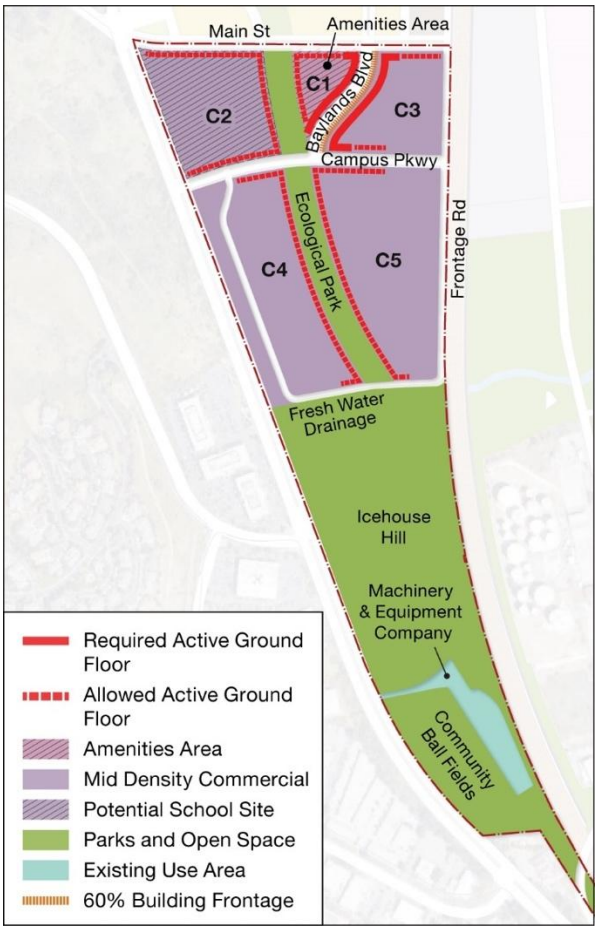
[54] See Draft EIR Section 3.3.3 a for a description of proposed parks.

A maximum of 1,200 off-street parking spaces are permitted within this District.

Icehouse Hill District

The Icehouse Hill District is located north of Icehouse Hill between Bayshore Boulevard and the Caltrain right-of-way. This District is proposed for a maximum of 3.4 million square feet of commercial office development. As illustrated in **Figure 3-10**, the Icehouse Hill District will consist primarily of commercial office buildings up to 150 feet in height (typically 8–10 stories) fronting onto the Ecological Park.

Figure 3-10: Icehouse Hill Development Plan



Block Number	Land Use	Max Commercial Floor Area (ft²)
C1	Amenities Area	—
C2	Mid Density Comm.	800,000
C3	Mid Density Comm.	750,000
C4	Mid Density Comm.	1,000,000
C5	Mid Density Comm.	1,150,000

Buildings where "Active Ground Floor**" is required must have retail, restaurants, commercial or other pubic/semi-public services or uses on the ground floor building frontage. Where "allowed," these uses may be provided.**

60% Building Frontage **indicates the minimum % of the building that must be placed at the minimum required setback in order to encourage pedestrian activity.**

Baylands Boulevard south of Main Street is designed to function as a "shopping street" with ground floor shops, cafés, and restaurants fronting the street and plazas on the east side integrated into the office buildings and a residential amenity facility on the west side. The Icehouse Hill District includes several important open space resources. A middle school (grades 6–8) is proposed in the vicinity of Main Street within the Bayshore School District portion of Block C2 of the Icehouse Hill District, or within the Roundhouse District.

A maximum of 6,150 off-street parking spaces are permitted within this District.

Campus East District

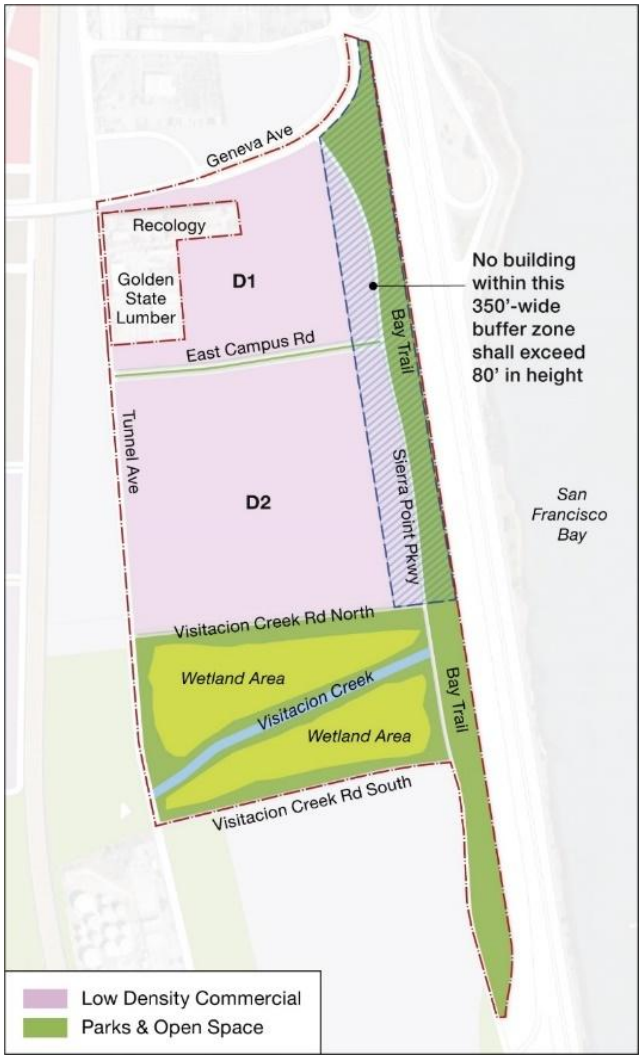
The area east of the Caltrain right-of-way comprises the Campus East District, which will be developed with a maximum of 2.5 million square feet of low-density commercial office uses north of Visitacion Creek Park. Buildings up to 100 feet height (typically 4–6 stories) will be oriented along Sierra Point Parkway, providing views of San Francisco Bay over the US 101 freeway (see **Figure 3-11**).

As shown in **Figure 3-11**, the existing Golden State Lumber and Recology facilities will remain in their present location. The Specific Plan designates these parcels as "Existing Use Area," but does not include them within the Campus East District.

A maximum of 2,485 off-street parking spaces are permitted within this District.

This District will be constructed over a Title 27-compliant cap over the existing refuse layer. Landfill gas and leachate control systems will also be installed (see Section 2.6.2, *Title 27 Final Landfill Closure*, for a description of Title 27 landfill closure). Vapor intrusion mitigation systems will be integrated into the building design.

Figure 3-11: Campus East District Development Plan



Block Number	Land Use	Max. Commercial Floor Area (ft²)
D1	Low Density Comm.	1,200,000
D2	Low Density Comm.	1,500,000

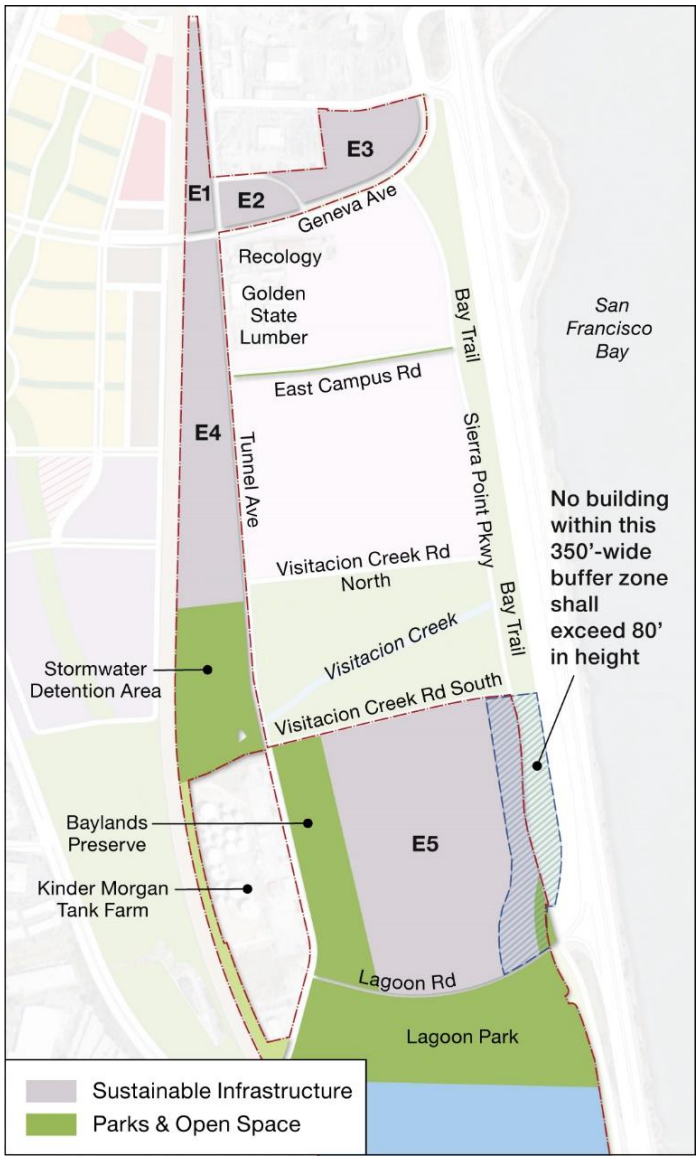
Sustainability District

The Sustainability District includes the area between Tunnel Avenue and Caltrain right-of-way, the area north of Geneva Avenue, and the area between Visitacion Creek and Lagoon Park (see **Figure 3-12**). This area is planned for a variety of sustainable infrastructure and open space/open area uses including:

- Sustainable Infrastructure Uses
  - Solar farm
  - Battery storage
  - Switching substation
  - Water storage
  - Water recycling facility
  - Stormwater detention
  - Fire station/training facilities
- Open Space/Open Area
  - Lagoon Park
  - Baylands Preserve
  - Brisbane Lagoon

Structures within the Sustainability District are limited to a maximum height of 100 feet (80 feet for structures within 350 feet of US Highway 101).

Figure 3-12: Sustainability District Development Plan



Block Number	Land Use
E1	Sustainable Infrastructure
E2	Sustainable Infrastructure
E3	Sustainable Infrastructure
E4	Sustainable Infrastructure
E5	Sustainable Infrastructure

Displacement and Relocation of Existing Uses

Existing leases for businesses outside of Existing Use areas will lapse or be terminated by the property owner prior to site grading, including approximately 231,400 square feet of industrial building area along Industrial Way along with other interim uses throughout the site, resulting in displacement of businesses from the Baylands. Existing Use Areas include Recology uses along Tunnel Avenue, Golden State Lumber, Kinder Morgan Tank Farm, Machinery & Equipment Company, and the Bayshore Sanitary District Pump Station. The Mission Blue Nursery will be relocated to the former police shooting range on Icehouse Hill.

d. Open Space and Open Areas

The Baylands Specific Plan would establish a 157-acre network for the preservation of natural resources and outdoor recreation and gathering places, which is illustrated in **Figure 3-13** and consists of:

- Active recreation areas
- Urban plazas
- Community greens
- Ecological greenspaces
- Green edges

Active Recreation Areas

Two active recreation areas are proposed to provide opportunities for outdoor exercise and community sports in locations accessible from Baylands neighborhoods via bicycle or walking, as well as accessible to Brisbane residents. These areas are intended to accommodate an array of physical activities and play for all ages and abilities.

Community Fields (7.4 acres)

This approximately 7.4-acre park includes a flexible recreational irrigated turf lawn, ballfield, picnic and games area, amenity pavilion with restrooms, playground, fitness station(s), buffer plantings, and shade structure(s). The park will be night lighted, including lighting for active nighttime sports activities. Vehicular parking would also be provided. Pedestrian and bicycle trails will connect to the existing Crocker Trail, Icehouse Hill trail network, Tunnel Avenue, and the proposed Ecological Park.

Figure 3-13: Baylands Open Space/Open Area Network



Bay Trail (20.0 acres)

The San Francisco Bay Trail will be extended through the Baylands, connecting to existing portions of the trail to the north and south of the Specific Plan area, with accessible trailhead connections at Geneva Avenue, Lagoon Road, Campus Drive North, Campus Drive South, and Sierra Point Parkway. Approximately 21.2 acres will be reserved for the Bay Trail, 1.2 acres of which will be subject to sea level rise through the Year 2100. Low-level safety lighting is proposed to be provided along the trail.

The trail extension is to be designed as a Class I shared use path along Sierra Point Parkway connecting to sidewalks and Class IV bicycle facilities on Geneva Avenue in the northern portion of the Baylands.[55] To the south, the Bay Trail would connect to a Class I shared use path through Lagoon Park and Class II bike facilities (no provisions for pedestrians) along the existing Sierra Point Parkway. The trail extension is proposed to meet the design standards set forth in the San Francisco Bay Trail Design Guidelines and Toolkit. No improvements to the existing portion of the Bay Trail, which consists of the bicycle lanes along Sierra Point Parkway south of Lagoon Road, are proposed.

The Bay Trail is proposed to incorporate stormwater treatment areas that cleanse water with green stormwater infrastructure prior to draining toward Visitacion Creek, Lagoon Park, and Geneva Avenue. The existing culvert is proposed to be replaced with a clear span bridge, maintaining connectivity for small terrestrial fauna.

Community Greens

Community greens provide centrally located park spaces that support social connectivity along with opportunities for passive recreation—such as display gardens, fountains, dining and seating areas—and active recreation—such as irrigated turf event/play lawns, children's areas, and dog parks.

Sunnydale Park (0.8 acres) and Baylands Park (5.8 acres)

Approximately 6.6 acres of park area are proposed as a linear green, onto which medium- to high-density residential uses would face. The parks are proposed to be night lighted.

The 5.8-acre Baylands Park is a linear green space for the Bayshore and Roundhouse districts, onto which low-density residential uses would face. East–west oriented paseos and green shared streets would connect the park to retail uses along Bayshore Boulevard. Baylands Park is

[55] A Class I Shared-Use Path is completely separated from the street with a limited number of street and driveway crossings. Shared-Use Paths are typically shared by bicyclists and pedestrians. A Class IV Protected Bike Lane is located within the curb line adjacent to the vehicle travel lane. While part of the roadway cross section, a Class IV lane is separated from moving traffic vertically, horizontally, or both with a minimum 1.5-foot buffer (3 feet adjacent to parking).

intended to serve as a central social green for the Baylands. It would host an array of activities, with features such as native and botanic gardens, vegetated swales, irrigated turf community recreational and event lawns, play area, plaza, dog park/run, rain garden, shade structure, restroom pavilion, art walk, and flexible seating areas.

Located at the north end of the central green, Sunnydale Park spans the city limits of Brisbane and San Francisco and adjoins high-density residential development and residential areas to the north in San Francisco. Sunnydale Park is proposed to provide green infrastructure features, such as native and gardens and bioretention. Small passive uses also proposed for this space include art walk and flexible seating areas. This park is intended to provide for safe pedestrian and bicycle movement between (1) Baylands residential and commercial areas and (2) the urban plaza at the entry to the Bayshore Caltrain station.

Roundhouse Park (3.9 acres)

Roundhouse Park is proposed as a multi-purpose community gathering space for the Baylands, providing community event spaces focused on the restored historic Roundhouse. Because of required grade changes to accommodate site remediation that is required prior to development within the western portion of the Baylands, the historic Roundhouse would be dismantled and then reconstructed in its current location following site remediation and grading. The restored Roundhouse and adjacent park area are proposed to include an irrigated turf event lawn, outdoor dining area, informal play area, garden walks, a flexible lawn that can be utilized for event staging, industrial art and history garden, native gardens, event pavilion, bermed seating, outdoor cafe, and an open-air theater utilizing the cast iron columns and beams at the inner curved wall of the Roundhouse. Roundhouse Park is proposed to be night lighted to accommodate nighttime use and activities. The potential also exists for joint use of Roundhouse Park with the middle school proposed for the Baylands.

Urban Plaza

An urban plaza adjacent to the Bayshore Caltrain Station has been designed primarily for pedestrian uses, providing public amenities such as seating and gathering areas.

Bayshore Caltrain Station Plaza (1.4 acres)

The Bayshore Caltrain Station Plaza is intended as a gathering place at the entry to the Bayshore Caltrain Station. The plaza is proposed to feature an arrival plaza, pavilion, cafe garden, outdoor seating areas, kiosk with time boards, bike parking, and areas for transit boarding and queuing. High-limbed canopy trees (lowest rung 8 to 9 feet above finish grade), herbaceous planting and planters, eco-regionally appropriate plantings, and small irrigated turf lawn space are proposed. The plaza is proposed to be designed to limit vehicular access with crash-rated barriers in the form of passive seat walls and planters with sparing use of bollards. A dedicated Baylands shuttle drop-off would separate from a multimodal drop off intended for private

vehicles, non-Baylands shuttles, and transit agencies. The Bayshore Caltrain Station Plaza is proposed to include night lighting.

Ecological Greenspaces

Open space areas for preservation and enhancement of important habitat areas include the Brisbane Lagoon and Lagoon Park, Visitacion Creek, Icehouse Hill, and the Ecological Park. In addition to habitat preservation and enhancement, the areas provide site drainage and water quality treatment functions, as well as public access to recreation within natural settings.

Brisbane Lagoon (147.8 acres) and Lagoon Park (15.4 acres)

As a result of sea level rise, Brisbane Lagoon is expected to expand from 121.8 acres to 147.8 acres by the Year 2100, leaving 15.4 acres of land area within Lagoon Park. The design of Lagoon Park provides for the protection and enhancement of biological resources along with compatible recreational activities such as outdoor education and wildlife observation. The park is proposed to include multi-use paths, a native plants discovery garden, play area, community space, and educational signage. Uses that promote large gathering and/or excessive noise would be prohibited within 50 feet of designated habitat areas. Night lighting is proposed for a parking area, along with low-level lighting for paths.

- Habitat restoration and enhancement is proposed to include tidal flats, tidal marsh, grassland, and coastal scrub (see Section 3.3.2 f, below, for a detailed description of Lagoon Park restoration and enhancement. Lagoon Park improvements would follow completion of Title 27 landfill closure activities, which would remove existing vegetation for placement of ~~an impermeable~~ a low-permeability landfill cap over the existing refuse layer along with landfill gas and leachate control systems (see Section 2.5.3, *Title 27 Final Landfill Closure*, for a description of Title 27 landfill closure requirements). The existing east–west alignment of Lagoon Road is proposed to be relocated to the north to align with the US 101 freeway on- and off-ramps as well as to protect the roadway from projected sea level rise through 2100.

Visitacion Creek (30.8 acres)

Immediately upstream of the Specific Plan area's eastern boundary, Visitacion Creek's tidally influenced channel is proposed to be widened to rehabilitate its ecological functions, including on-site wetland creation featuring an enhanced tidal channel, restored salt marsh, native scrub, and grasslands, along with freshwater seasonal wetlands. Approximately 39.3 acres of land area are proposed for Visitacion Creek, 8.5 acres of which would be subject to daily inundation due to sea level rise by the Year 2100, leaving 30.8 acres of land within this open space area. See Section 3.3.2 d, below, for a detailed description of Visitacion Creek habitat restoration and enhancement.

Stormwater Detention Area (13.8 acres)

The area immediately east of the Caltrain right-of-way is proposed to be improved as a 13.8-acre ecologically focused stormwater detention area. This naturalized facility with "soft" planted edges of native species will provide permeable soils and forebays, as well as native plantings to slow flow rates and remove nutrients and pollutants. The eastern edge of the stormwater detention area is proposed to transition to Visitacion Creek.



Detention Area Example

Icehouse Hill (24.3 acres)

Icehouse Hill's ecological functions are proposed to be improved through protection, enhancement, and restoration of native grasslands, coastal scrub, and small pockets of seasonal wetlands. Planting of native butterfly host species is proposed to increase butterfly habitat extent and quality. Invasive species management is proposed due to the presence of Eucalyptus sp., fennel, and other non-native species (see Section 3.3.2 d, below).

In addition to maintaining the natural character and habitat value of Icehouse Hill, "low-impact" gravel trails, a nature play area, native gardens, butterfly garden, overlook(s), hillside slides, educational area(s) with group seating, multi-use trails, and outdoor educational area with educational signage are proposed.

Mission Blue Nursery, a non-profit nursery that collaborates with local communities to restore San Bruno Mountain's native habitats and cultivate its flora, is proposed to be relocated to the former police shooting range. Prior to its relocation, appropriate cleanup and remediation of the shooting range site will be completed.

Visual screening of the adjacent Kinder Morgan Tank Farm would also be provided in the form of naturalized vegetation.

The Ecological Park (7.3 acres)

The 7.3-acre Ecological Park is proposed as a primarily naturalized open space within the Icehouse Hill District. The primary feature of the Ecological Park is a central swale. Seasonal rains filling dry creek beds and bioswales are proposed to be directed to stormwater treatment areas within the park to improve water quality. Multi-use paths, overlook(s), shade structure(s), small lawn areas, plaza(s), flexible seating areas, and interpretive features are also proposed within this park.

Habitat restoration and enhancement within the Ecological Park is proposed to include grassland, coastal scrub, and woodland (see Section 3.3.2 d, below).

Baylands Preserve (14.1 acres)

The Baylands Preserve would be constructed following Title 27 landfill closure to provide habitat connectivity, wildlife crossings, and pedestrian and bicycle connectivity. The Specific Plan states that wetland habitats and woodland habitats would also be "allowed as deemed viable and beneficial to overall habitat value." A low-impact multi-use pathway and trailhead on the east side of the preserve is also "allowed" as a means of connecting pedestrians to Lagoon Park. Direct views of the Lagoon and Visitacion Creek are proposed to be provided as vantage allows.

Green Edges

Green Edges are proposed to support ecological goals, including supporting biodiversity by hosting dominant native plant communities and habitat for insects, small mammals, and reptiles. These spaces are also proposed to improve the visual experience within the Baylands.

West Rail Trail (8.5 acres)

The West Rail Trail is located adjacent to the Community Fields and Icehouse Hill and is proposed as a biological connector, including a sage-scrub ecology with integrated stormwater treatment areas. Tall and dense native vegetation screens are proposed adjacent to the railroad right-of-way. The West Rail Trail is proposed to link the Community Fields, Crocker Trail, Icehouse Hill, and the Ecological Park through a path system.

East Rail Green Edge (3.5 Acres)

The East Rail Green Edge is proposed to provide native sage-scrub plantings and assist in screening views of the railway and the tank farm.

e. Transportation

The Baylands Specific Plan proposes roadway and streetscapes, an "active transportation network" consisting of bicycle and pedestrian facilities, and a transit network. The plan establishes specific standards and guidelines for Baylands roadways along with design standards proposed for access and movement of pedestrians, bicyclists, transit, and vehicles.

Roadway Network

The Specific Plan is designed for US Highway 101 to continue providing regional vehicular access to the Baylands and Bayshore Boulevard. The planned Geneva Avenue extension through the Baylands from Bayshore Boulevard to Beatty Avenue/Alana Way will also provide regional access.

The Specific Plan organizes proposed streets within the Baylands using the Brisbane General Plan's functional classifications, adding a "green shared street" classification for select residential streets.[56] The proposed Baylands street network is identified in **Table 3-2** and illustrated in **Figure 3-14** through **Figure 3-29**.

Regional Roadway and Highway Connections

Connections to two north–south regional highway facilities, US 101 and Bayshore Boulevard, which form the eastern and western boundaries of the Specific Plan area will be provided.

- The **US 101 Freeway** would continue to serve as the key regional vehicular access to the Baylands with two major access points:
    - The Candlestick Interchange at Harney Way/Alana Way, generally serving the northern portions of the Baylands; and
    - The Sierra Point Interchange at Sierra Point Parkway, generally serving the central and southern portions of the Baylands.
- **Bayshore Boulevard** would also provide regional access to the Baylands, remaining one of the most transit accessible corridors for the Baylands, including the existing San Francisco Municipal Railway (Muni) Light Rail K/T Line and multiple existing and nearby Muni and SamTrans bus services. Bayshore Boulevard also serves as a major regional through route for vehicular travel. Geneva Avenue extension, which is a key facility proposed in the San Mateo-San Francisco Bi-County Transportation Study, would be extended from its current terminus at Bayshore Boulevard east to Beatty Avenue, terminating in a 4-way intersection with

San Mateo-San Francisco Bi-County Transportation Study

The 2013 Bi-County Transportation Study was undertaken by the San Francisco County Transportation Authority and the City/County Association of Governments of San Mateo County, along with the City of Brisbane, City and County of San Francisco, Peninsula Corridor Joint Powers Board (Caltrain), and others to assess the transportation improvements needed to support development of approximately 15,000 new housing units and over 14 million square feet of new employment uses proposed within the southeastern corner of San Francisco and the northeastern corner of San Mateo County including the Baylands.

The study identifies needed transportation improvement projects along the San Francisco/San Mateo county line and a funding strategy, including:

- US 101 Candlestick Interchange Re-Configuration
- Geneva Avenue Extension from Bayshore Boulevard to the US 101 freeway
- Harney-Geneva Bus Rapid Transit Line
- T-Third Street Light Rail Extension (Segment "S")
- Bayshore Caltrain Station Re-Configuration
- Bicycle-Pedestrian Connections
- Area-Wide Traffic Calming Program

It is anticipated that information from the Baylands Specific Plan EIR will assist Bi-County agencies determine whether any revisions to the 2013 list of transportation improvements might be needed.

[56] The Specific Plan also references "Frontage Road" as a roadway type. The Frontage Road identified in the Specific Plan functions as a Local Street.

Beatty Avenue and Alana Way as part of Specific Plan development. Included in the Geneva Avenue extension is a bridge over the Caltrain right-of-way.

Baylands Roadway Network

The Specific Plan organizes roadways within the Baylands using General Plan functional classifications with two additional classifications unique to the Baylands: green shared street and access road (see **Table 3-2** and **Figure 3-14**).

Table 3-2: Proposed Baylands Roadway Network

Street Name	Functional Classification	Description
Geneva Avenue	Regional Arterial	Geneva Avenue is proposed to be constructed and serve as the major gateway to the Baylands. Geneva Avenue would be extended from Bayshore Boulevard through the Baylands to Beatty Avenue/Alana Way, including a bridge over the existing Caltrain right-of-way. The new segment to be constructed as part of Baylands development includes sidewalks and protected bike facilities. Except for the bridge section, the Specific Plan proposes that Geneva Avenue be constructed with four travel lanes for automobiles and two dedicated lanes for bus rapid transit. The Specific Plan also indicates a four-lane section on the bridge, with buses sharing lanes with automobile traffic. Except for Tunnel Avenue and Frontage Road, roadways will intersect Geneva Avenue at grade. Tunnel Avenue and Frontage Road will pass under the Geneva Avenue Bridge. Proposed Geneva Avenue cross-sections are illustrated in **Figure 3-15**.
Sierra Point Parkway	Minor Arterial	Sierra Point Parkway, which runs along the eastern edge of Baylands adjacent to US 101, will be extended from its existing terminus at Lagoon Road north to Geneva Avenue and serve as a primary access for vehicles coming to and from US 101 in the Campus East District. As shown in **Figure 3-16**, Sierra Point Parkway improvements include extension of the Bay Trail through the Baylands as an adjacent separated shared use path for people walking and biking. The path is proposed to be separated from traffic with a painted buffer and flexi-posts. The vehicular travel lanes will be striped to shift east where needed with a reduced east side shoulder to accommodate the facility within the existing right-of-way.
Tunnel Avenue	Minor Arterial	Tunnel Avenue will be improved roughly along its current alignment, providing access to the Bayshore Caltrain station. A sidewalk is proposed on one side of the street with protected bicycle lanes proposed along both sides of the street. The Tunnel Avenue cross-section is illustrated in **Figure 3-17**.
Lagoon Road	Minor Arterial	Lagoon Road will be realigned to provide direct access to the existing southbound US 101 freeway on- and off-ramps. An adjacent separated multi-use path for people walking and biking is proposed along Lagoon Road. The Lagoon Road cross-section is illustrated in **Figure 3-18**.
Sunnydale Avenue	Collector	The existing Sunnydale Avenue will be extended into the Baylands and serve as the community's gateway from the Visitacion Valley neighborhood in San Francisco. Sidewalks and a protected bicycle lane are proposed along both sides of the street. The Sunnydale Avenue cross-section is illustrated in **Figure 3-19**.
Baylands Boulevard	Collector	Baylands Boulevard will serve denser residential and commercial office uses and will function as the main shuttle spine for the western portion of the Baylands. Sidewalks and a protected bicycle lane are proposed along both sides of the street. The Baylands Boulevard cross-section is illustrated in **Figure 3-20**.
Main Street	Collector	Main Street will be extended into the Baylands to provide access to residential areas to the north and commercial uses within the Icehouse Hill District to the south. Sidewalks and a protected bicycle lane are proposed along both sides of the street. The Main Street cross-section is illustrated in **Figure 3-21**.

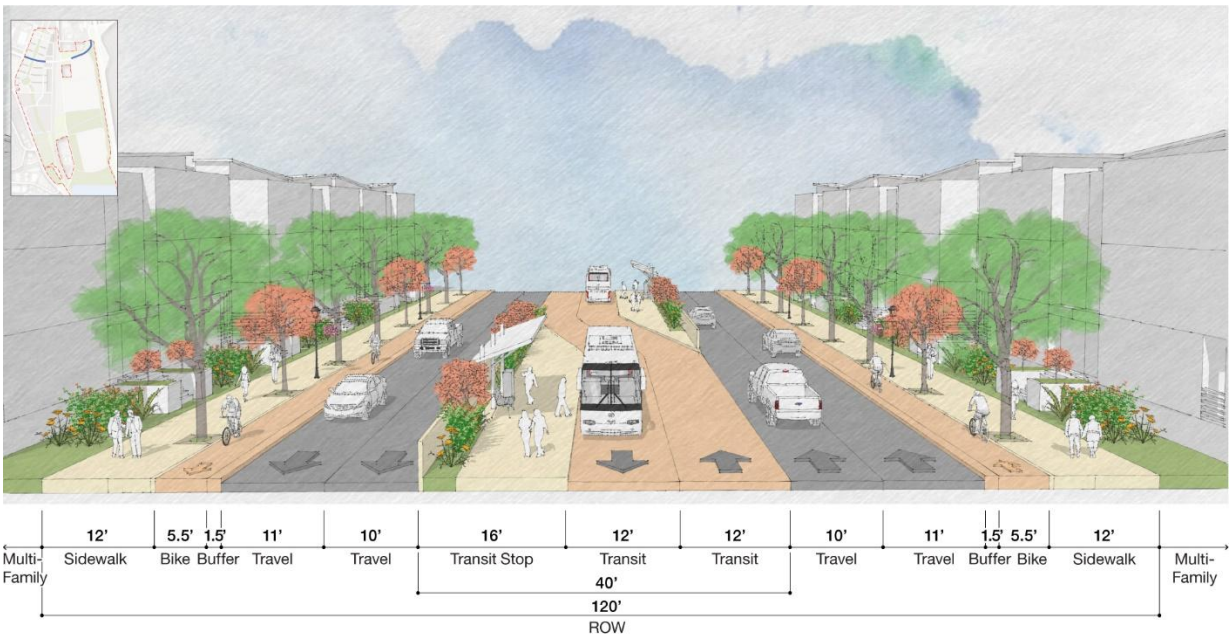
Street Name	Functional Classification	Description
Campus Parkway	Collector	Connecting Bayshore Boulevard to Frontage Road along the Caltrain right-of-way, Campus Parkway will provide access for people within the Icehouse Hill District. Sidewalks and a protected bicycle lane are proposed along both sides of the street. The Campus Parkway cross-section is illustrated in **Figure 3-22**.
Frontage Road	Collector	Frontage Road's primary function is to provide access to parking and services within residential and office towers along the west side of the Caltrain right-of-way. The Frontage Road cross-section is illustrated in **Figure 3-23**.
East Campus Road	Collector	East Campus Road will provide internal circulation in the Campus East District and includes sidewalks and protected bike facilities. The East Campus Road cross-section is illustrated in **Figure 3-24**.
East Park Street West Park Street	Local	This couplet of one-way streets along each side of Baylands Park form the primary north–south vehicular axis that will connect the Bayshore and Roundhouse districts. The couplet is proposed to provide a sidewalk and bicycle facilities along both sides of Baylands Park south to Roundhouse Circle. The couplet would also provide access to public open spaces and residential areas. East Park Boulevard and West Park Boulevard cross-sections are illustrated in **Figure 3-25**.
Roundhouse Circle	Local	Roundhouse Circle would connect to the Park Street couplet, North Main Street, and other streets in the Roundhouse District. Its shape forms Roundhouse Park within which the Roundhouse is located. A sidewalk and protected bicycle lane are proposed along the outside of the traffic circle. The Roundhouse Circle cross-section is illustrated in **Figure 3-26**.
Visitacion Creek North	Local	Visitacion Creek North provides internal circulation within the Campus East District and includes an adjacent separated shared use path for people walking and biking. The Visitacion Creek North cross-section is illustrated in **Figure 3-27**.
Visitacion Creek South	Local	Visitacion Creek South provides internal circulation in the Campus East District, including an adjacent separated shared use path for people walking and biking. The Visitacion Creek South cross-section is illustrated in **Figure 3-27**.
Various	Local Streets	Residential streets in the Roundhouse and Bayshore districts have been designed for low-speed travel. In addition to two, 10-foot wide travel lanes, local streets are proposed to provide a 12-foot sidewalk, including a 7-foot pedestrian through zone (including a minimum 5-foot wide travel path) and a 5-foot furnishing zone along both sides of the street. The cross-section for Local Streets is illustrated in **Figure 3-28**.
Various	Green Shared Streets	Green Shared Streets provide direct access to residential areas. They are proposed as shared streets that provide for pedestrians, bicyclists, and vehicular movement. They are designed with a curbless cross-section, street furnishings, and traffic calming measures. Cross-sections for Green Shared Streets are illustrated in **Figure 3-29**.
Access Road	Access Road	Access Road provides access to parking and services between Frontage Road and Campus Parkway north of Icehouse Hill.

SOURCE: The Baylands Specific Plan, 2025.

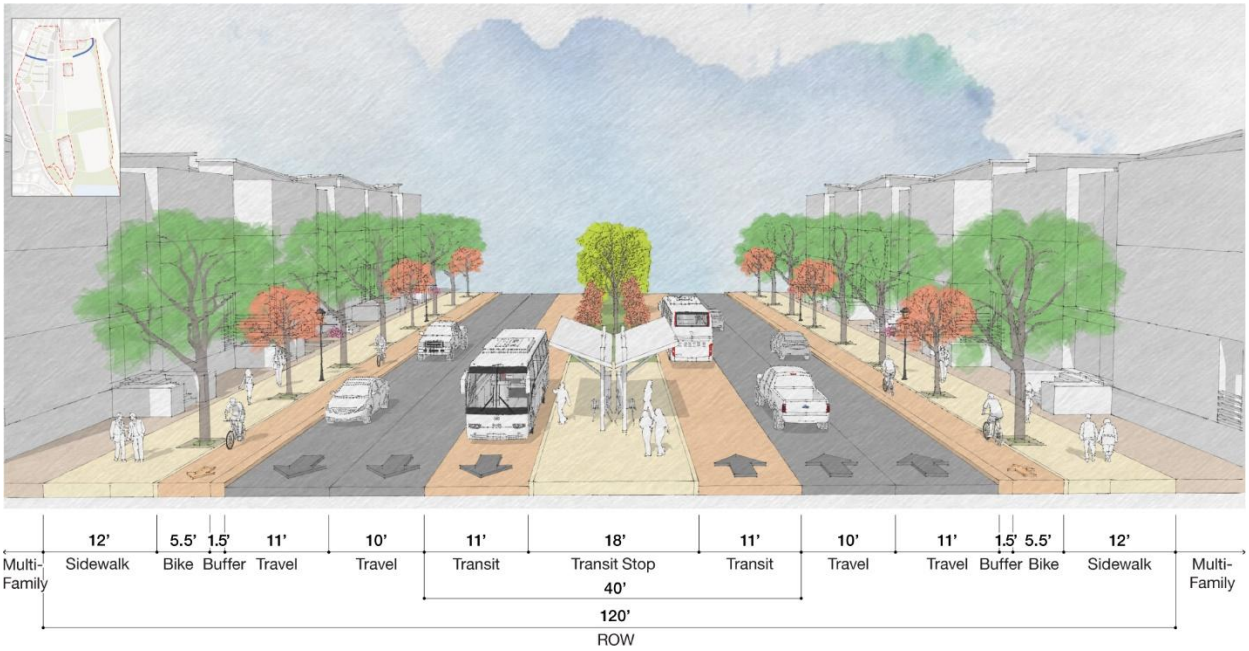
Figure 3-14: Proposed Baylands Street Network



Figure 3-15a: Geneva Avenue Cross-Sections

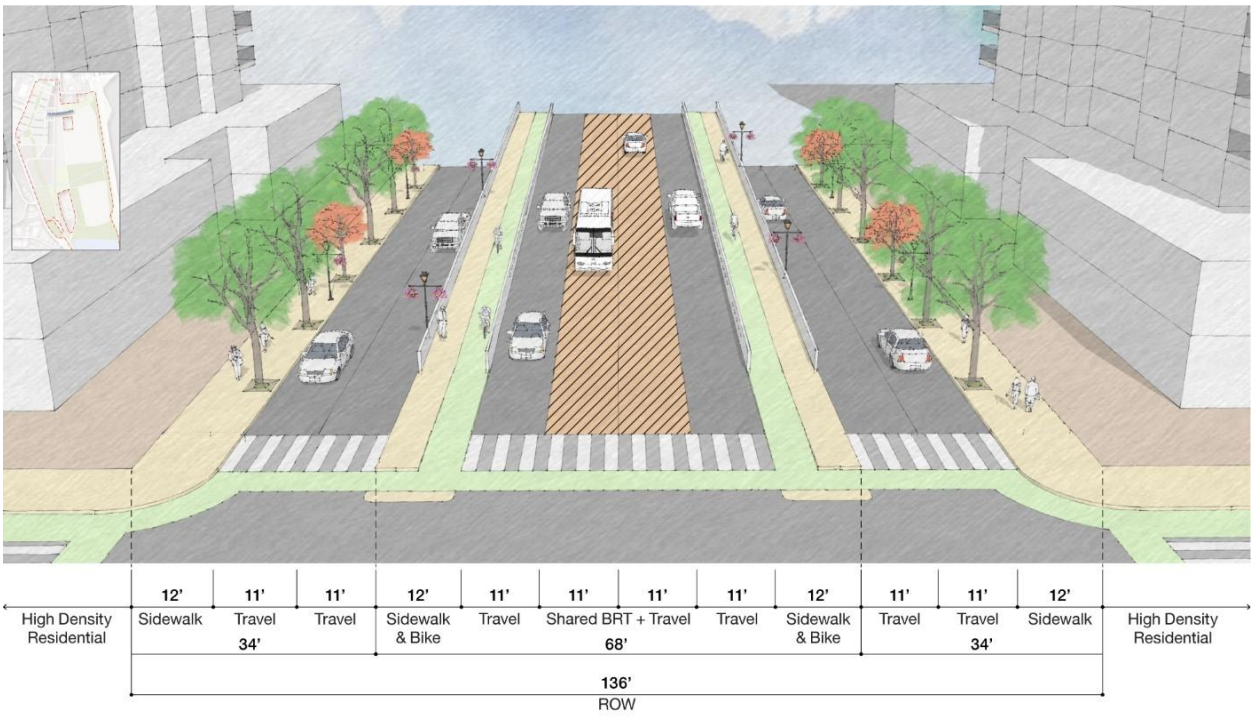


GENEVA AVENUE WITH SIDE BOARDING BRT

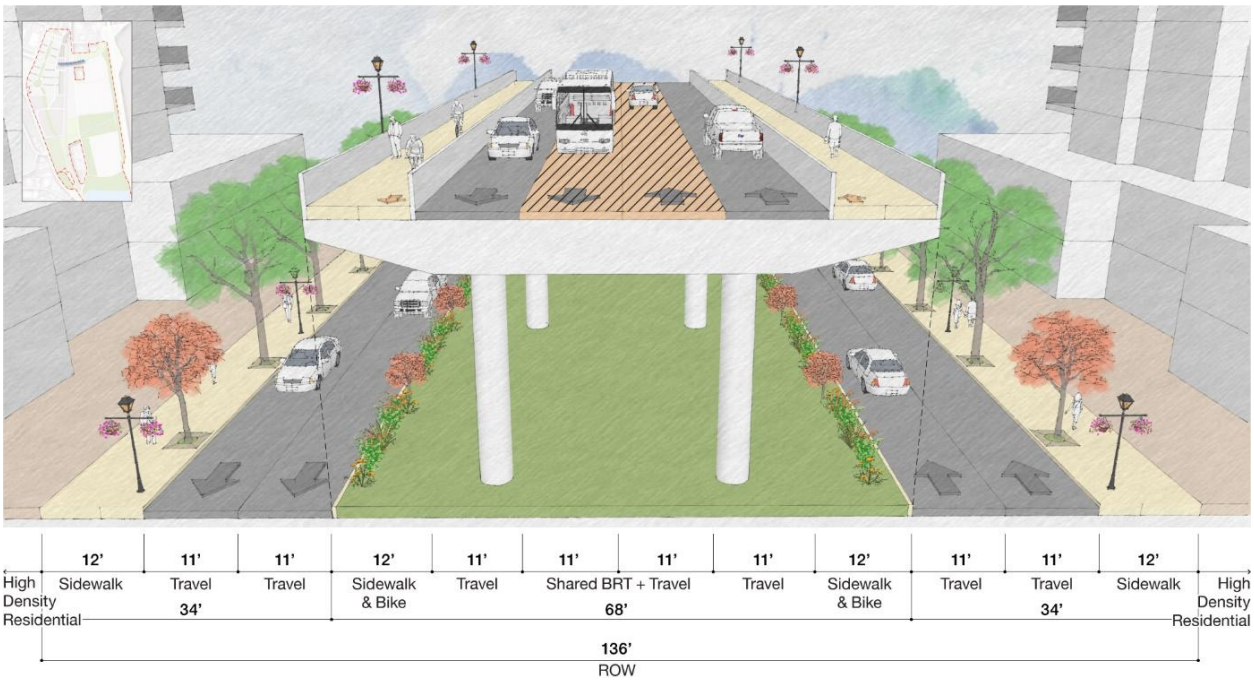


GENEVA AVENUE WITH CENTER BOARDING BRT

Figure 3-15b: Geneva Avenue Cross-Sections



GENEVA AVENUE BRIDGE APPROACH AND FRONTAGE ROADS



GENEVA AVENUE BRIDGE AND FRONTAGE ROADS

Figure 3-16: Sierra Point Parkway Proposed Cross-Section

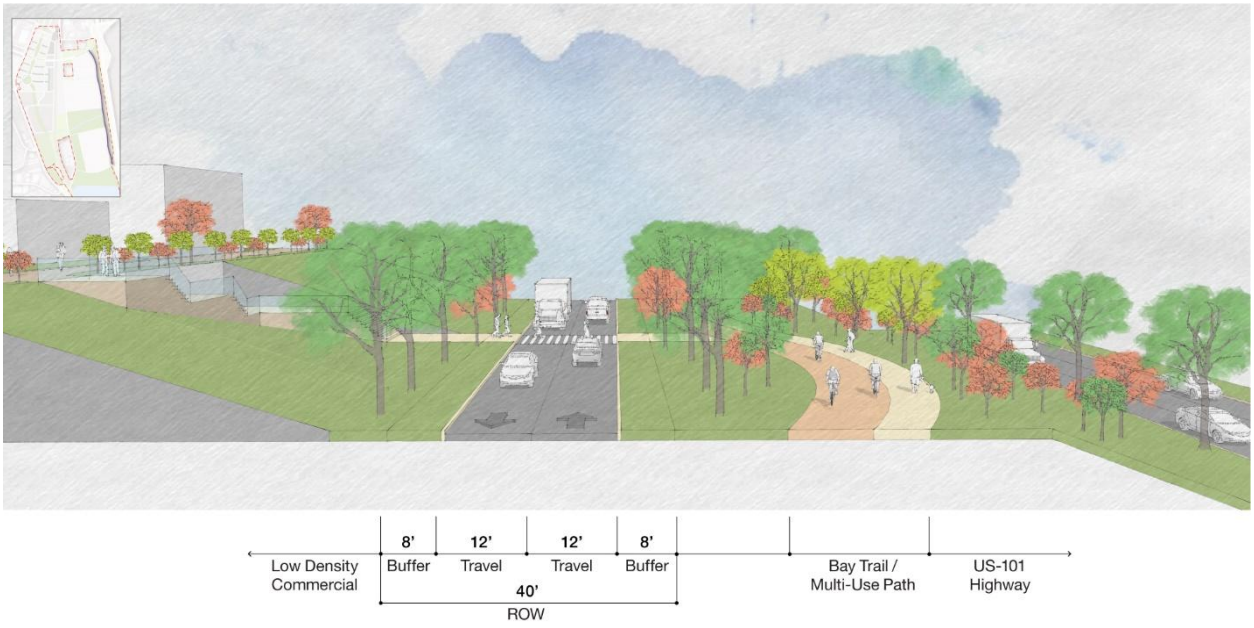


Figure 3-17: Tunnel Avenue Proposed Cross-Section

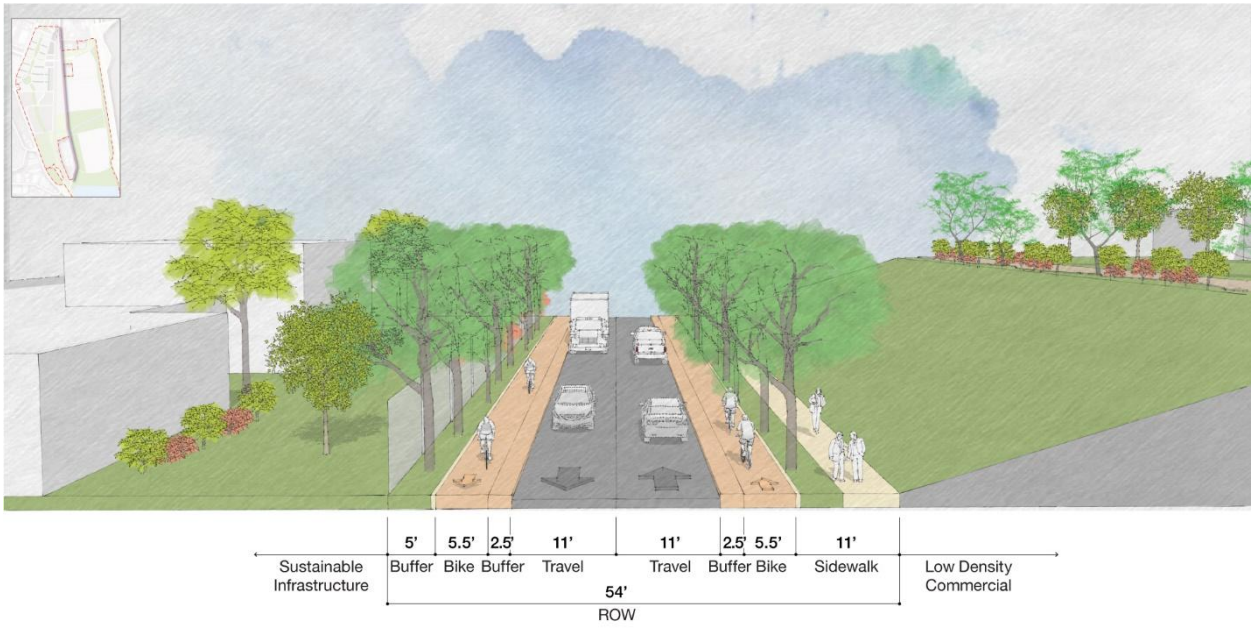


Figure 3-18: Lagoon Road Proposed Cross-Section

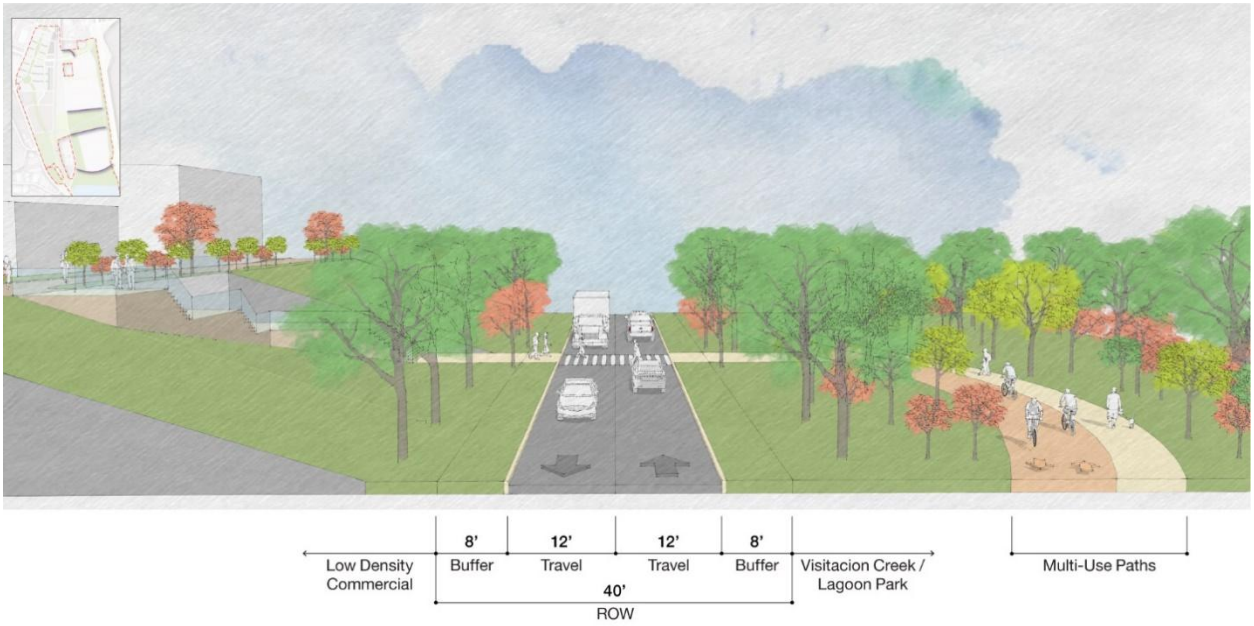


Figure 3-19: Sunnydale Avenue Proposed Cross-Section

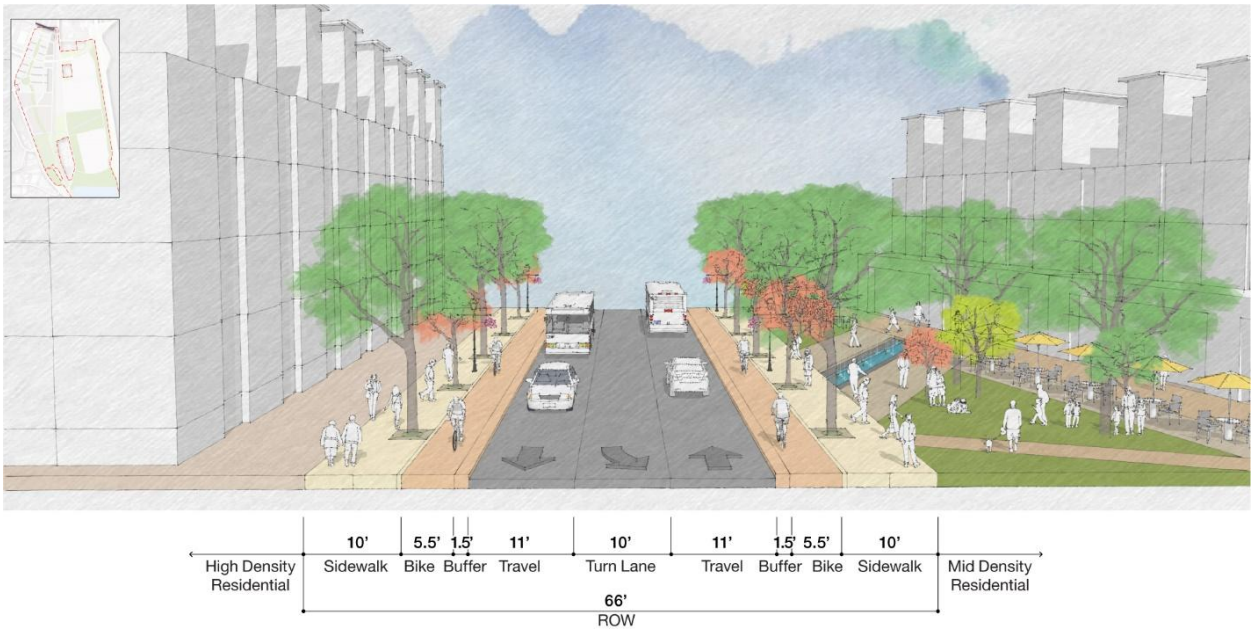
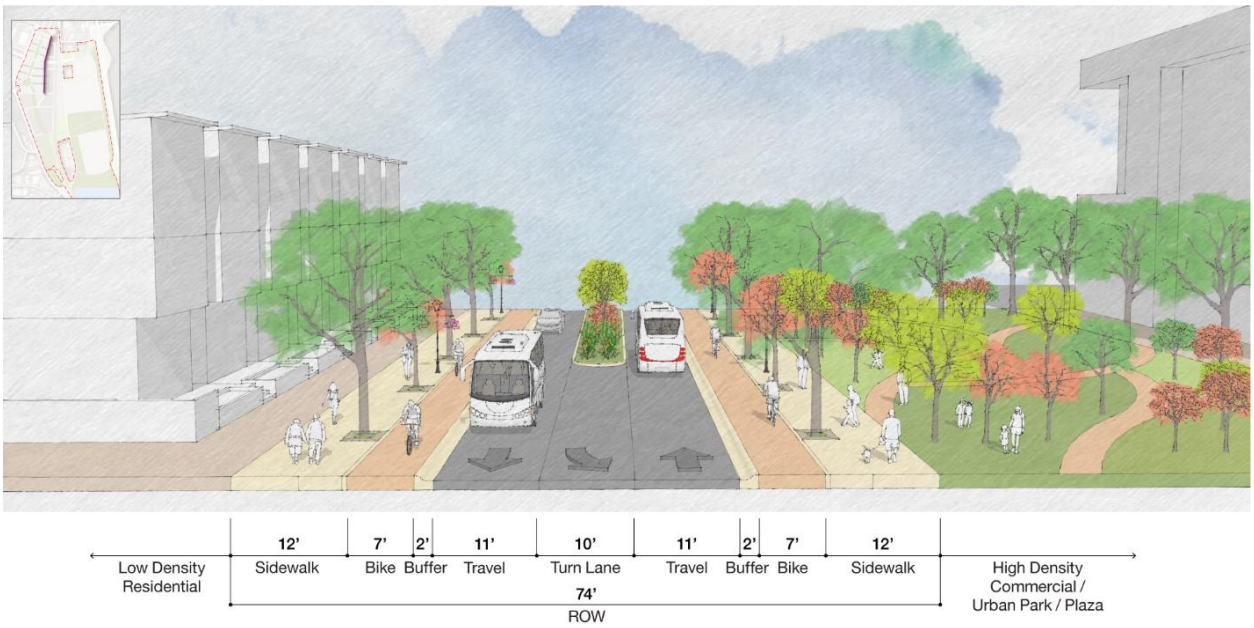
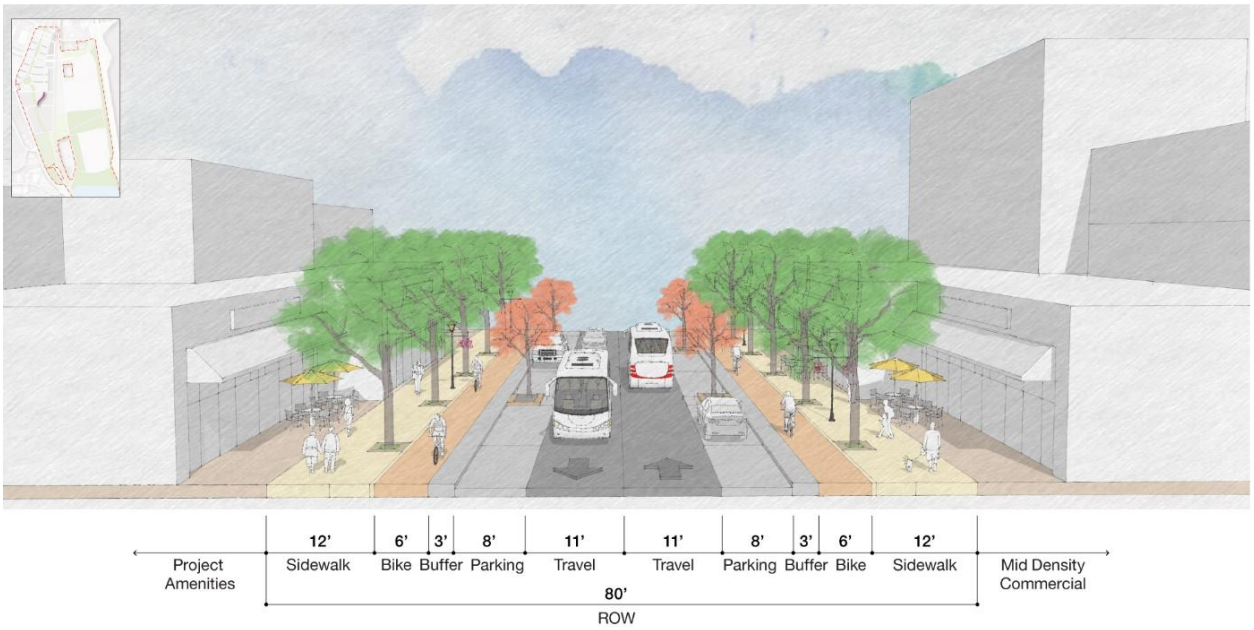


Figure 3-20: Baylands Boulevard Cross Sections



BAYLANDS BOULEVARD NORTH OF MAIN STREET



BAYLANDS BOULEVARD SOUTH OF MAIN STREET

Figure 3-21: Main Street Proposed Cross-Section

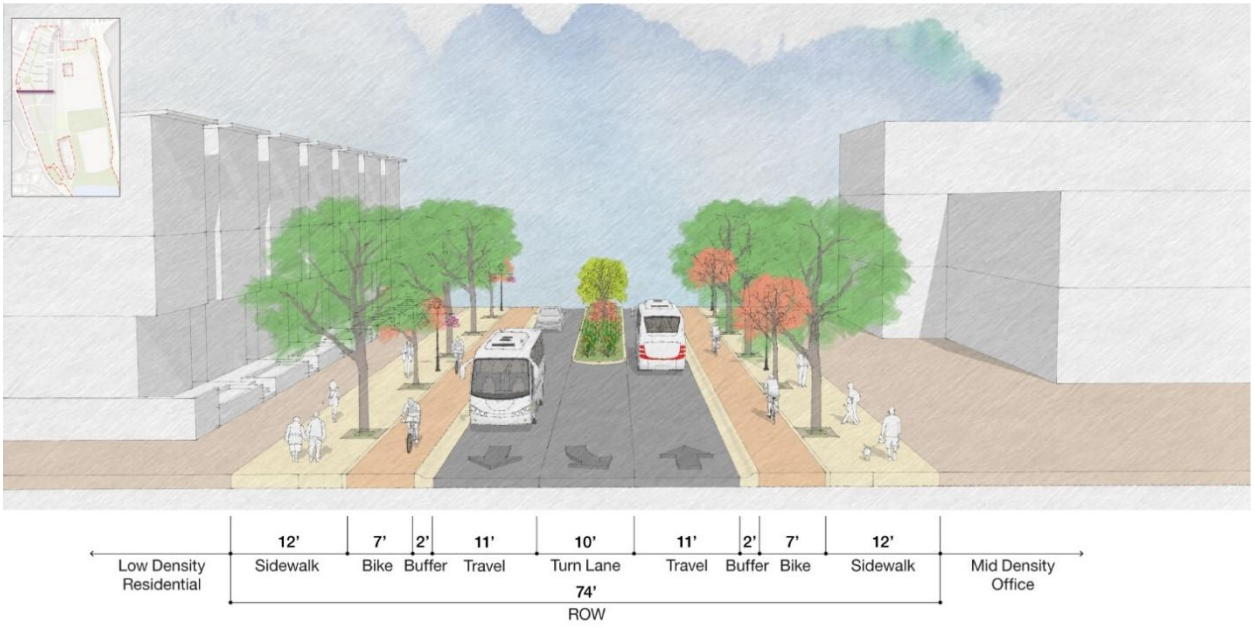


Figure 3-22: Campus Parkway Proposed Cross-Section

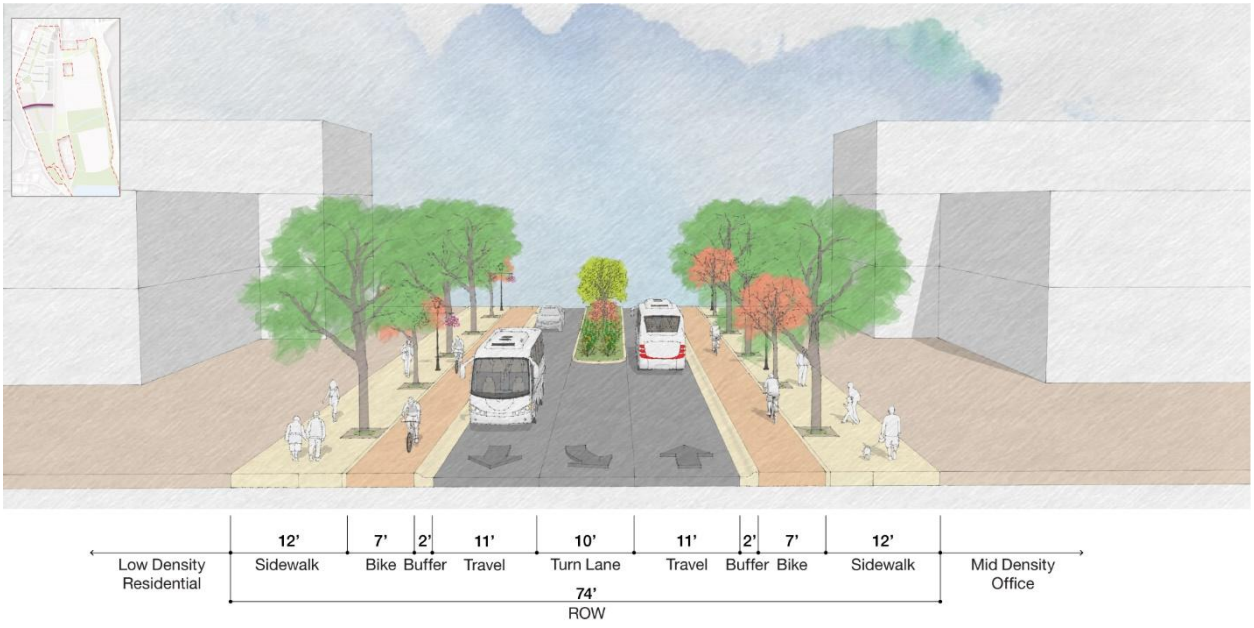


Figure 3-23: Frontage Road Proposed Cross-Section

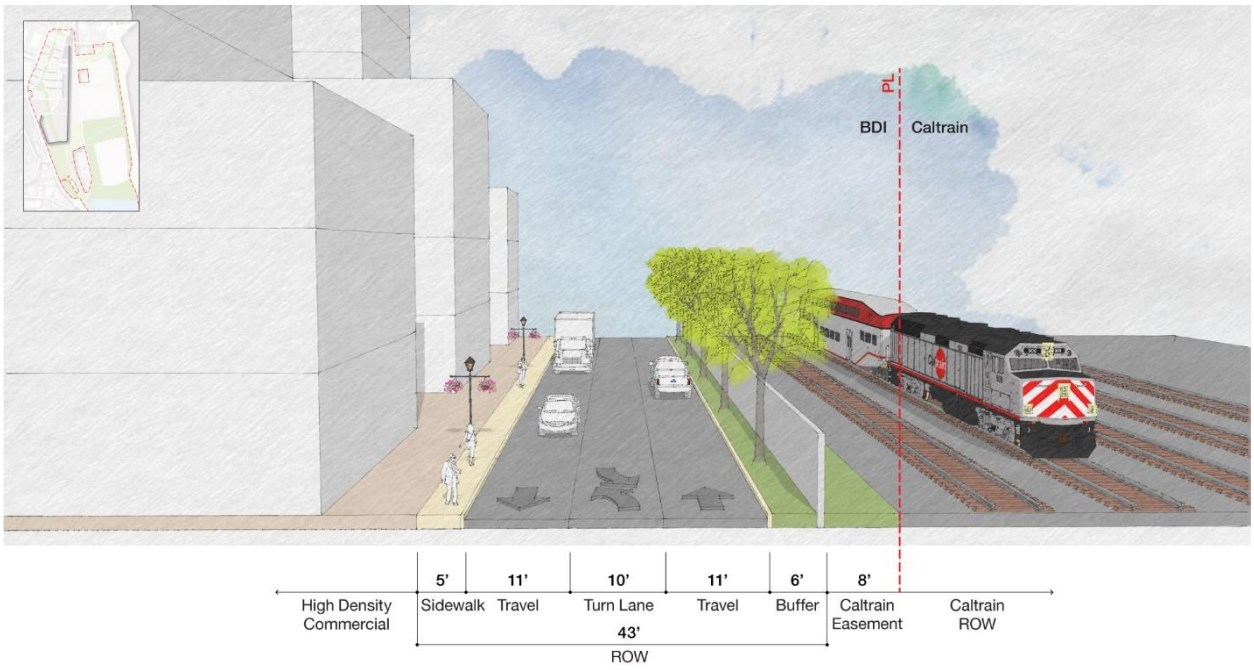


Figure 3-24: East Campus Road Proposed Cross-Section

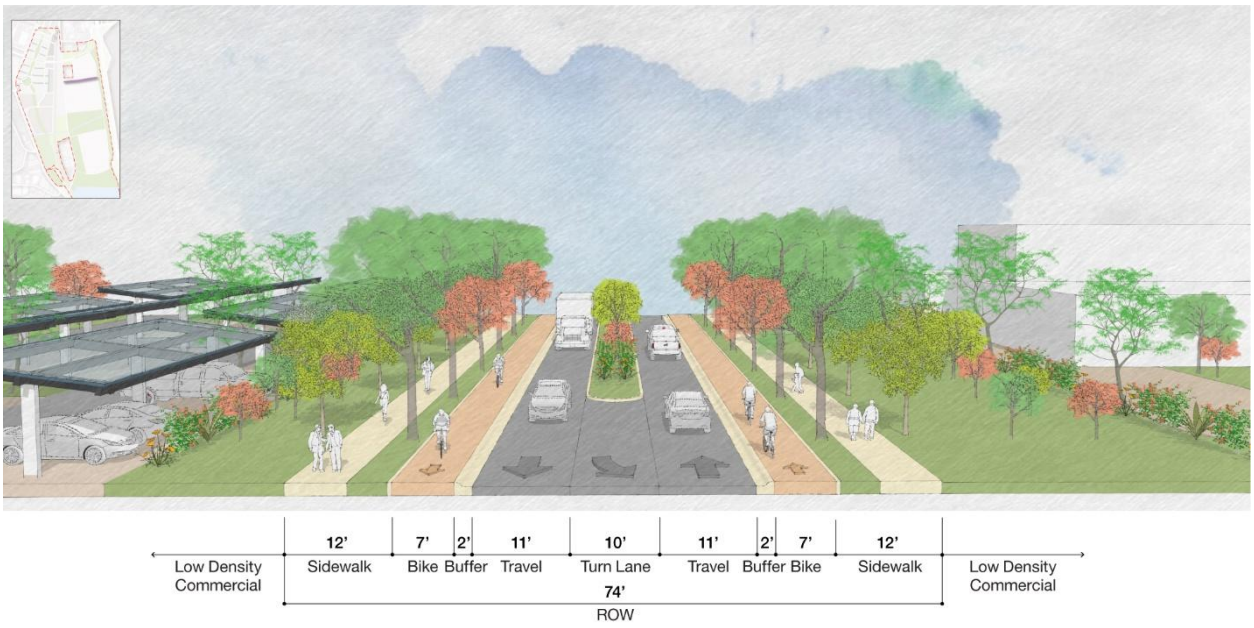


Figure 3-25: East Park Street and West Park Street Proposed Cross-Section

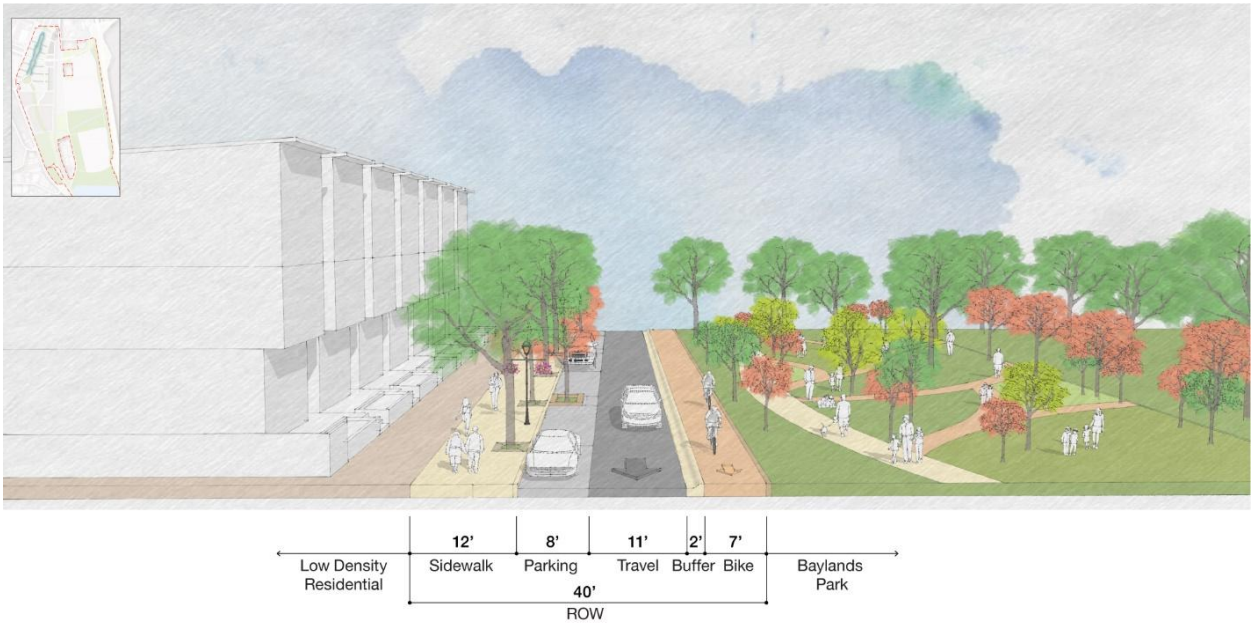


Figure 3-26: Roundhouse Circle Proposed Cross-Section

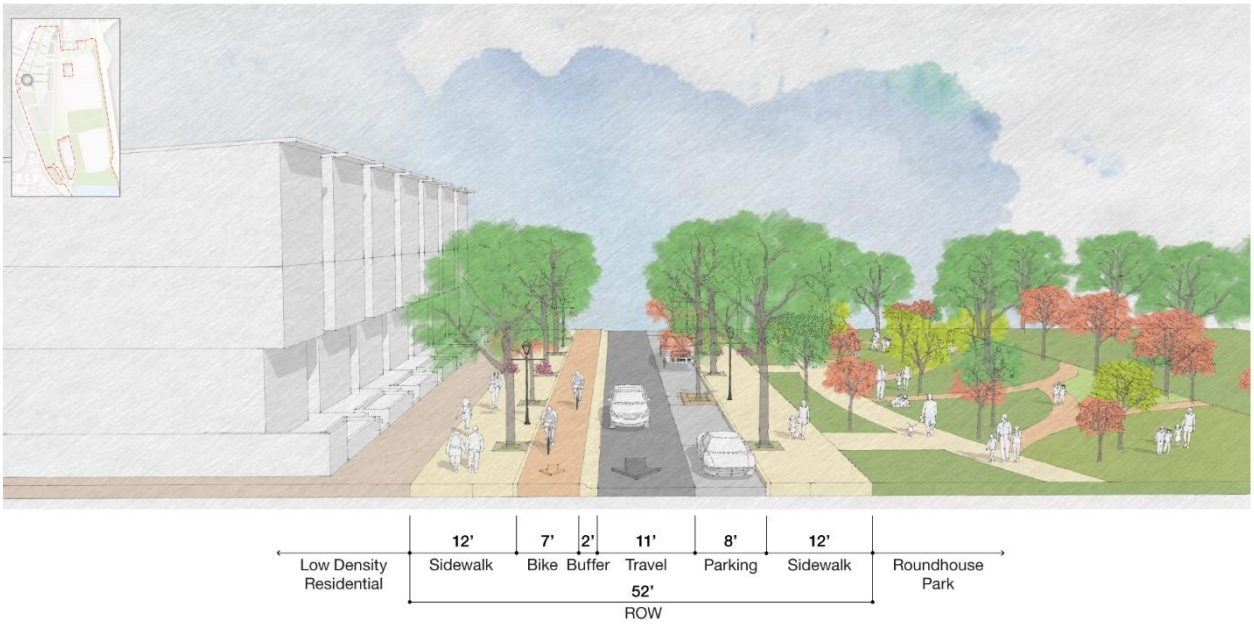


Figure 3-27: Visitacion Creek North and South Proposed Cross-Section

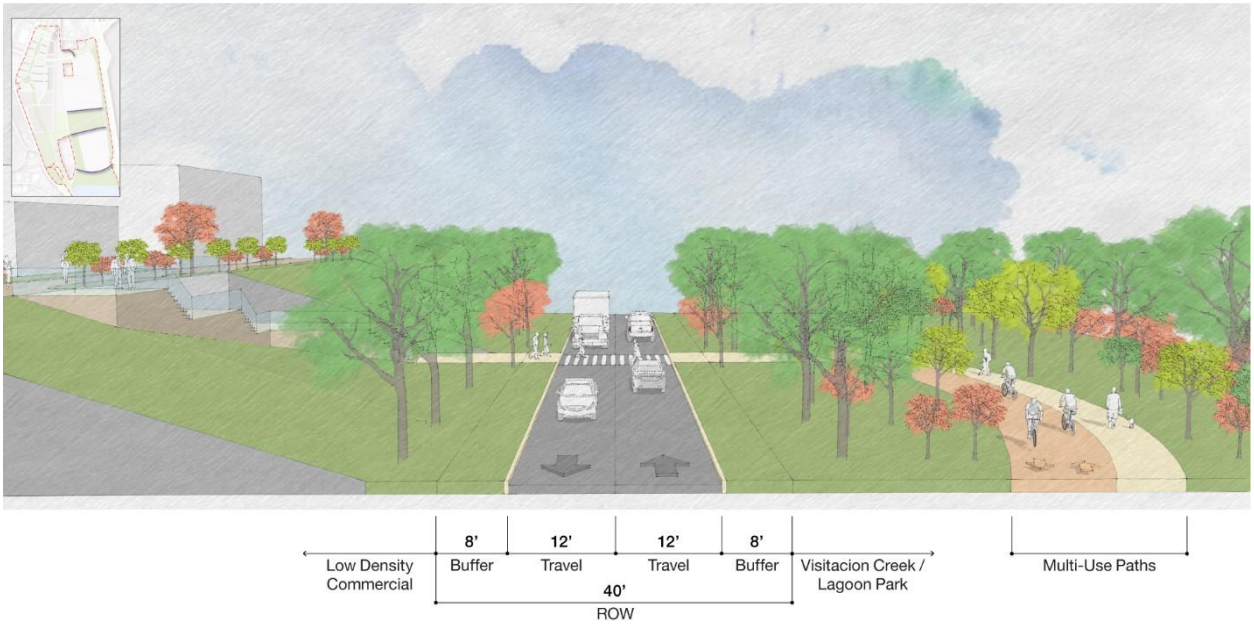


Figure 3-28: Local Streets Proposed Cross-Section

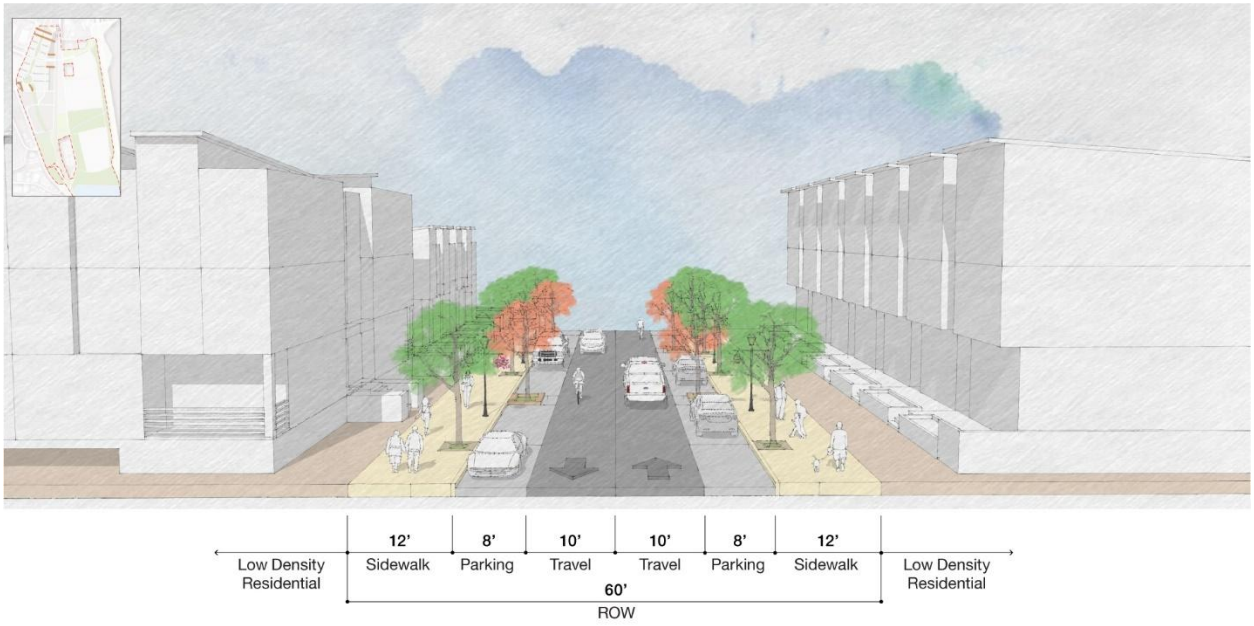
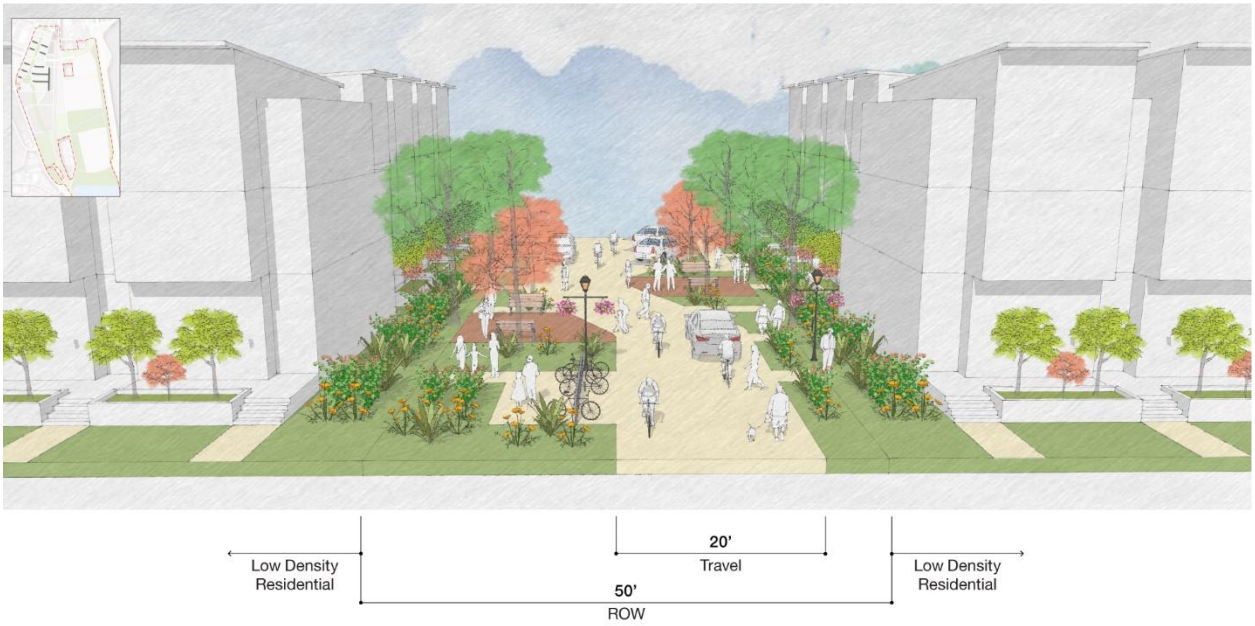
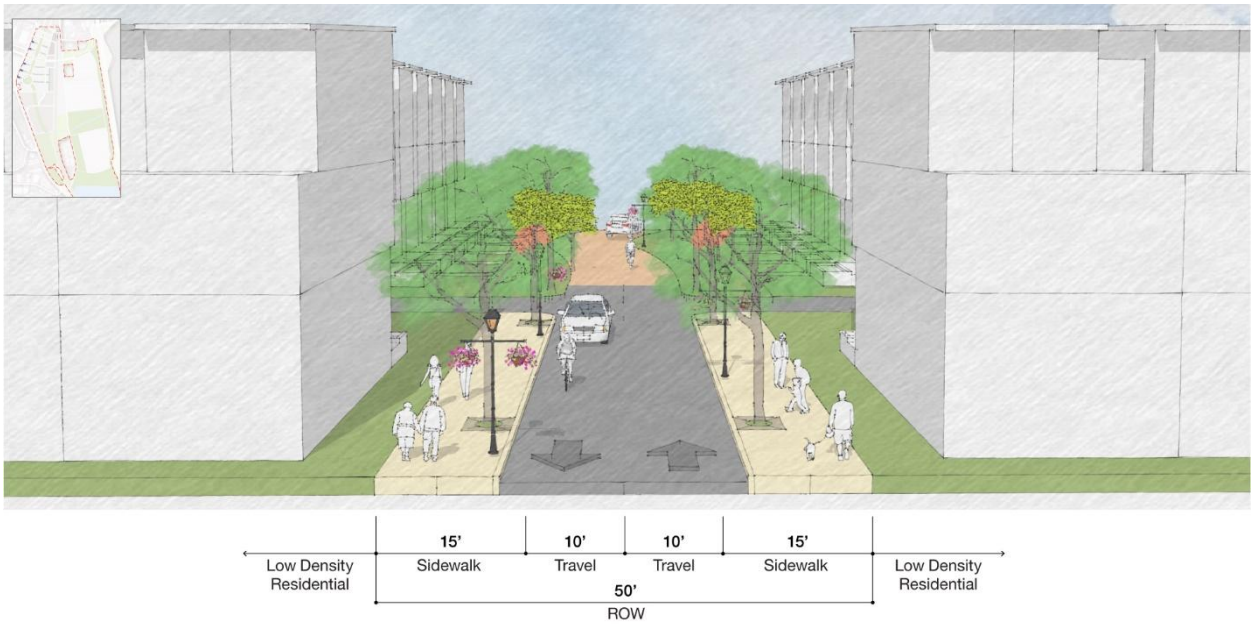


Figure 3-29: Green Shared Streets Proposed Cross Sections



GREEN SHARED STREET



GREEN SHARED STREET TRANSITIONS TO BAYSHORE BOULEVARD

Active Transportation Network

An active transportation network is proposed consisting of an internal network of shared use paths, bicycle facilities, and sidewalks compliant with the Americans with Disabilities Act (ADA) that will connect to existing local and regional routes.

Pedestrian System

Sidewalks or shared use paths will be provided adjacent to all Specific Plan area roadways. Planted curbside buffers and enhanced pedestrian crossings will also be provided at key intersections to provide additional comfort and safety, with features including curb extensions and leading pedestrian intervals. Curb extensions would extend the sidewalk into the curb lane at intersections or mid- block crossings, shortening crossing distances for people walking. Pedestrian facility types are described in **Table 3-3**. The proposed Baylands pedestrian network is illustrated in **Figure 3-30**.

Table 3-3: Baylands Pedestrian Network Improvements

Facility Type	Description	Location(s)
Sidewalk	A paved walkway adjacent to and separated by grade from a roadway. In compliance with the Americans with Disabilities Act (ADA), sidewalks will have a minimum 5-foot width. Sidewalks within the Baylands will provide additional width where needed for landscaping and other street furniture such as benches, streetlights, and bike racks, and may use decorative materials other than concrete subject to City approval as part of streetscape landscaping plans.	• Sunnydale Avenue • Baylands Boulevard • Bayshore Boulevard • Park Street East & West • Roundhouse Circle • Main Street • Geneva Avenue • Campus Parkway • East Campus Road • Tunnel Avenue • Frontage Road • Local Streets
Green Shared Street	A slow speed, curbless, and paved space intended to be shared by people walking, biking, and driving motor vehicles, with priority given to pedestrians and bicyclists.	Residential streets in the Bayshore and Roundhouse districts (see **Figure 3-30**).
Shared Use Path (Class I)	A paved path that is separated from roadways for use by pedestrians and bicyclists.	Along both sides of the Geneva Avenue bridge and adjacent to the following streets: • Sierra Point Parkway • Lagoon Road • Visitacion Creek North • Visitacion Creek South
Pedestrian Path	Pedestrian connections through open space areas that may be paved or unpaved.	Open space areas within the Baylands as described above in Section 3.3.2 d, *Open Space and Open Areas*.

SOURCE: The Baylands Specific Plan, 2025.

Figure 3-30: Baylands Pedestrian Network



Bicycle and Micro-Mobility System

Micro-Mobility

"Micro-mobility" refers to small, fully, or partially human-powered vehicles such as bicycles, e-bikes, and e-scooters.

A bicycle and micro-mobility network connecting each of the Baylands residential, commercial, and industrial areas to its open space network and the Bayshore Caltrain station will be provided. A comprehensive system of north–south and east–west on-street bicycle lanes and off-street bikeways are proposed for bicycle and micro-mobility travel throughout the Baylands, including protected bikeways that provide physical separation (vertically, horizontally, or both) from vehicular travel lanes. Connections to Brisbane's existing bike network will also be provided to facilitate connectivity between the existing community and the Bayshore Caltrain station. Baylands bicycle and micro-mobility facility types are identified in **Table 3-4** and illustrated in **Figure 3-31**.

Table 3-4: Baylands Bicycle and Micro-Mobility Network Improvements

Facility Type	Description	Location(s)

Class I Shared Use Path	A shared use path that is completely separated from the street with a limited number of street and driveway crossings. Class I Shared Use Paths are typically shared by bicyclists and pedestrians.	• Within the Ecological Park and on Icehouse Hill
		• Along both sides of the Geneva Avenue bridge
		• Adjacent to the following streets:
		  ○ Visitacion Creek North and South
		  ○ Lagoon Road
		  ○ Sierra Point Parkway (Bay Trail)

Class IV Protected Bike Lane	A bike lane that is separated from moving traffic vertically, horizontally, or both, with a minimum 1.5-foot buffer (3-feet adjacent to parking).	• Bayshore Boulevard (east side from Sunnydale Avenue to Main Street) • Sunnydale Avenue • Geneva Avenue • Roundhouse Circle • Main Street • Campus Parkway • Park Street East and West • Baylands Boulevard • Tunnel Avenue • East Campus Road
Green Shared Street	A slow speed, curbless, and paved space intended to be shared by people walking, biking, and driving motor vehicles, with priority given to pedestrians and bicyclists.	• Residential streets in the Bayshore and Roundhouse districts

SOURCE: The Baylands Specific Plan, 2025.

Transit

Regional Transit Systems Serving the Baylands

The Bayshore Caltrain Station will continue serving as the primary transit facility for uses within and near the Baylands. All of the Specific Plan area's 2,200 dwelling units and approximately 80 percent of the site's employment-generating uses are located within a ½-mile walk of the Bayshore Station or a SamTrans bus, Muni bus, or Muni light rail transit stop. The remaining 20 percent of the Specific Plan area's commercial square footage is proposed to be located within a ¼-mile walk of a Baylands Shuttle stop.

Figure 3-31: Baylands Bicycle and Micro-Mobility Network



Baylands Shuttle Routes

A fare-free shuttle network is proposed to be provided to transport Baylands residents and workers throughout the site and connect the Baylands to downtown Brisbane and existing transit routes. Shuttle service is proposed to be established in two phases, initially providing an internal Baylands route and weekday connections to downtown Brisbane as illustrated in **Table 3-5** and **Figure 3-32**.

Table 3-5: Proposed Baylands Shuttle Service and Phasing

Shuttle Route	Weekday Service	Weekend Service	Service to be Established Prior to:
Phase 1			
Baylands Internal Route	6:00 a.m.–8:00 p.m. Maximum 15-minute headways	10:00 a.m.–5:00 p.m. On-demand service (Fixed-route service dependent on demand)	Prior to 50% occupancy of any Baylands Specific Plan area district
Baylands-Downtown Route	6:00 a.m.–9:00 a.m. 4:00 p.m.–6:00 p.m. 1-hour headways	No Service	Prior to 50% occupancy of any Baylands Specific Plan area district
Phase 2			
East Side Route	6:00 a.m.–9:00 a.m. 4:00 p.m.–6:00 p.m. 1-hour headways	10:00 a.m.–5:00 p.m. On-demand service (Fixed-route service dependent on demand)	Prior to 50% occupancy of Campus East District

SOURCE: The Baylands Specific Plan, 2025.

Transportation Demand Management

In addition to providing a proposed roadway network, pedestrian and bicycle facilities, and transit services described above, the Specific Plan proposes preparation of Transportation Demand Management (TDM) Plans for each applicable site-specific development project as it undergoes site-specific development review. The purpose of these TDM plans is to encourage and incentivize travel other than via use of single-occupant vehicle trips in accordance with San Mateo County and City of Brisbane Transportation Demand Management requirements.[57] Transportation Demand Management strategies include:

- Transit Measures
    - Shuttle program connecting Specific Plan area locations to each other (see **Figure 3-31** and **Table 3-5**).
    - Transit incentives such as marketing or transit pass subsidies.

[57] Current TDM requirements focus on implementation by users and require new development expected to generate more than 100 peak hour trips to incorporate TDM measures that reduce the project's net vehicular trip generation.

Figure 3-32: Proposed Shuttle Routes and Transit Connections



- Active Transportation Facilities
    - Pedestrian and bicycle facilities.
    - Bicycle parking.
- Parking Strategies
    - Parking management, such as maximum parking ratios and unbundling parking from land uses.
- Other TDM strategies required by the City of Brisbane or C/CAG.

f. Habitat Conservation, Restoration, and Enhancement

Open space areas for preservation and enhancement of important habitat areas include four ecological greenspaces: the Brisbane Lagoon and Lagoon Park, Visitacion Creek, Icehouse Hill, and the Ecological Park. In addition to habitat preservation and enhancement, the areas provide site drainage and water quality treatment functions, as well as public access to recreation within natural settings.

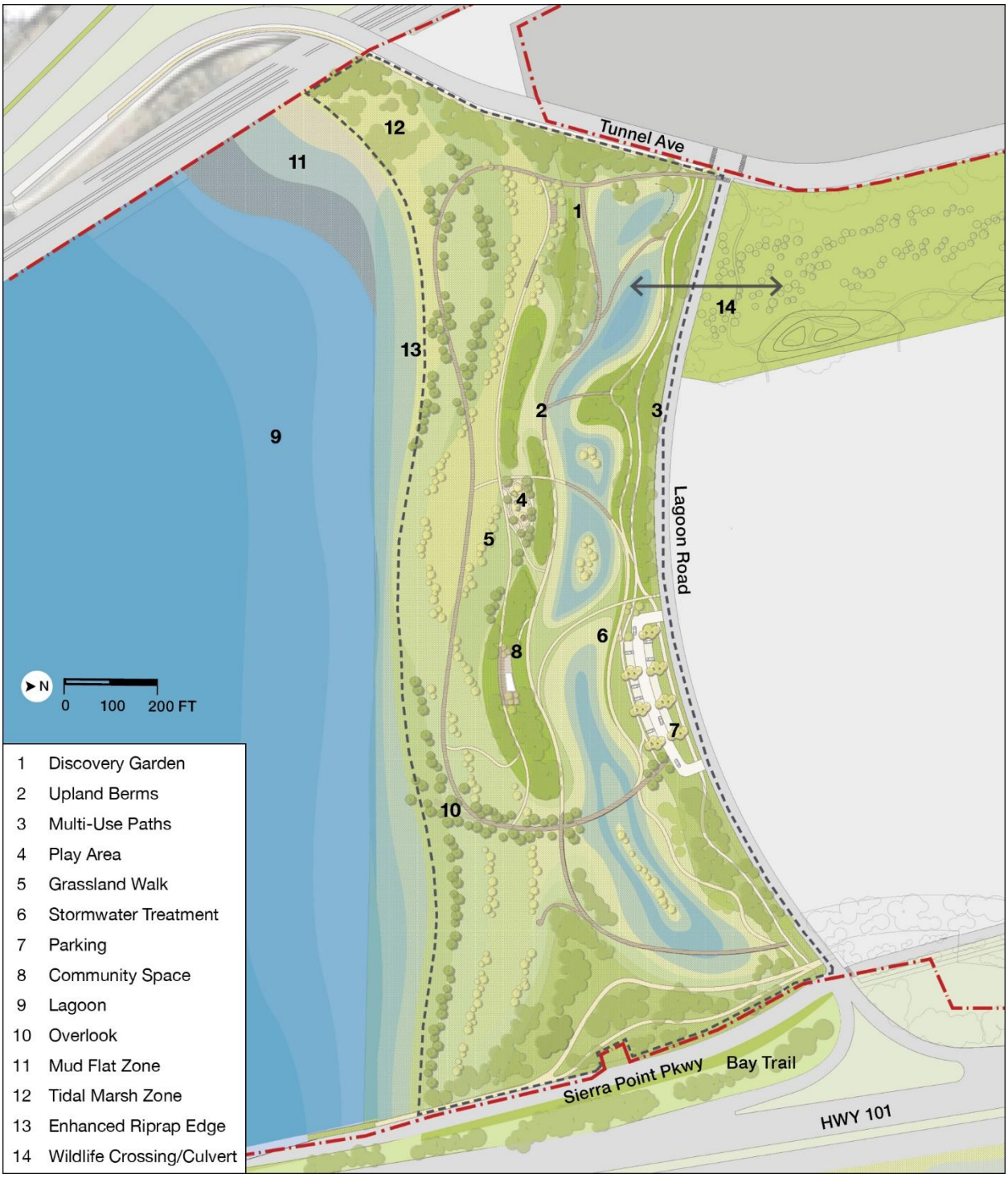
Brisbane Lagoon (147.8 acres) and Lagoon Park (15.4 acres)

The existing east–west alignment of Lagoon Road is proposed to be relocated to the north to provide a 31.7-acre area along the north side of the 121.8-acre Brisbane Lagoon for development of Lagoon Park (see **Figure 3-33**). As a result of sea level rise, Brisbane Lagoon is expected to expand to 137.8 acres by the Year 2100, leaving 15.4 acres of land area within Lagoon Park. The design of Lagoon Park provides for the protection and enhancement of biological resources along with compatible recreational activities such as outdoor education and wildlife observation. The park will include multi-use paths, a native plants discovery garden, play area, community space, and educational signage. Uses that promote large gathering and/or excessive noise will be prohibited within 50 feet of designated habitat areas. Night lighting will be provided for a parking area, along with low-level lighting for paths.

Proposed habitat restoration and enhancement includes:

- **Tidal flats** to be planted with eelgrass designed to attract birds such as heron, plover, and egret, as well as fish when the flats are submerged.
- **Tidal marsh** located just upslope of tidal flats. The design of tidal marsh areas provides greater native plant diversity than tidal flats with California cordgrass, pickleweed, saltgrass, and woody saltwort.
- **Grassland** that would provide a naturalized herbaceous assemblage would include an assortment of grasses and wildflowers. Example plant species are Junegrass, purple needlegrass, California melic, lupines, Indian paintbrush, and Douglas iris.

Figure 3-33: Lagoon Park Illustrative Concept Diagram



- **Coastal scrub** is proposed to be defined by its low-growing woody species such as coyotebrush, snowberry, and wax myrtle, and associated herbaceous species such as lupine, lizard's tail, and western swordfern.

Lagoon Park improvements would follow completion of Title 27 landfill closure activities, which would remove existing vegetation for placement of ~~an impermeable~~ a low-permeability landfill cap over the existing refuse layer along with landfill gas and leachate control systems. The existing east–west alignment of Lagoon Road is proposed to be relocated to the north to align with the US 101 freeway on- and off-ramps as well as to protect the roadway from projected sea level rise through 2100.

Specific Plan Figure 5.3.4 designates the tidal flats area shown in **Figure 3-34** as "Open Area Protection" for their preservation and protection. Ground disturbance north of the "tidal flats" up to the relocated Lagoon Road is required for restoration and enhancement of existing habitat and stormwater features. Overall, physical improvements in this area are proposed to remain largely naturalized but also include amenities that provide educational/recreational community spaces and means for accessibility as indicated in **Figure 3-33**, Lagoon Park Illustrative Concept Diagram. Park amenities include at-grade walks and bikeways, an elevated walk, wildlife observation areas, gardens, play spaces, picnic areas, and limited parking.

Figure 3-34: Biotic Habitat Zones within and adjacent to the Brisbane Lagoon

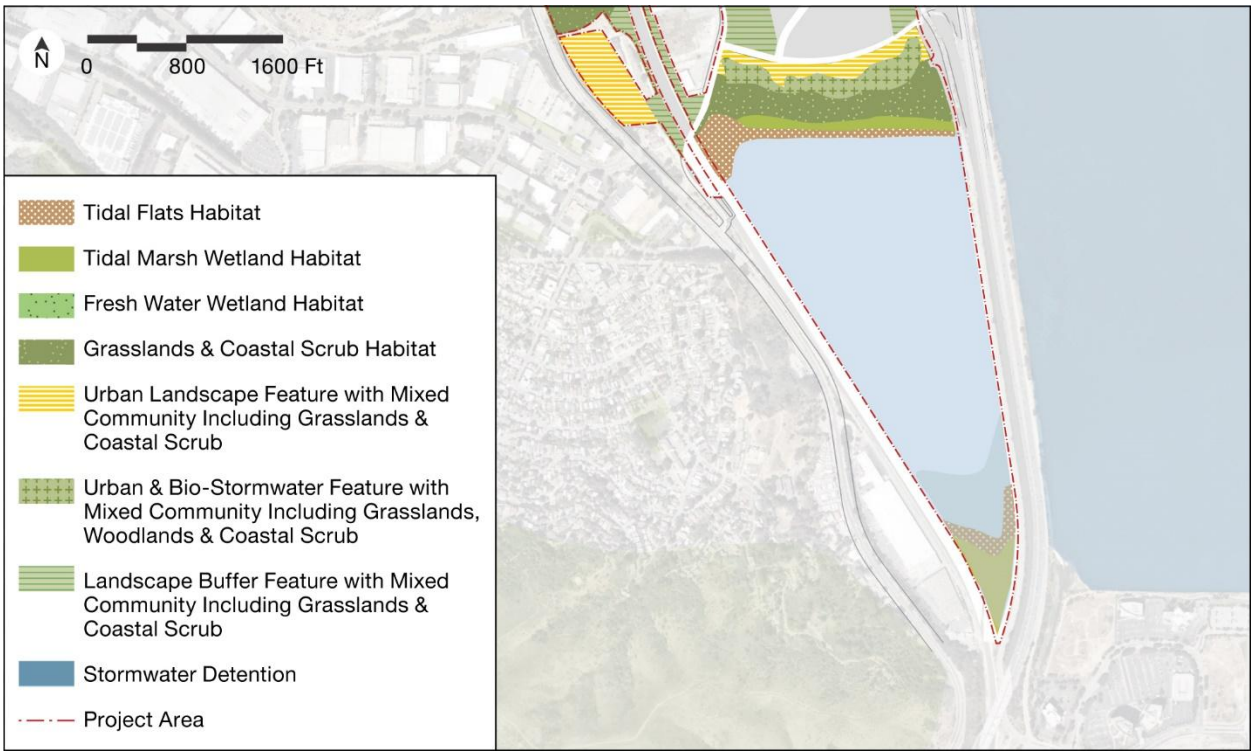
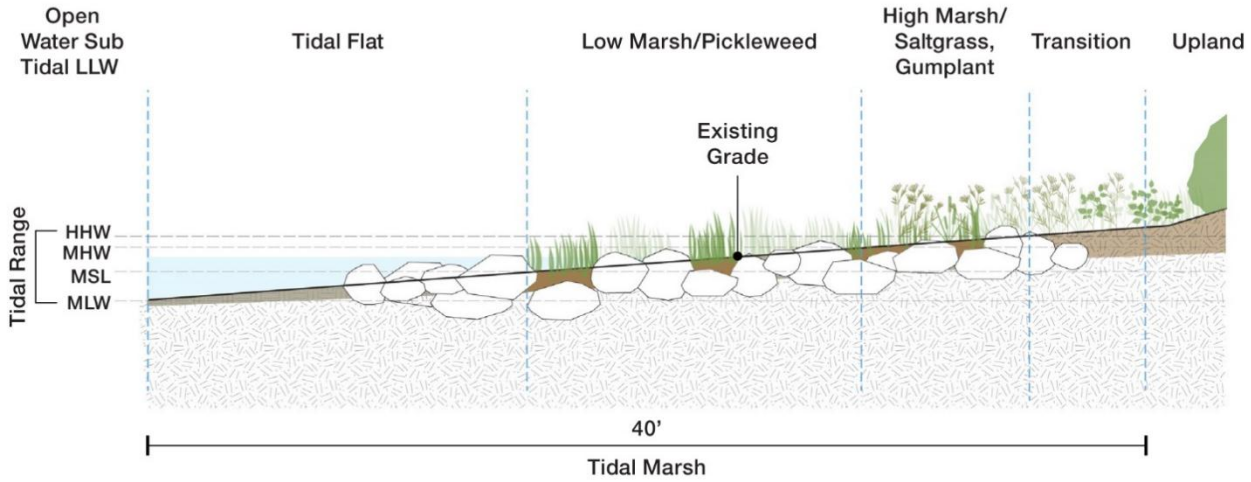


Figure 3-35a: Existing Lagoon Edge



As shown in **Figure 3-35a**, the existing northerly edge of the Brisbane Lagoon is lined with riprap. The Specific Plan proposes improving and restoring habitat along this edge. If permitted by regulatory agencies, existing riprap edges along the northern shoreline of the Brisbane Lagoon is proposed to be enhanced by infilling voids with soil, without raising the elevation, and interplanting with tidal wetland vegetation (see **Figure 3-35b**). This would include re-structuring the rocks and infill with the appropriate substrate (matching soil organic matter and grain size from reference marshes and/or using appropriate dredged material) to allow for tidal action and to promote the growth and establishment of pickleweed and saltgrass toward the upland transition. Construction of the enhanced lagoon edge is proposed to be undertaken in sections with the establishment of silt curtains, floating sediment booms protecting the lagoon while leveraging the total height of the tidal range. The use of coir erosion control fabric during plant establishment would be required to protect newly established plants and accrete sediment.

Figure 3-35b: Proposed Lagoon Edge Enhancement



Visitacion Creek (30.8 acres)

The tidally influenced Visitacion Creek is connected directly to San Francisco Bay through a culvert beneath US 101. Immediately upstream of the Specific Plan area's eastern boundary, Visitacion Creek's tidally influenced channel is proposed to be widened to rehabilitate its ecological functions, including on-site wetland creation featuring an enhanced tidal channel and restored salt marsh, native scrub, and grasslands, along with freshwater seasonal wetlands. Approximately 39.3 acres of land area are proposed for Visitacion Creek, 8.5 acres of which

would be subject to daily inundation due to sea level rise by the Year 2100, leaving 30.8 acres of land within this open space area.

East of the Caltrain right-of-way, Visitacion Creek is situated over an existing refuse layer that will be capped as part of the required Title 27 closure of the former Brisbane Landfill. The Specific Plan proposes erosion control and water pollution control measures to be implemented along with an ongoing maintenance plan to protect water quality.

Following landfill remediation, on-site wetland creation featuring an enhanced tidal channel and restored salt marsh, native scrub and grasslands, and freshwater seasonal wetlands is proposed. Above Visitacion Creek, freshwater seasonal wetland areas would also be established. The space allocated for these systems would allow the migration of the adjacent tidal wetlands as sea level rise occurs.

Under-road wildlife connections are proposed at Tunnel Avenue, Visitacion Creek Road North, and Sierra Point Parkway (see **Figure 3-36a** through **Figure 3-36e**), in the form of a small culvert or clear span bridge, sized appropriately for small terrestrial fauna to traverse between local and regional habitat patches. The under-road wildlife connection provided at Sierra Point Parkway and the Bay Trail is proposed to consist of a clear span bridge replacing the existing culvert.

Figure 3-36a: Visitacion Creek Illustrative Concept Diagram

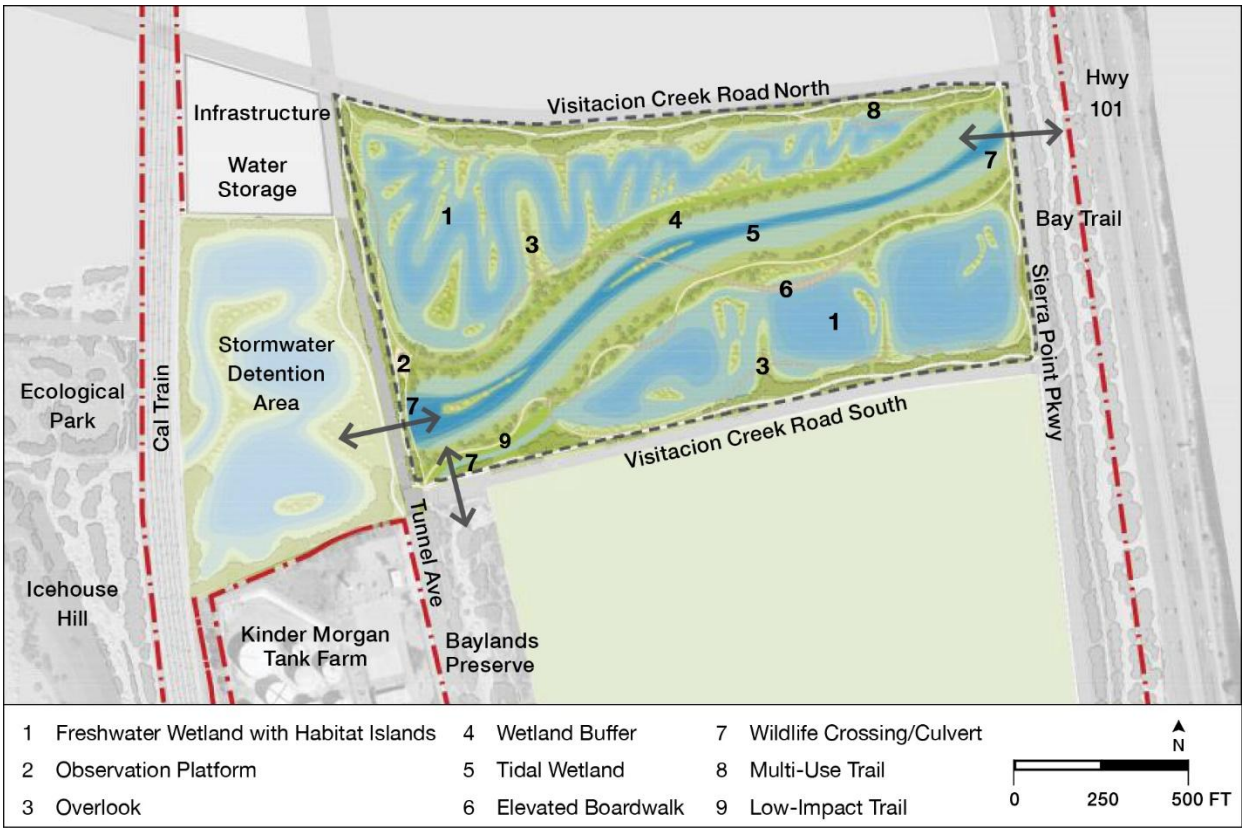
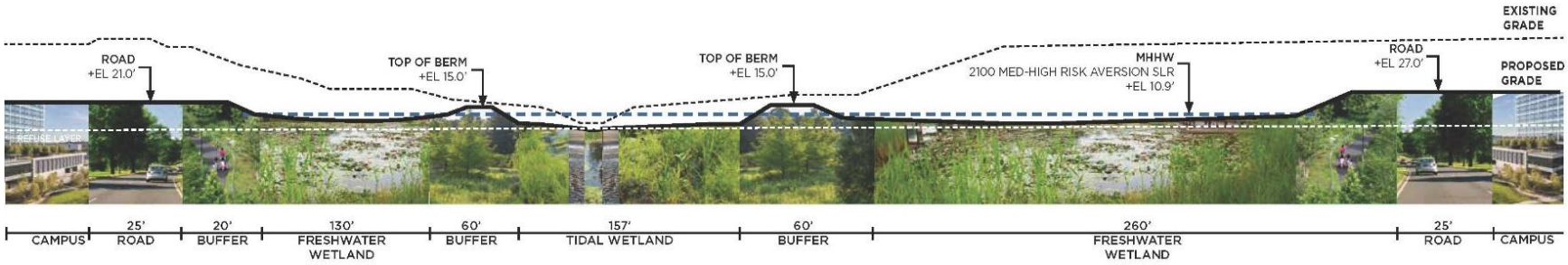


Figure 3-36b: Visitacion Creek Section A-A'



VISITACION CREEK SECTION A-A'

NOTES: Elevations shown are based on the NAVD 88 vertical datum.

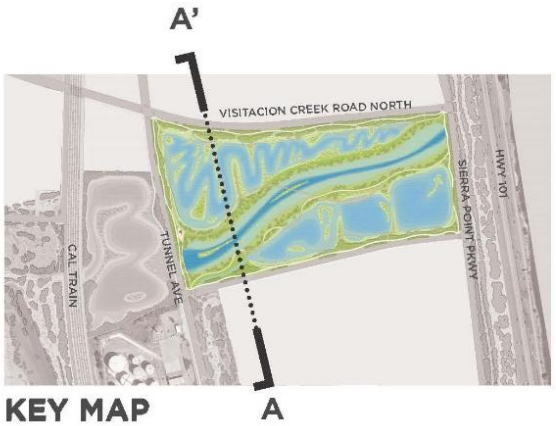
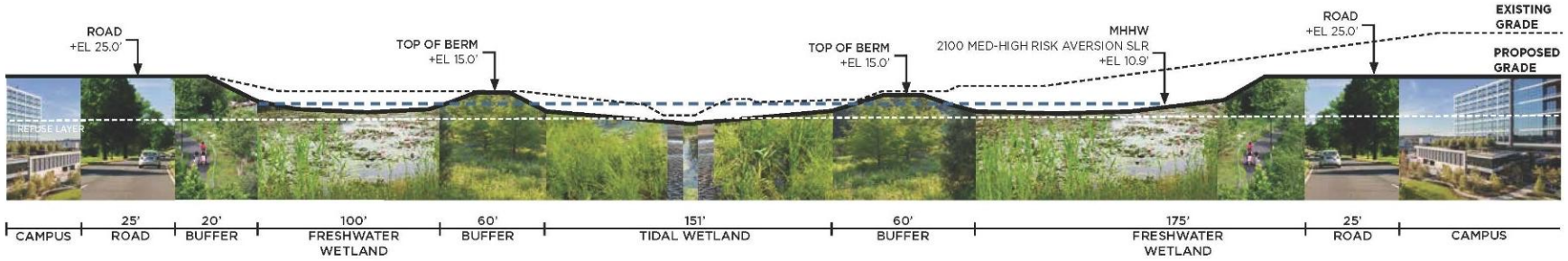
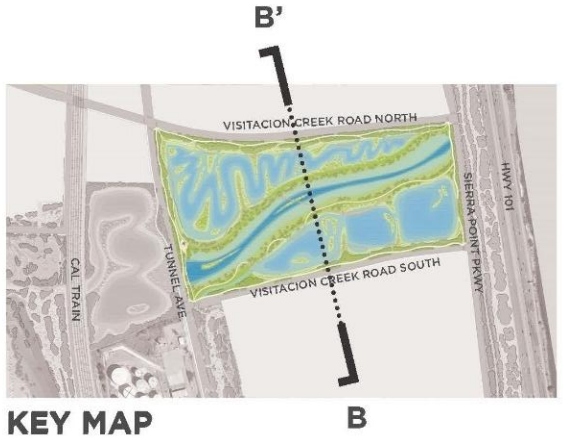


Figure 3-36c: Visitacion Creek Section B-B'

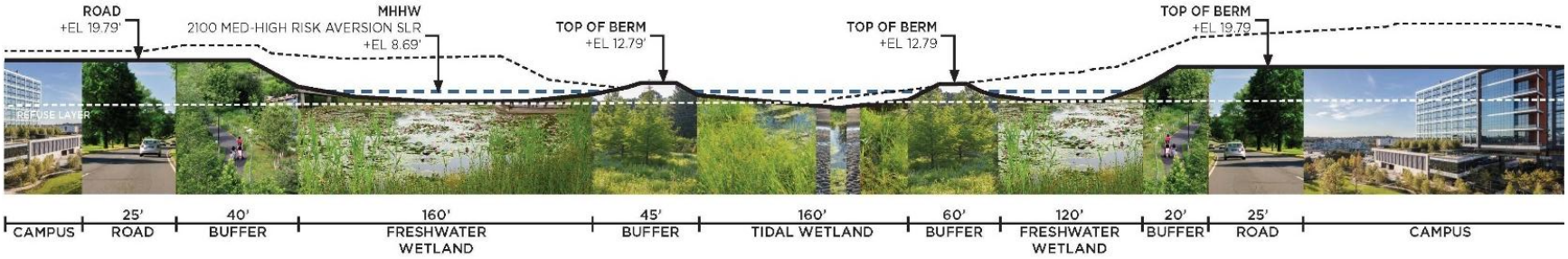


VISITACION CREEK SECTION B-B'



KEY MAP

Figure 3-36d: Visitacion Creek Section C-C'



VISITACION CREEK SECTION C-C'

NOTES: Elevations shown are based on the NAVD 88 vertical datum.

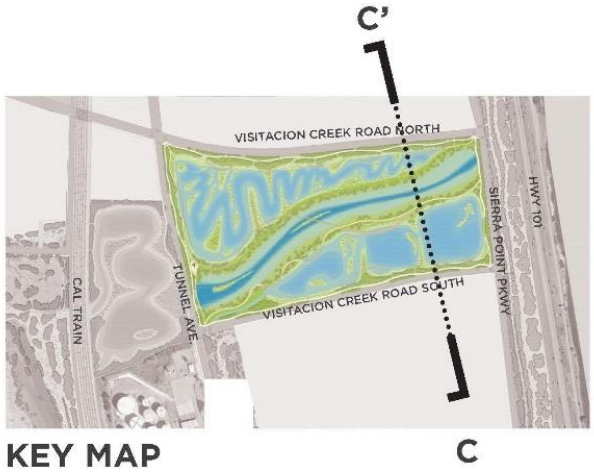
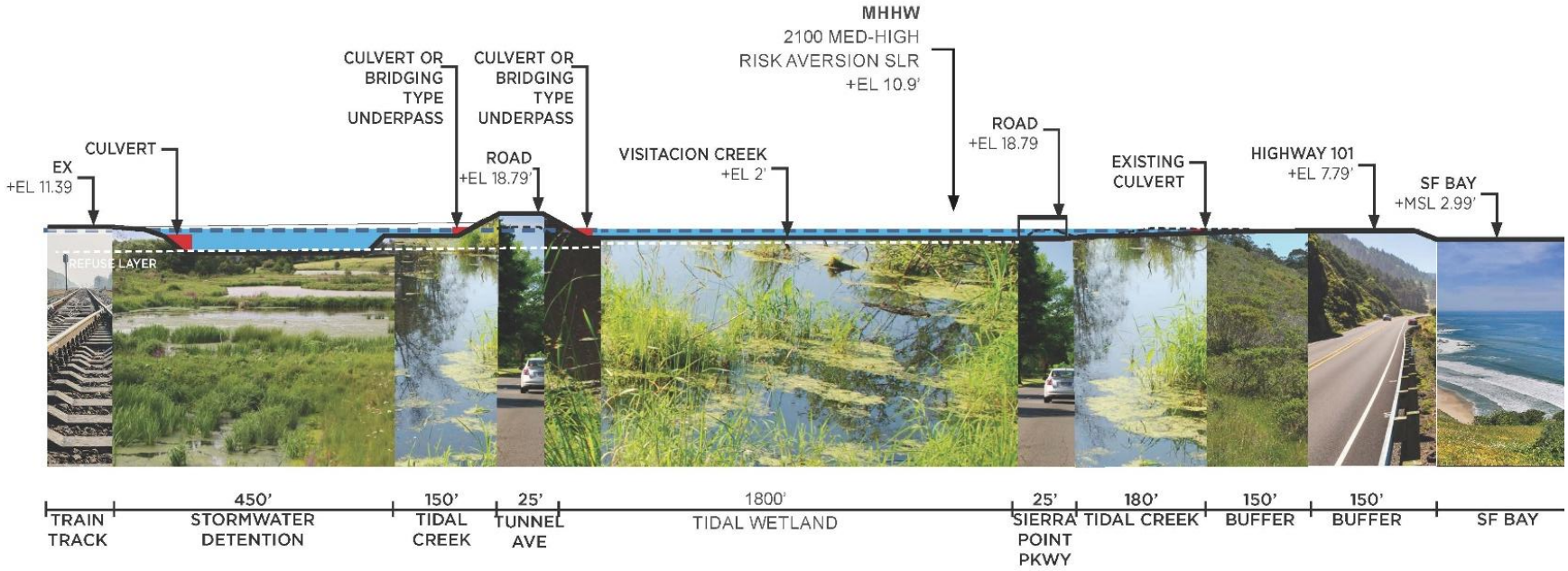


Figure 3-36e: Visitacion Creek Section D-D'



VISITACION CREEK SECTION D-D'



KEY MAP

Stormwater Detention Area (13.8 acres)

The area immediately east of the Caltrain right-of-way is proposed as a 13.8-acre ecologically focused stormwater detention area (see **Figure 3-37**). This naturalized facility with "soft" planted edges of native species would provide permeable soils and forebays, as well as native plantings to slow flow rates and remove nutrients and pollutants. The eastern edge of the stormwater detention area is proposed to transition to Visitacion Creek.

Figure 3-37: Detention Area Example



Icehouse Hill (24.3 acres)

The Specific Plan proposes protection, enhancement, and restoration of native grasslands, coastal scrub, and small pockets of seasonal wetlands on Icehouse Hill (see **Figure 3-38**). Planting of native butterfly host species is proposed to increase butterfly habitat extent and quality. Invasive species management is proposed due to the presence of Eucalyptus sp., fennel, and other non-native species.

In addition to maintaining the natural character and habitat value of Icehouse Hill, "low-impact" gravel trails, a nature play area, native gardens, butterfly garden, overlook(s), hillside slides, educational area(s) with group seating, multi-use trails, and outdoor educational area with educational signage are proposed.

Mission Blue Nursery, a non-profit nursery that collaborates with local communities to restore San Bruno Mountain's native habitats and cultivate its flora, is proposed to be relocated to the former police shooting range. Prior to its relocation, appropriate cleanup and remediation of the firing range site would need to be completed.

Visual screening of the adjacent Kinder Morgan Tank Farm would also be provided in the form of naturalized vegetation.

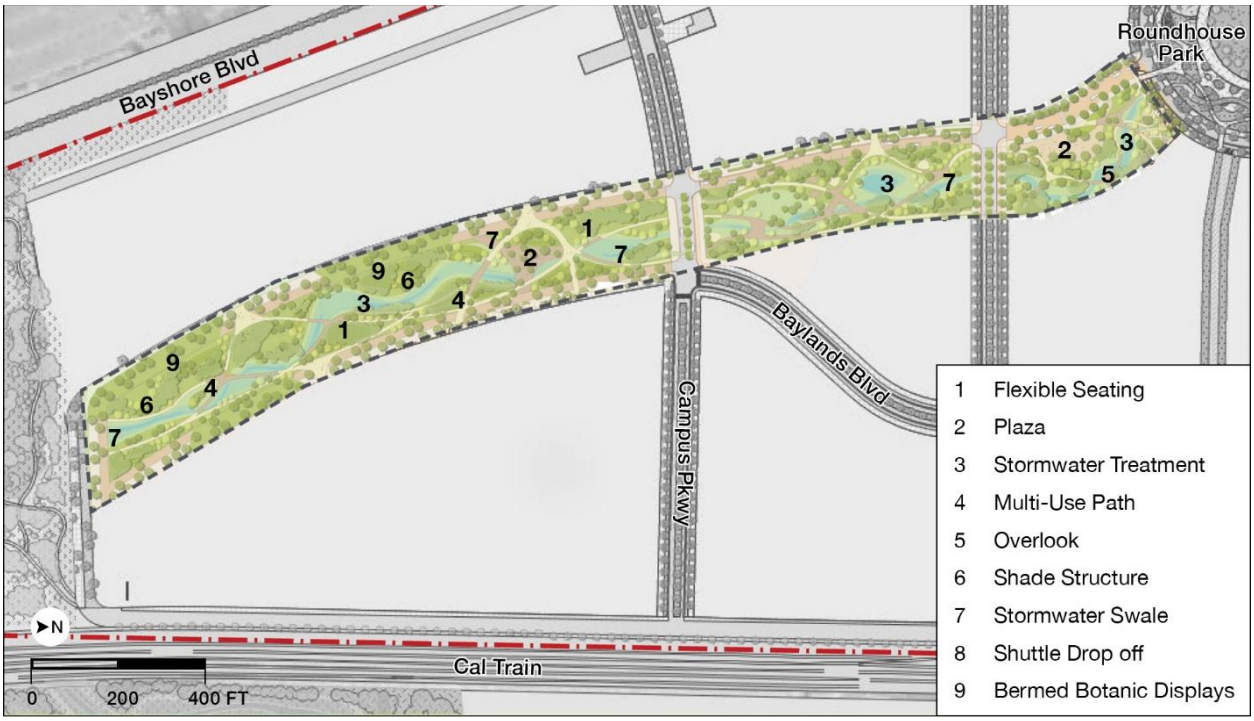
The Ecological Park (7.3 acres)

The 7.3-acre Ecological Park is proposed to serve as a primarily naturalized open space within the Icehouse Hill District (see **Figure 3-39**). A central swale is proposed as the primary feature of the Ecological Park. Seasonal rains filling dry creek beds and bioswales are proposed to be directed to stormwater treatment areas within the park to improve water quality. Multi-use paths, overlook(s), shade structure(s), small lawn areas, plaza(s), and flexible seating areas and interpretive features are also proposed within this park.

Figure 3-38: Icehouse Hill Illustrative Concept Diagram



Figure 3-39: The Ecological Park Illustrative Concept Diagram



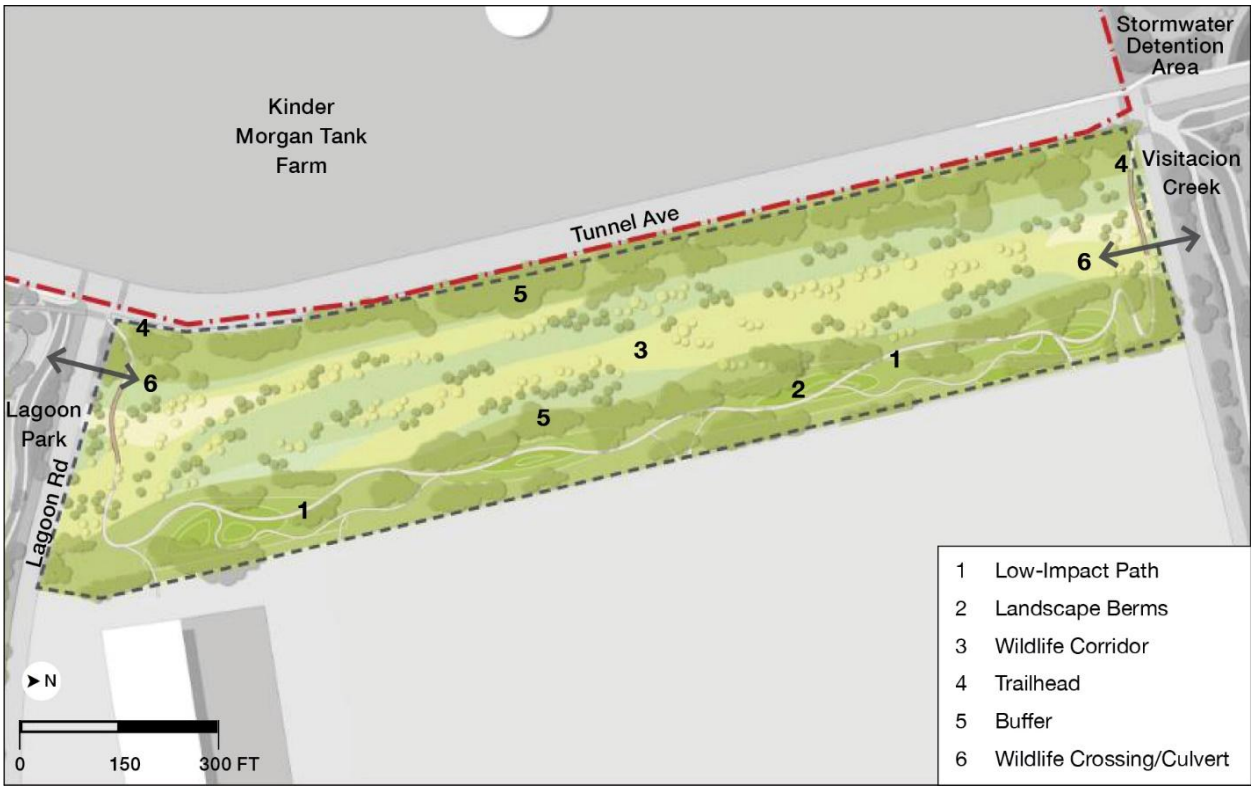
Proposed habitat restoration and enhancement within the Ecological Park includes:

- **Grassland** to provide a naturalized herbaceous assemblage, including an assortment of grasses and wildflowers. Example plant species are Junegrass, purple needlegrass, California melic, lupines, Indian paintbrush, and Douglas iris.
- **Coastal scrub** would be defined by its low-growing woody species such as coyotebrush, snowberry, and wax myrtle, and associated herbaceous species such as lupine, lizard's tail, and western swordfern.
- **Woodland** areas would have the highest canopy and include plantings of live oak, bay, buckeye, and hazelnut trees with an understory sharing many coastal scrub species.

Baylands Preserve (14.1 acres)

The Baylands Preserve central swale would be constructed following Title 27 landfill closure to provide habitat connectivity, wildlife crossings, and pedestrian and bicycle connectivity (see **Figure 3-40**). Coastal scrub and grassland habitat will be provided. The Specific Plan states that wetland habitats and woodland habitats would also be "allowed as deemed viable and beneficial to overall habitat value." A low-impact multi-use pathway and trailhead on the east side of the preserve is also "allowed" as a means of connecting pedestrians to Lagoon Park.

Figure 3-40: Baylands Preserve Illustrative Concept Diagram



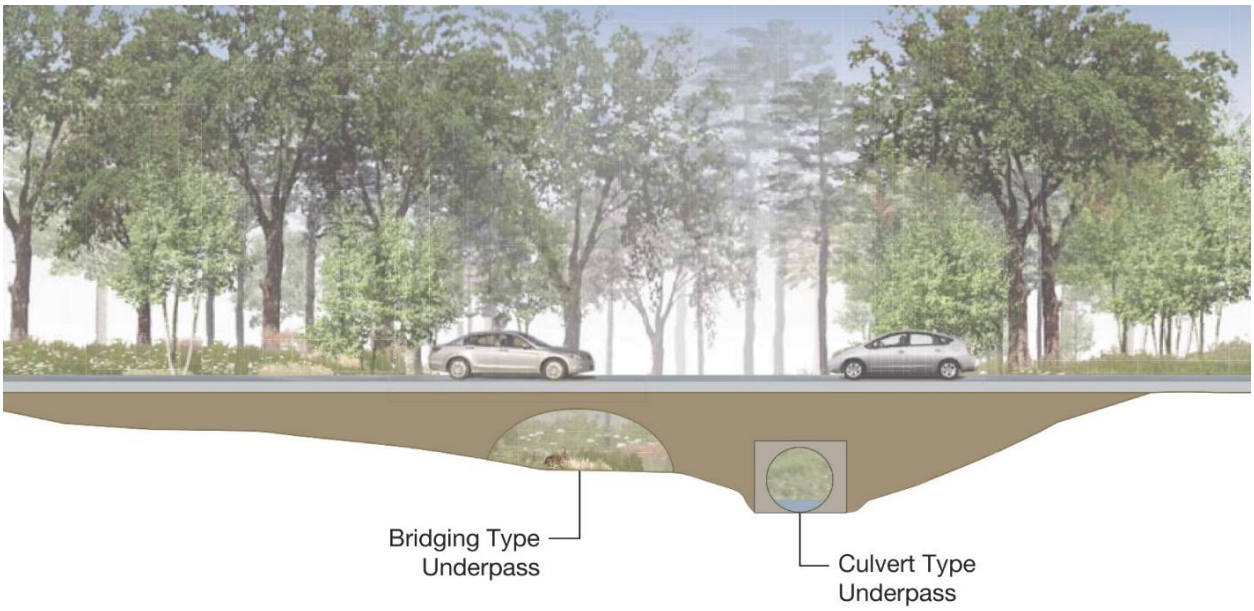
Under-road wildlife connectors are proposed at Lagoon Road and Visitacion Creek Road South in the form of culverts, sized appropriately for small terrestrial fauna. Large evergreen shrubs and trees along Tunnel Avenue to screen views of the tank farm are "allowed" but not required by the Specific Plan. Direct views of the Lagoon and Visitacion Creek are proposed to be provided as vantage allows.

Low-impact trails with trailhead(s) located on the east side of the preserve are proposed to connect pedestrians to Lagoon Park, Visitacion Creek, and adjacent development. Trails are required to be offset or elevated from habitat areas.

Wildlife Connector Types

As noted above, two types of under-road connectors are proposed: clear span bridge and culvert types of underpasses (see **Figure 3-41**).

Figure 3-41: Wildlife Connector Types



g. Water Supply

Water supply for the Baylands is proposed to be provided by the California Water Service Company (Cal Water) "South San Francisco District" using a combination of (1) potable water purchased from the San Francisco Public Utilities Commission (SFPUC) supplemented by five existing off-site groundwater wells and (2) recycled water from the water recycling facility to be constructed within the Baylands. Cal Water potable supplies would be delivered to the site via existing turnouts from the SFPUC regional water system.

To provide water service to the Baylands, Cal Water's South San Francisco District service area would be expanded to include the Baylands, Beatty, and Sierra Point[58] areas

California Water Service Company

California Water Service Company (Cal Water) is an investor-owned public utility supplying water service to approximately 1.8 million Californians through over 481,000 connections. Its 25 districts serve 63 communities spanning from the Chico-Hamilton City District in the north to the Palos Verdes District in Southern California. California Water Service Group, Cal Water's parent company, also provides water service to communities in Washington, New Mexico, and Hawaii. Water rates are set separately for each district, subject to California Public Utilities Commission (CPUC) oversight of the water rate setting process and district operations.

Cal Water incorporated in 1926 and has provided water service since 1931 to the South San Francisco District, which encompasses the communities of South San Francisco, Colma, a small portion of Daly City, and an unincorporated area of San Mateo County known as Broadmoor.

[58] Because the Sierra Point area is currently contiguous to Cal Water's existing service area, its inclusion would make the Baylands contiguous with the South San Francisco District and also provide needed potable water supply for Sierra Point.

within the City of Brisbane while simultaneously removing those areas from Brisbane's water service area (see **Figure 3-42**). The water currently being supplied to the Sierra Point area would then become available to the City to support buildout of the Brisbane General Plan. Water currently being supplied by SFPUC within the Specific Plan area would become available to SFPUC.

In addition to potable water supply, a 1.0-million-gallon-per-day (mgd) capacity water recycling facility would be constructed within the Baylands along the east side of the Caltrain right-of-way adjacent to the on-site water tank. The water recycling facility would be owned and operated by Cal Water and generate 0.52 mgd of recycled water for the Baylands and 0.43 mgd of recycled water for users in South San Francisco to reduce potable water demand both within the Baylands and Cal Water's South San Francisco service area. Recycled water would be supplied to the Baylands for non-potable uses. In addition, recycled water would be made available to Sierra Point, Oyster Point, and other development areas within the northeastern portion of the City of South San Francisco.

h. On-Site and Off-Site Water Infrastructure

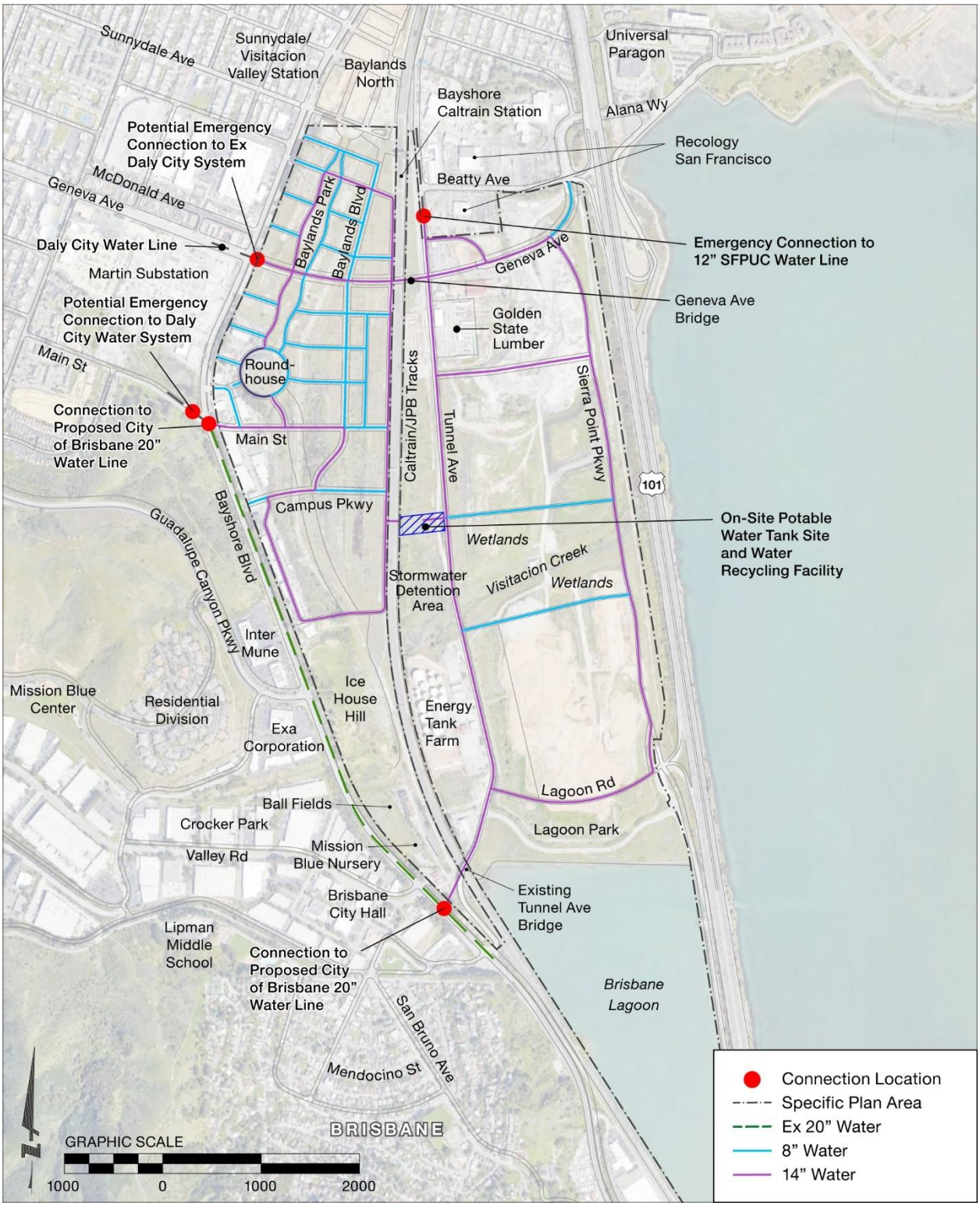
Baylands Potable Water System Improvements

The proposed on-site potable water system is described below.

Pipelines

The Baylands potable water system is proposed to deliver a maximum daily demand of 1,200 gallons per minute (gpm) (flow without the use of recycled water) across the Baylands while being able to provide 6,000 gpm at 20 psi residual pressure to fire hydrants within the Baylands per California Code of Regulations, Title 22, requirements. Subject to review and approval of Cal Water, the Baylands potable water system would consist of a grid of 8-inch-diameter pipes surrounded by 14-inch-diameter loops (see **Figure 3-42**). To connect water distribution systems in the western and eastern portions of the Baylands, 14-inch-diameter pipes are proposed to cross the Caltrain right-of-way at two locations. A water main in Bayshore Boulevard would feed the on-site grid at two locations, which are shown on **Figure 3-42**. Looping local residential water lines would provide the required 6,000 gpm fire flow for residential land uses and reduce potential water quality issues associated with water stagnation.

Figure 3-42: Proposed On-Site Potable Water System



Baylands development would be served from existing turnouts from the SFPUC regional water system; no new turnouts are needed or proposed. The closest turnout, located on Main Street near Bayshore Boulevard, is connected to the SFPUC distribution system, and is intended for use only in an emergency. The other existing turnouts that currently serve the City of Brisbane and Guadalupe Valley Municipal Improvement District (GVMID) service areas would be connected to the Baylands via a proposed transmission main on Bayshore Boulevard. The proposed infrastructure plan also includes the potential for emergency interties with the City of Daly City and SFPUC.

Subject to State of California and California Water Service approvals, the Baylands water system is proposed to be constructed from fusion-welded high-density polyethylene (HDPE[59]) pipe. Fusion-welded HDPE is being proposed by the applicant due to its flexibility and capacity to manage the substantial soil settlement that is anticipated within the Baylands, thereby reducing the potential for pipe shearing.

To accommodate differential settlement at the interface between buildings within the Baylands and proposed HDPE potable or fire water lateral service lines, the *Brisbane Baylands Infrastructure Plan* notes that flexible connections with settlement vaults may be provided to mitigate shearing of utility infrastructure.[60] In addition, approved backflow prevention devices would be installed for both the fire and domestic water connections either within or outside of the buildings per applicable regulations.

Water Storage

To maintain proper water pressure, an approximately 3.16-million gallon storage tank is proposed, which may be provided as a single above-ground tank (approximately 125 feet in diameter and 40 feet tall) or as two or three smaller water storage tanks. If multiple tanks are provided, initial Baylands development would be served from a single storage tank and additional tank(s) then added as needed. In addition to the water storage facility, a pump station with an emergency standby generator is proposed to assure pumping continues during power outages.

Sierra Point Potable Water System Improvements

A turnout from the California Water Company's water system in South San Francisco to the existing water system in the Sierra Point Subarea within Brisbane exists along the existing boundary between Brisbane and South San Francisco. This turnout, which was constructed for

[59] HDPE pipe is a type of flexible plastic pipe that is often used to replace ageing concrete or steel pipelines.

[60] As the ground and vault settle while the building and its water pipes remain fixed, a flexible stainless steel hose would adjust with the ground settlement and prevent pipe shearing.

emergency purposes, would be used to deliver California Water Company supplies to the Sierra Point Subarea and its existing water infrastructure.

The Sierra Point area would continue to be served by existing potable water lines that would be maintained by Cal Water once it starts providing water service to the area.

Recycled Water System

Water Recycling Facility

The water recycling facility would have a capacity to generate a maximum of 1.0 mgd of recycled water from sewage generated within the Baylands, the City of Brisbane, and the Bayshore Sanitary District. Approximately 1.74 mgd of sewage would be pumped to the water recycling facility.[61] The excess flow of approximately 0.74 mgd would be discharged to the SFPUC sewer system for treatment at the Southeast Treatment Plant. The planned capacity of the water recycling facility includes approximately 0.8 mgd for irrigation use during summer months and 0.15 mgd for in-building uses year-round as described below.

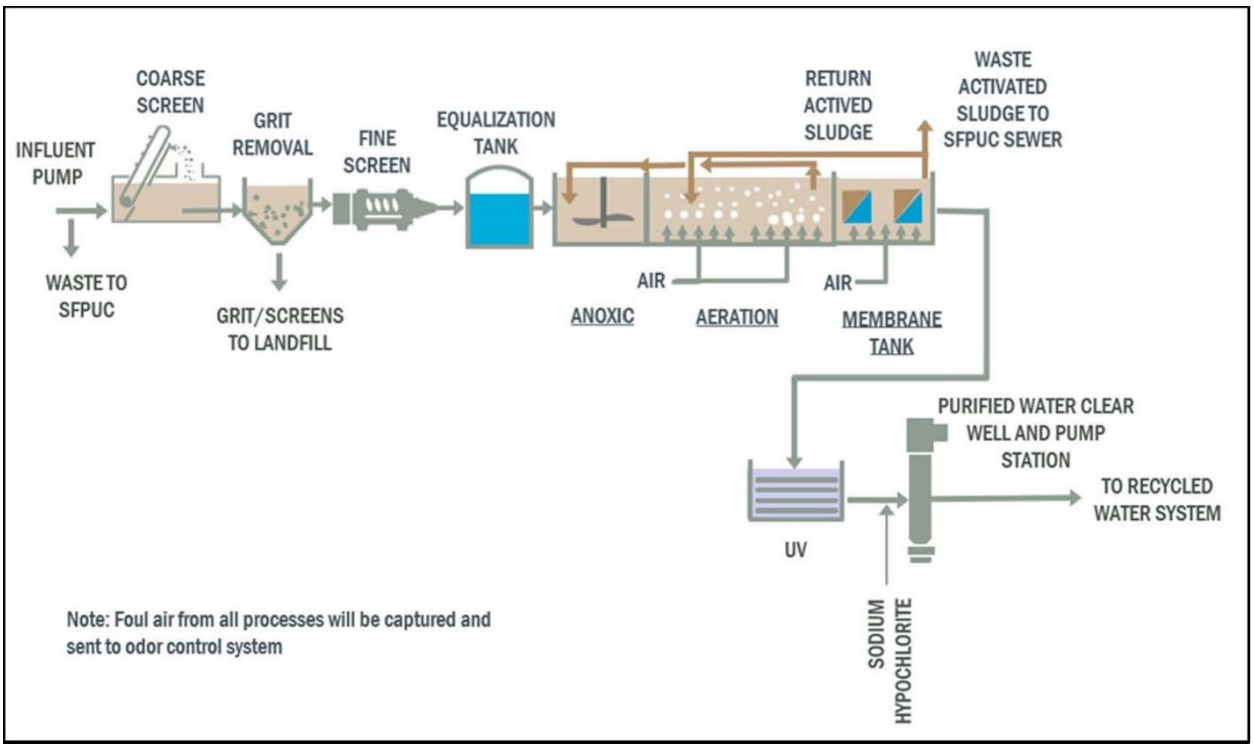
- Within the Baylands, recycled water would be used for irrigating open space areas, roadside planter areas, and landscape water features. In addition, commercial, office, biotech, and retail buildings are proposed to be dual plumbed to supply industrial cooling, non-residential toilet and urinal flushing, and other Title 22 permitted uses. The maximum recycled water demand for the Baylands is estimated to be approximately 0.30 mgd, which includes approximately 0.22 mgd for irrigation use during summer months and 0.08 mgd for in-building uses year-round.
- In addition, recycled water would be delivered to development within South San Francisco to be used for landscape irrigation and industrial cooling, non-residential toilet and urinal flushing, and other Title 22 permitted uses within the Sierra Point, Oyster Point, and other development areas in the northeastern portion of South San Francisco. The maximum recycled water demand for South San Francisco uses is estimated to be approximately 0.43 mgd, which includes approximately 0.36 mgd for irrigation use during summer months and 0.07 mgd for in-building uses year-round.

The proposed water recycling facility design would treat wastewater using a combination of mechanical, biological, and chemical treatment systems to produce Title 22 Disinfected Tertiary Recycled Water for irrigation and toilet flushing. Although the specific treatment technology process train will be determined during final facility design, for planning purposes, the water recycling facility is anticipated to primarily involve a membrane bioreactor system to treat wastewater, which may include a side stream through another natural treatment system. Waste

[61] This 1.74 mgd of sewage would be generated by the Bayshore Sanitary District (0.25 mgd), City of Brisbane (0.40 mgd), and the Baylands Specific Plan area (1.09 mgd).

activated sludge would then be returned through the force main leaving the water recycling facility for discharge to the SFPUC sewer system for treatment at the Southeast Treatment Plant (see **Figure 3-43**). It is anticipated the water recycling facility would produce approximately 50,000 gallons of waste activated sludge for 1.0 mgd of recycled water.

Figure 3-43: Conceptual Water Recycling Facility Flow Schematic



SOURCE: BKF, Baylands Infrastructure Report, 2023.

The design and operation of the water recycling facility would meet the following criteria:

- On-site treatment will produce disinfected tertiary recycled water conforming to California Code of Regulations Title 22 water regulations.
- On-site treatment will have an estimated capacity of 1.0 mgd based on a maximum day irrigation demand of two times the peak-month, average day irrigation demand (approximately 0.8 mgd) plus the average daily demand of 0.15 mgd from other uses.
- Sufficient raw sewage would be treated to satisfy demands for recycled water within the Baylands and provide 0.43 mgd of recycled water to Sierra Point, Oyster Point, and other development in the northeastern portion of South San Francisco.
- Storage tanks, pumps, and emergency generators would be provided.
- All structures would be designed to minimize visual impacts (e.g., installing berms to decrease ground-level visibility). The exterior of the water recycling facility is proposed to be architecturally consistent with other Baylands development.

- The facility would be constructed and operational concurrent with the first Baylands recycled water demands, drawing raw sewage as needed from the City and Bayshore Sanitary District.

Baylands Recycled Water System

Figure 3-44 illustrates the proposed on-site recycled water distribution system. Recycled water distribution mains are proposed to consist of a grid of 6-inch HDPE pipe surrounded by an 8-inch HDPE looped system. Since refuse and Bay Mud soil conditions are susceptible to significant settlement, the fusion-welded joints of the HDPE pipe are proposed to be designed to be flexible and withstand anticipated differential settlement within the Baylands. Service lines delivering recycled water to buildings, parks, and open space for recycled water would be metered and include code-required backflow protection.

Storage for recycled water is proposed to meet the single maximum day recycled water demand. Storage for recycled water is proposed to be provided by either constructing steel or concrete storage tanks or within a clear well, and/or within a combination of constructed wetland areas near the proposed water recycling facility. Pipelines are proposed to be constructed to allow for connection of these storage facilities to the recycled water distribution system.

The applicant proposes fusion-welded HDPE for recycled water use, because, due to its flexibility and capacity, it would reduce the potential for pipe shearing that could result from the substantial soil settlement that is anticipated within the Baylands. In addition, flexible connections within settlement vaults are proposed to be provided to mitigate the potential for shearing of the utility infrastructure due to differential settlement of on-site soils.

Proposed South San Francisco Recycled Water System

As shown in **Figure 3-45**, a recycled water line is proposed to be constructed west from the Baylands water recycling facility to Bayshore Boulevard, turning south for approximately 2 miles where the pipeline could be extended through the Sierra Point area within Brisbane south into the City of South San Francisco. From Bayshore Boulevard (at Sierra Point), the recycled water line would continue approximately 1 mile further south until approximately Chapman Avenue in the South San Francisco.

In total, approximately 5.5 miles of off-site recycled water pipelines are anticipated. Trenching work for recycled water pipeline installation outside of the Specific Plan would generally consist of cut-and-cover methods, except where crossing of Caltrain tracks and US 101 may require trenchless methods, such as jack-and-bore techniques. It is conservatively estimated that cut and cover work would proceed at a rate of 100 feet per day. Because the location of specific recycled water users cannot be known at this time, the location of local recycled water lines cannot be known at this time.

Figure 3-44: Proposed Baylands Recycled Water System

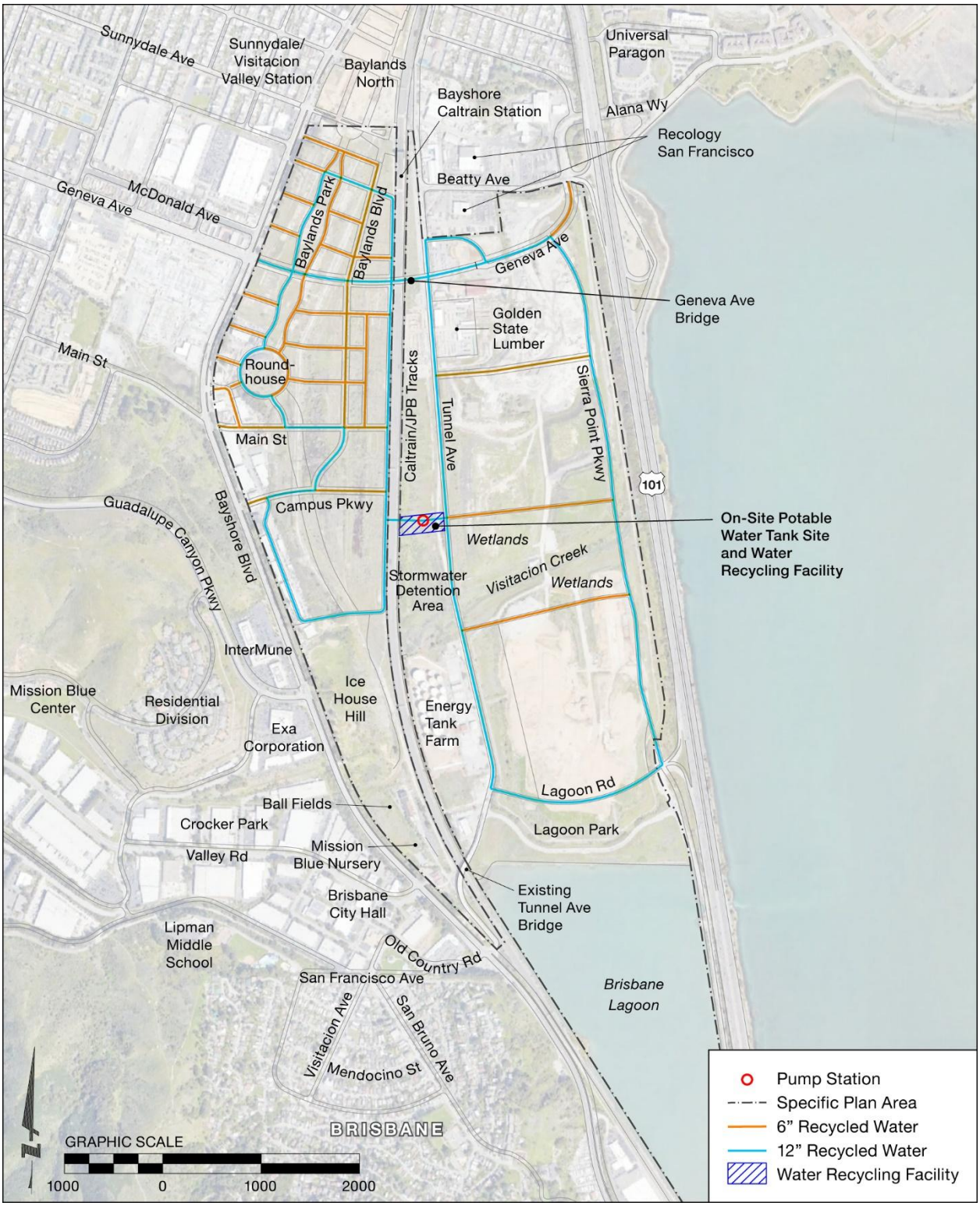
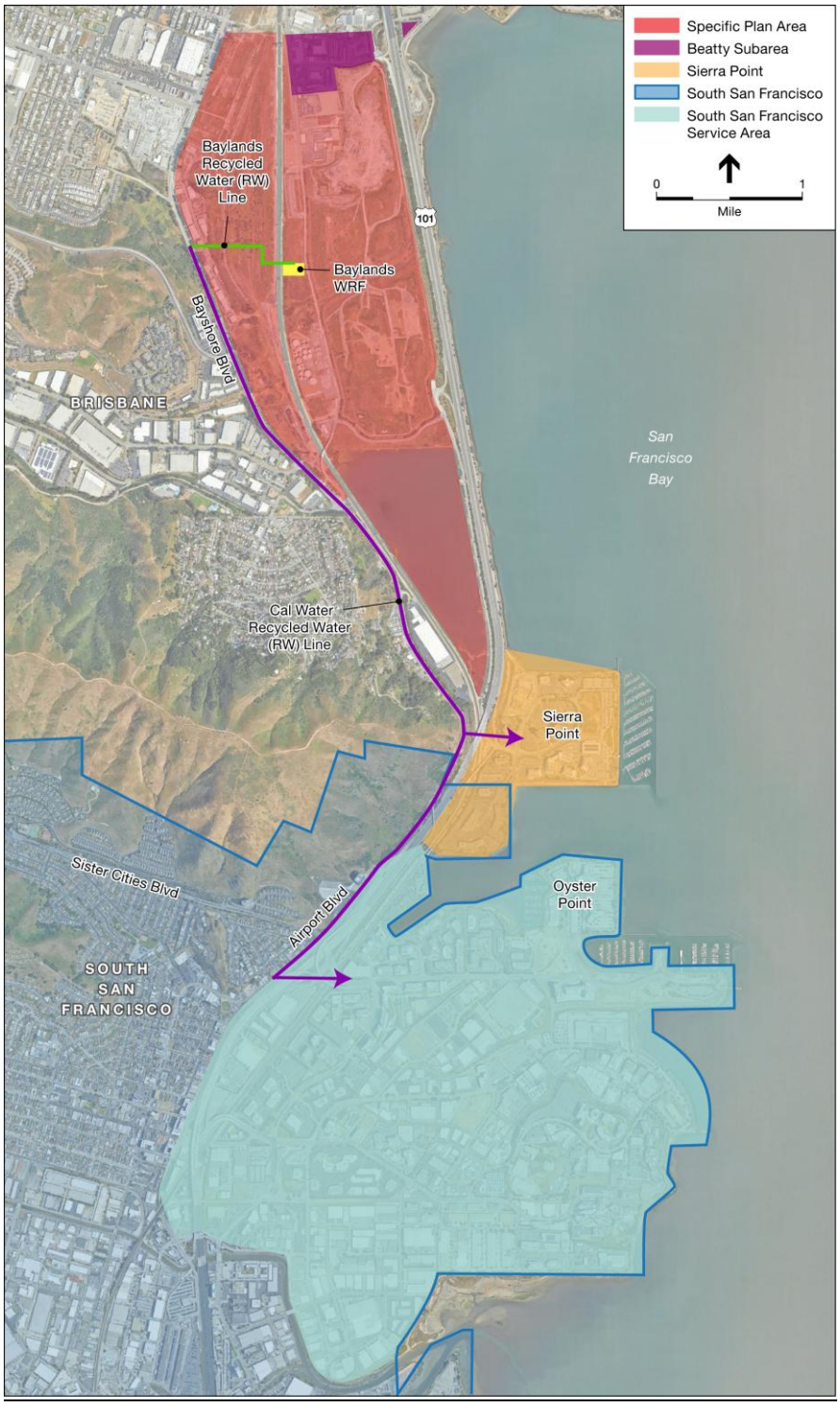
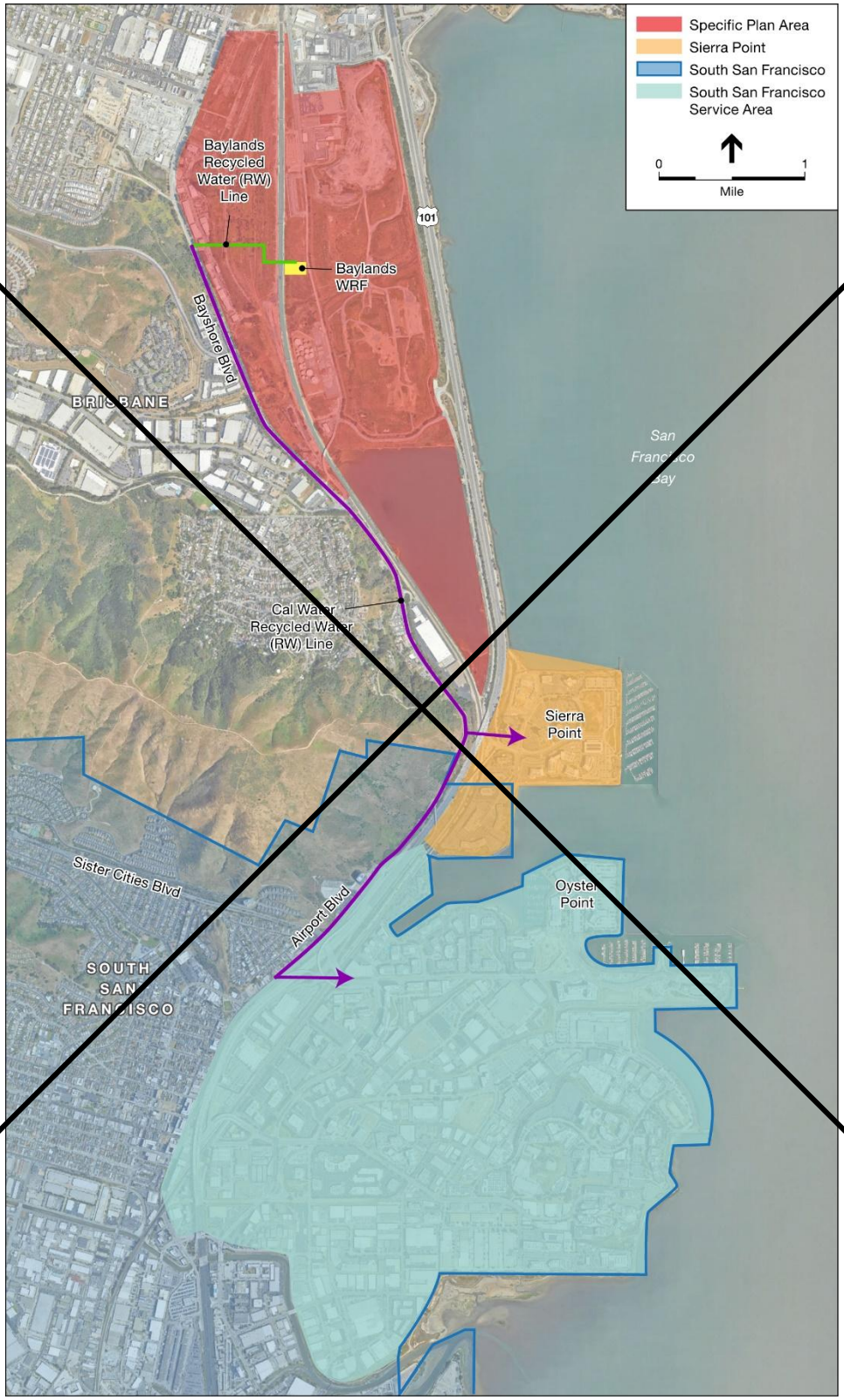


Figure 3-45: Proposed Cal Water Service Areas in Brisbane and Recycled Water Service Areas in South San Francisco




Specific Plan Area
Sierra Point
South San Francisco
South San Francisco Service Area
0
1
Mile
Baylands Recycled Water (RW) Line
Baylands WRF
101
Bayshore Blvd
BRISBANE
San Francisco Bay
Cal Water Recycled Water (RW) Line
Sierra Point
Sister Cities Blvd
Airport Blvd
Oyster Point
SOUTH SAN FRANCISCO

i. Baylands Wastewater System

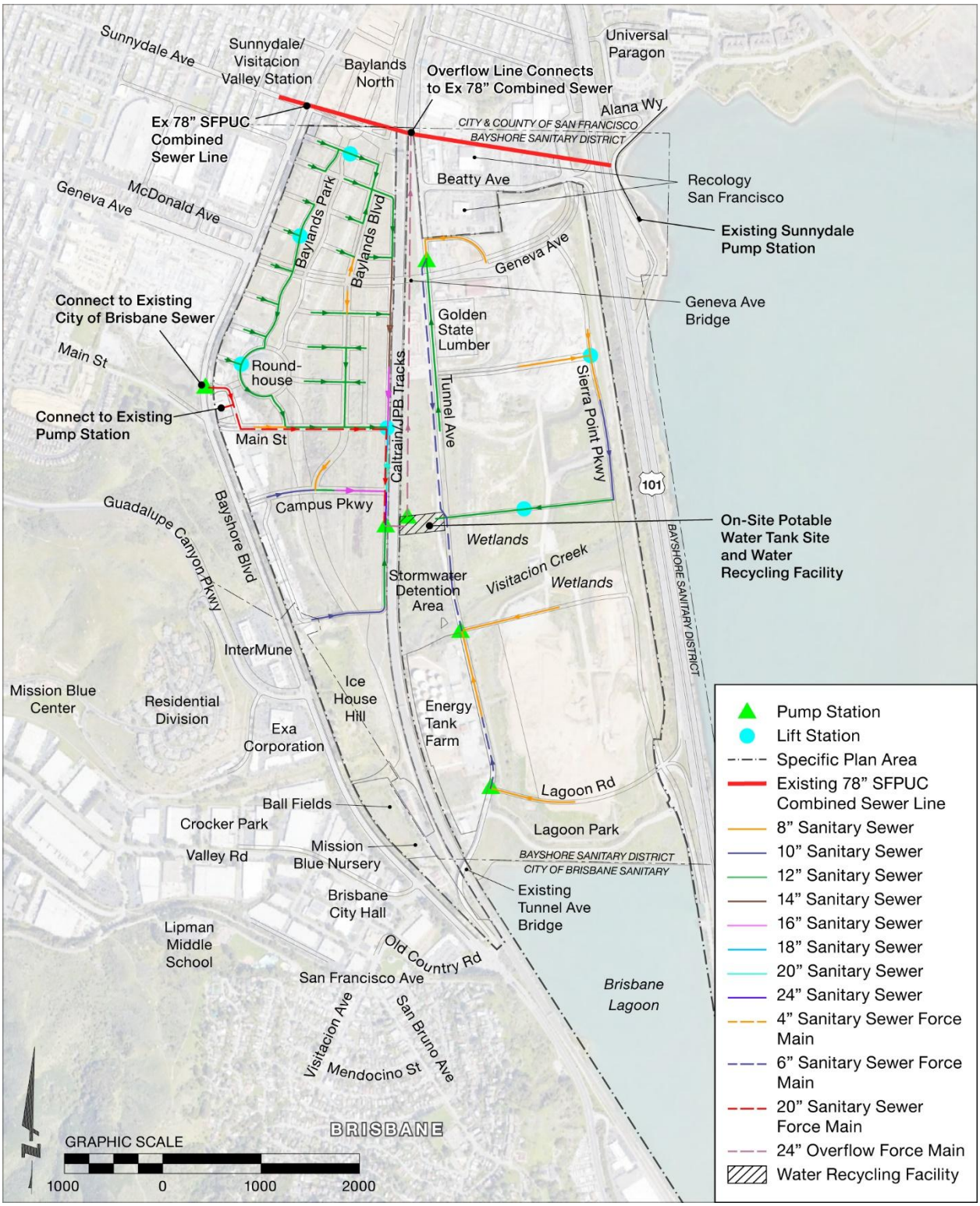
The Baylands site currently lies within the Bayshore Sanitary District, which owns and operates wastewater collection facilities. Proposed Baylands sewer system improvements are illustrated in **Figure 3-46**. Within the area west of the Caltrain right-of-way, wastewater is proposed to be collected and conveyed through a series of HDPE gravity mains and inline lift stations, where sewage would be pumped underneath the rail line into the proposed Baylands water recycling facility

Within the eastern portion of the Baylands, wastewater is proposed to be collected and conveyed as follows:

- In the area between the Brisbane Lagoon and Visitacion Creek, wastewater is proposed to be collected in a series of gravity mains. In combination with the piping system, pump and lift stations would convey flow to a new pump station located adjacent to the intersection at the northeast corner of the Kinder Morgan Tank Farm. Wastewater flow is then proposed to be pumped to the water recycling facility.
- In a portion of the northernmost area of the existing landfill adjacent to Geneva Avenue, wastewater is proposed to be collected by a series of gravity mains. In combination with the piping system, a pump station adjacent to northwestern corner of the former landfill at Tunnel Avenue would pump wastewater flow to the water recycling facility.
- Within the area between Geneva Avenue and Visitacion Creek along Sierra Point Parkway, wastewater flow is proposed to be collected by a series of gravity mains and lift stations and conveyed to the water recycling facility.
- Gravity and force mains within the Baylands are proposed to be constructed with HDPE pipe to accommodate anticipated ground settlement.
- To accommodate differential settlement at the interface between proposed structures and sanitary sewer lateral service connection lines, flexible connections with settlement vaults are proposed to be provided to avoid shearing of utility infrastructure.

Included in the design of the Baylands water recycling facility will be connections for City of Brisbane and Bayshore Sanitary District sewage to the delivered to the facility when needed to meet demand for recycled water. This would likely consist of lines directly from the existing nearby Valley Drive and/or Bayshore Sanitary District lift stations to the water recycling facility.

Figure 3-46: Proposed Baylands Wastewater System



SOURCE: BKF Engineers, *The Baylands Infrastructure Report*, January 2023.

j. Stormwater Drainage

The proposed Baylands stormwater management system includes a combination of Visitacion Creek restoration and improvements, expanded wetlands, bioswales, and underground box culverts and storm drains. The proposed drainage plan is illustrated in **Figure 3-47**. Proposed site grading and drainage include redirecting 19 acres of tributary area from the Beatty Avenue drainage area to the Bayshore drainage area, which helps alleviate existing downstream combined sewer overflows in the Harney Way box culvert.

The Baylands drainage system is proposed to be designed to convey peak flows based on the following criteria:

- Storm drainage collection facilities will have capacity to convey the peak flow rate from a 25-year storm event entirely within the piping system such that Baylands roadways and recreational facilities are not flooded.
- The stormwater system will accommodate the 100-year peak storm event within drainage channels, underground storm drains, and streets such that the finished floor elevations of proposed new Baylands buildings have a minimum of 1 foot of freeboard above the 100-year storm event hydraulic grade line water elevation with tidal flow and an estimated 6.9 feet (83 inches) of sea level rise (Year 2100 medium-high risk sea level rise projection).
- Stormwater conveyance and storage capacity will be sufficient to keep key roadways, including Sierra Point Parkway, Lagoon Road, and Tunnel Avenue available as evacuation routes in the event of a 100-year storm event with tidal flows.
- Existing drainage inlets fronting Levinson Overflow Area and the PG&E Martin Substation will be hydraulically isolated from the existing Brick Arch Sewer system.
- Within the eastern portion of the site:
    - Underground stormwater installations will be designed to minimize impacts to the underlying Low Hydraulic Conductivity Layer for landfill closure.
    - Storm drain materials and design will include materials and installation techniques that address anticipated settlement due to compression/ decomposition of the waste material.
- The Specific Plan proposes that newly constructed public parks and publicly accessible open space would be designed with 1 foot of freeboard above the Year 2050 medium-high-risk sea level rise projection estimated to be 1.9 feet (23 inches). Thus, portions of certain parks will be designed for daily inundation due to sea level rise.

Figure 3-47: Proposed Drainage System



SOURCE: BKF Engineers, The Baylands Infrastructure Report, January 2023.

Bayshore Drainage Area

Existing drainage facilities within the eastern portion of the Baylands will be removed and/or replaced to allow for installation of the proposed landfill cap and cover to facilitate Title 27 landfill closure. Existing drainage facilities within the western portion of the Baylands will be removed as needed to comply with Remedial Action Plans for OU-SM and OU-2 and support site grading for proposed Baylands development.

The proposed storm drain piping system for the Bayshore drainage area is described in the Baylands Infrastructure Report as consisting of a series of 18-inch to 66-inch fusion-welded HDPE pipes, 78-inch-diameter reinforced concrete pipes, culverts, and U-channels. A combination of on-site pipes, culverts, and conveyance and catchment structures is proposed to direct the stormwater runoff to stormwater treatment facilities and the freshwater wetlands prior to discharging to Visitacion Creek east of the Caltrain right-of-way.

Beatty Avenue Drainage Area

Existing storm drain infrastructure within the remaining 27 acres of the Beatty Avenue area will be retained or replaced in its current location. This infrastructure connects to the existing 42-inch-diameter storm drainage infrastructure in Beatty Avenue.

Brisbane Lagoon Drainage Area

As part of the realignment of Lagoon Way, existing culverts will be replaced with a minimum of two new outfalls to the Brisbane Lagoon. Installation of the new Brisbane Lagoon outfalls is proposed to be coordinated with landfill closure activities and adjacent Kinder Morgan infrastructure.

Visitacion Creek Improvements

Levinson Overflow Area and Brick Arch Sewer

Currently, during a large storm event, up to 2.2 feet of flooding occurs for a period of nearly three hours near the intersection of Bayshore Boulevard and Industrial Way. To alleviate flooding conditions and increase the conveyance capacity of the Bayshore Boulevard storm drainage system, Bayshore Boulevard drainage inlets fronting the Levinson Overflow area are proposed to be hydraulically isolated from the existing Bayshore system and brick arch sewer, which is proposed for removal. The *Brisbane Baylands Infrastructure Plan* reports that these improvements would reduce flooding during the 100-year storm event to approximately 1.2 feet over a 109-minute period, and that the 25-year design storm event would be contained within the proposed storm drain system.

Visitacion Creek Improvements West of the Caltrain Right-of-Way

As the result of the above proposed improvements near the intersection of Bayshore Boulevard at Industrial Way, stormwater flows would converge at a proposed large inlet structure near the Bayshore Boulevard/Industrial Way intersection and be routed through the western portion of the Baylands in a culvert or U-channel that would discharge to Visitacion Creek east of the Caltrain right-of-way.

Visitacion Creek Crossing under the Caltrain Right-of-Way

Visitacion Creek is proposed to cross under the railroad right-of-way in two approximately 175-foot-long, 6.5-foot-diameter circular pipes that will be constructed with structural headwalls on each side for structural support of the tracks. The design of these culverts and the adjacent detention area will include natural or mechanical backflow prevention solutions to prevent tidal influence from reaching the area west of the railroad right-of-way.

Within the eastern, former landfill portion of the Baylands, Visitacion Creek grading is proposed to be designed to accommodate the anticipated 100-year flood, inclusive of anticipated sea level rise through Year 2100 within the creek banks. As a result, the maximum top-of-bank elevation is anticipated to be 14 to 15 feet adjacent to proposed freshwater wetlands, which would provide approximately 4 to 5 feet of freeboard. The *Brisbane Baylands Infrastructure Plan* reports that although soil consolidation settlement has not been documented on the former landfill for this level of fill, information from adjacent areas "indicates that up to 2 feet of settlement in the channel could be anticipated."

Stormwater Detention Area

To support the attenuation of peak flows, a stormwater detention area is to be provided between the Caltrain right-of-way and Tunnel Avenue, providing approximately 45.2 acre-feet of detention storage. The design will include natural or mechanical backflow prevention solutions to prevent tidal influence from reaching the detention area. To maintain its stormwater function and maintain hydraulic capacity, ongoing maintenance will include selective pruning and minimized root system disturbance, ensuring side slope stability through non-invasive activities.

Visitacion Creek Crossings under Tunnel Avenue and Sierra Point Parkway

Visitacion Creek's existing undersized and deteriorated culverts under Tunnel Avenue and Sierra Point Parkway will be removed. A small culvert or clear span bridge will be provided at Tunnel Avenue, with a clear span bridge provided at Sierra Point Parkway.

Under-road wildlife connections are proposed at Tunnel Avenue, Visitacion Creek Road North, and Sierra Point Parkway, in the form of a small culvert or clear span bridge, sized appropriately for small terrestrial fauna to traverse between local and regional habitat patches.

US Highway 101 Box Culvert and San Francisco Bay Outfall

Stormwater within Visitacion Creek discharges into the existing 10-foot by 10-foot box culvert under US Highway 101. To reduce friction losses and improve the functional capacity of the box culvert, a thorough cleaning to remove sediment buildup and refuse and repair large cracks is proposed to be undertaken as part of Baylands development.

Proposed Storm Drain System Pipe Materials

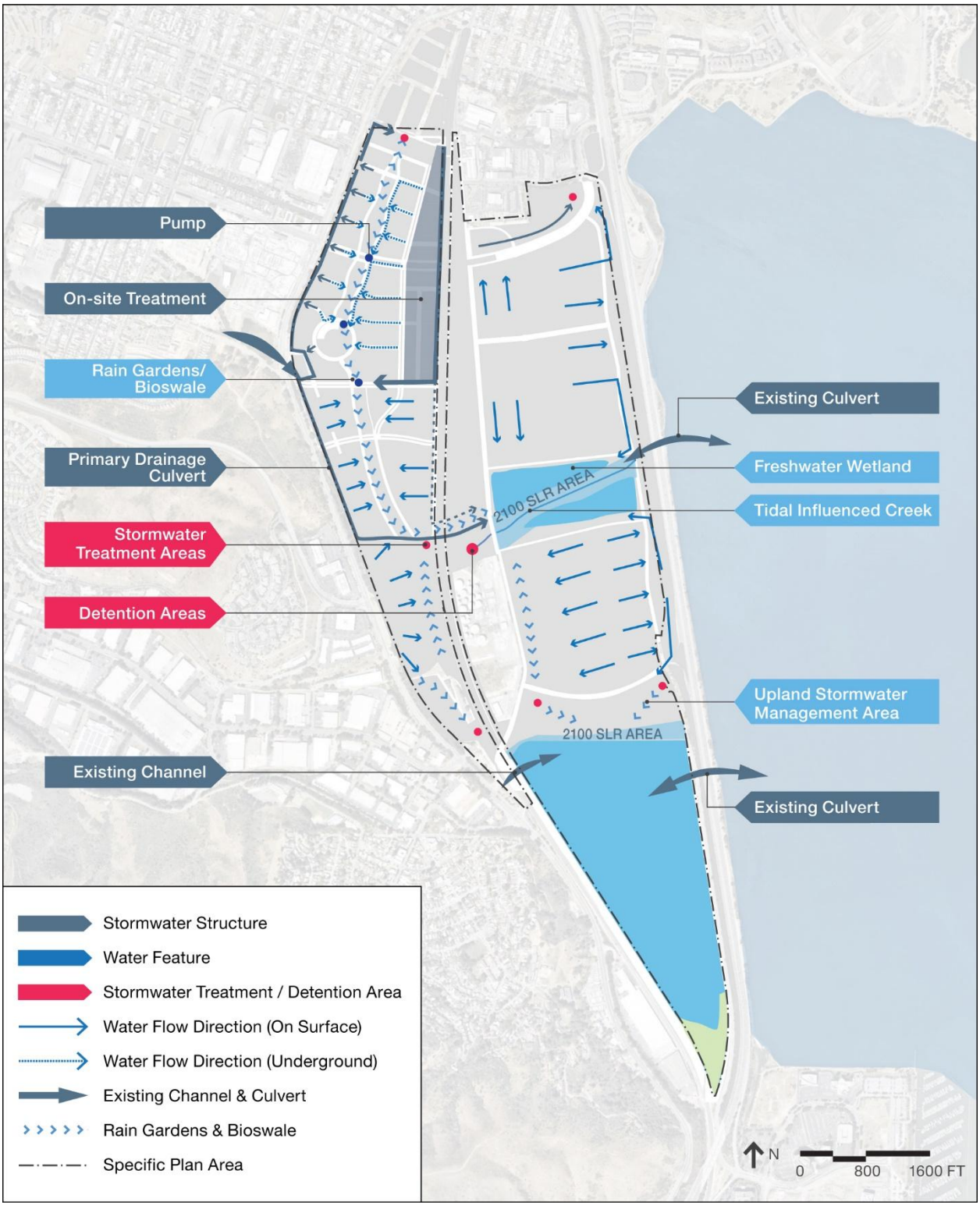
The storm drain piping system is proposed to consist of fusion HDPE pipe. Where minimal cover is available and large capacity required, shallow concrete culverts are proposed to be used to avoid encroaching into the Low Hydraulic Conductivity Layer that is proposed to be installed as part of the Title 27 landfill closure process. The pipes are proposed to be connected using fusion-welded joints to limit groundwater infiltration and stormwater contamination from landfill leachate. Since refuse and Bay Mud soil conditions are susceptible to substantial settlement, fusion-welded joints are proposed to be designed to be flexible and withstand anticipated differential settlement. To accommodate differential settlement at the interface between proposed structures and storm drain lateral service connections, flexible connections with settlement vaults would be provided where needed to avoid shearing of the drainage infrastructure.

Stormwater Treatment

Stormwater treatment within the Baylands will be required to meet the provisions of National Pollutant Discharge Elimination System (NPDES) municipal stormwater permits, as implemented by the San Francisco Bay Regional Water Quality Control Board (RWQCB), RWQCB's Provision C.3, as well as the San Mateo Countywide Water Pollution Prevention Program.

The Baylands Infrastructure Plan concludes that non-infiltrating treatment techniques should be used to limit the potential for stormwater runoff to mix with municipal solid waste and contaminated soil. Use of infiltration-type treatment measures would be underlain with a perforated storm drainpipe on top of an impermeable liner. The proposed stormwater treatment system (illustrated in **Figure 3-48**) would minimize both water infiltration into contaminated soils and the Title 27 compliant cap on top of the landfill.

Figure 3-48: Proposed Stormwater Treatment System



Source Controls and Site Design

In addition to compliance with Regional Water Quality Control Board Municipal Regional Stormwater Permit Order No. 2015-0049 as amended by Order No. 2019-0004 Provision C.3 (Provision C.3) and the San Mateo Countywide Water Pollution Prevention Program C.3 Regulated Project Guide (Guidebook), improved Visitacion Creek and the open space areas are proposed to include freshwater wetlands that will receive stormwater runoff from the on-site development. In these areas, a portion of the stormwater runoff generated by on-site development and roadways would flow to freshwater wetlands within Visitacion Creek. Prior to conveyance to the freshwater wetlands, runoff is proposed to be treated in compliance with Provision C.3 requirements.

Proposed Baylands Stormwater Treatment Solutions

Baylands stormwater treatment is required to comply with Provision C.3 such that stormwater runoff is treated prior to discharge to the on-site storm drainage system and Visitacion Creek, which conveys flows to San Francisco Bay through an existing outfall. Within Baylands remediation and landfill areas where infiltration of stormwater would not be permitted, use of natural, landscape-based stormwater treatment measures is proposed per Provision C.3 as the next preferred means of stormwater management.

As illustrated in **Figure 3-48**, compliance with Provision C.3 is proposed through multiple treatment solutions in a "treatment train," where water is to be filtered through a combination of rain gardens and bioswales, such as those provided within the Ecological Park in the western portion of the Baylands, as well as stormwater detention and bio-retention areas and freshwater wetlands, such as those that are proposed to be provided in the eastern portion of the Baylands.

The specific engineering design and design calculations for each of the facilities indicated in **Figure 3-48** are required to be submitted to the Brisbane City Engineer for review and approval prior to issuance of a grading permit. Preparation of a final Stormwater Management Plan (SMP) for review and approval by the Brisbane City Engineer is also required prior to issuance of a grading permit. The SMP is intended to be developed in conjunction with the City's Storm Drain Master Plan to ensure that the treatment designs support the hydraulics and hydrology of the proposed Baylands storm drainage system.

Stormwater Treatment within Site-Specific Development Projects and Roadway Rights-of-Way

Additional stormwater treatment is proposed within site-specific development projects and along roadway rights-of-way, including the following treatment options:

- **Bioswales**, such as those proposed within the Ecological Park, can also be designed for use within site-specific development projects and roadway landscape plantings. Bioswales are open, shallow channels typically in a trapezoidal shape with vegetation on all sides, typically 2 feet deep and 4 feet wide and a minimum of 100 feet in length.

Treatment through bio-retention swales is achieved by filtering runoff through the vegetation in the channel, filtering through a subsoil matrix, and/or infiltration into the underlying soils. Bio-retention swales trap particulate pollutants, promote infiltration, and reduce the velocity of stormwater runoff.

- **Bio-retention areas**, such as those proposed along Visitacion Creek, are large planted, landscaped areas used for detaining and treating local runoff. For treatment, a bio-retention area typically collects storm event runoff and allows it to infiltrate through the soil matrix to filter out particulate pollutants and debris before collecting in a perforated pipe subdrain and discharging to the storm drain system. Flows may be pumped to the planters where grading constraints do not permit gravity flow. Because drainage is directed to a subdrain, adequate depth needs to be provided for the proper operation of a bio-retention area. Bio-retention areas can also include an impermeable liner where clayey soils, a high-water table, or site remediation and landfill closure requirements prevent water from infiltrating the native soils.
- **Self-retaining areas** are a stormwater management concept that involves directing runoff from impervious walkways, pathways, and rooftops to adjacent pervious vegetated areas for biological uptake, evapotranspiration, and (within limited areas of the Baylands not affected by site remediation or landfill closure) infiltration. For vegetated areas to provide 80 percent capture of the average annual runoff and thus comply with the Provision C.3 requirements, self-retaining areas must comply with the following:
    - Provide surface treatment that includes permeable pavement, landscaping, or lawn;
    - Retain the first 1 inch of rainfall without runoff;
    - Incorporate a maximum impervious to pervious area ratio of 2:1;
    - Install inlets 3 inches above adjacent grade of the vegetated area; and
    - Grade vegetated areas with perimeter berms or with a concave shape
- **Tree well filters** are treatment planter systems integrated with trees typically used to treat smaller areas or used in a series to treat larger areas. Runoff would be directed from gutter flows into the area between the tree grate and the top of soil media. Then treatment is provided by filtering runoff through an 18-inch subsoil matrix and/or infiltration into the underlying soils. Infiltration through the compacted soil is limited to 5 inches per hour, which limits the available treatment area per tree well. Typically, tree well filters are a viable alternative for areas with high pedestrian space demand where a landscape planter is not feasible.
- **Flow-thru planters** are rectangular in shape with overall depths averaging 3 to 4 feet. Flow-thru planters can be located at ground level, such as within a parking lot, or

elevated a few feet against the side of a building to collect drainage from roof water downspouts.[62] Once runoff is discharged to a flow-thru planter, treatment is achieved by allowing biological filtration through the surface vegetation followed by slowly filtering runoff through a subsoil matrix at a rate of approximately 5 inches per hour. The treated runoff would then be collected by a perforated subdrain for discharge to the site storm drainage system and/or infiltrated into the underlying soils where permitted within the Baylands by site remediation and landfill closure requirements.

- **Permeable pavement** includes porous Portland Cement Concrete, porous asphalt concrete, porous pavers, and cellular paving grids. Permeable pavement areas are typically installed with relatively flat surface slopes to encourage a greater amount of infiltration while larger flows discharge through an overflow inlet. Permeable pavement can reduce peak flow rates from sites by storing and slowing stormwater runoff as it permeates through its structural section. Where a high groundwater table is present or remediation and landfill closure requirements restrict infiltration, permeable pavement requires an impermeable liner with runoff collecting through a perforated pipe subdrain that discharges to the storm drain system and thus the pavement can no longer be considered a treatment measure.
- **Credits for Tree Installation.** Trees within landscaped areas can help offset 5 to 10 percent of the impervious area requiring treatment. As a treatment measure, trees are typically used within small, otherwise difficult to treat areas, and would be subject to City approval.
- **Green roofs** are considered "self-treating areas" or "self-retaining areas," which the Baylands Infrastructure Report states "can be designed to drain directly to the Baylands storm drain system." The Specific Plan does not, however, require green roofs or drainage from roofs directly to the storm drain system. A green roof can be either extensive, with 3 to 7 inches of lightweight substrate and a few types of low profile, low-maintenance plants, or intensive with a thicker 8- to 48-inch substrate. Green roof system planting media needs to be sufficiently deep to provide capacity within the pore space of the media to capture 80 percent of the average annual runoff. The use of green roofs would reduce the amount of roof area available for solar energy production and would thus be limited to areas not required to meet the Baylands net zero energy performance standard.

The 2025 Specific Plan project proposes that the precise stormwater treatment techniques, or combination of techniques, to be constructed at specific locations would be determined as part of each site-specific development proposal. The Specific Plan states that Baylands development would comply with applicable legal requirements for stormwater treatment.

[62] Within the Baylands, the design of flow-thru planters would be required to provide sufficient depth to meet applicable site remediation and landfill closure requirements.

k. Energy Facilities

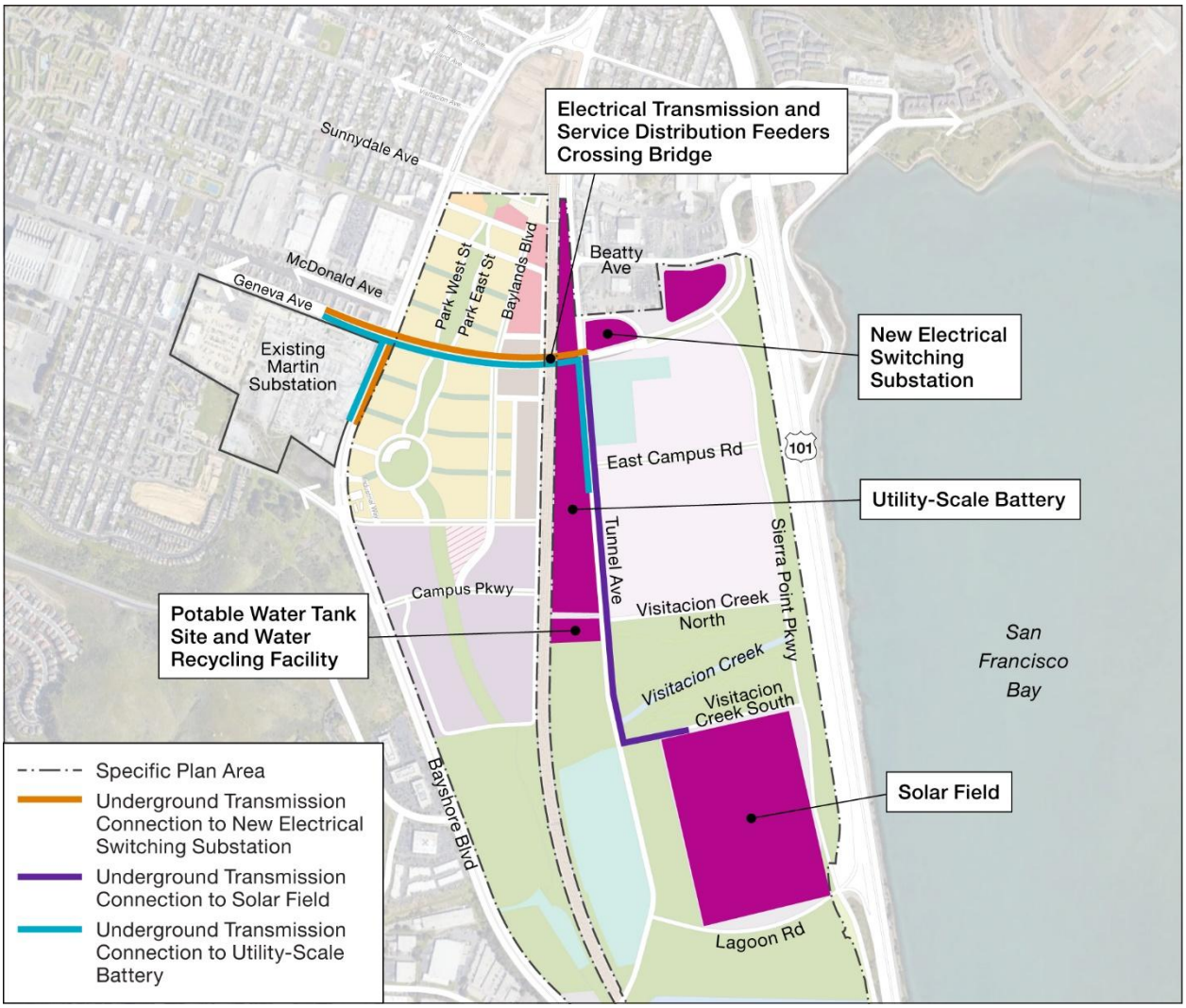
Electrical Facilities

The Specific Plan proposes that electric power for construction and future uses continue to be provided by Pacific Gas and Electric Company (PG&E). Proposed Baylands energy improvements are illustrated in **Figure 3-49** and include:

- Undergrounding of existing overhead lines and construction of new on-site electrical supply lines underground in joint trenches with communications infrastructure;
- A minimum of 85,000 megawatt-hours (MWh) of solar energy generation;
- A 250-megawatt (MW) battery storage facility, including an underground generation interconnect (gen-tie) line[63] connection to the existing PG&E Martin Substation across Bayshore Boulevard from the Baylands;
- Proposed improvements within the Martin Substation to connect the 250 MW battery storage facility and Baylands development would be constructed by PG&E and include:
    - Installation of line disconnect switch and line coupling capacitor voltage transformers for the gen-tie line with the following protection:
        - Installation of line current differential (LCD) relay scheme on the Martin Substation —Baylands Battery 115kV line. Relays compliant with PG&E specifications and requirements at the installation will be used.
        - Installation of fiber termination at the Martin Substation
        - Each LCD scheme will be provided with redundant fiber circuits with no common point of failure.
    - Installation, termination, and testing new fiber cable from station property line to control building.
- Installation of 30 MW of battery storage capacity distributed across the site within sustainable infrastructure, residential, and commercial areas; and
- An approximately 2-acre on-site switching substation.

[63] An underground generation interconnect (gen-tie) line is a series of wires and cables connecting nearby power generation and storage sites and substations.

Figure 3-49: Proposed Baylands Electrical System Improvements



Utility Undergrounding

Existing overhead electrical utility lines within the Baylands, including those along Tunnel Avenue, will be undergrounded. All new electrical distribution lines within the Baylands will be installed underground in joint trenches with the Specific Plan area's communications infrastructure. Standard above-grade secondary service transformers and/or switching would be deployed for building service connections per PG&E guidelines.

Solar Energy Generation

Solar-powered energy generating systems producing a minimum of 85,000 MWh of electricity are proposed, including:

- An approximately 55-acre solar farm in the southeastern portion of the Baylands between Visitacion Creek and the relocated Lagoon Road. The solar farm would be constructed in phases as Title 27 landfill closure is completed for those portions of the former landfill upon which the solar is to be located.
- Solar panels installed on buildings,[64] ground-mounted (no more than 30 feet above grade), and, where feasible, over parking lots.

On-site energy generation is proposed to connect to a switching station through underground lines located in joint trenches with project communications lines.

Battery Storage

Approximately 30 MW of stationary battery storage capacity is proposed to be distributed across the Baylands within sustainable infrastructure, residential, and commercial land use areas as permitted to provide for establishment of a distributed energy resource management system.



Typical battery enclosure.

In addition, a 250 MW front-of-the-meter, utility-scale battery storage facility is proposed to be developed as a regional grid resource. The facility would be operational 24/7 and require minimal staffing. The utility-scale battery facility would consist of lithium-ion battery cells housed in freestanding enclosures within an approximately 10-acre site along Tunnel Avenue. The number, size, layout, and capabilities of each enclosure that would be needed for 250 MW of storage varies between different system manufacturers. On average, enclosures would be approximately 10 feet in height (inclusive of the foundation), approximately 8 feet in width, and 20 to 40 feet in length. A combination of fencing or block walls along with landscaping is proposed to be provided for security along with landscape plantings for visual screening.

[64] The Specific Plan permits roof-mounted solar panels to be installed as a solar yard or to be used as shade structures for roof terraces. Where used as shade structures, solar panels could extend up to approximately 15 feet above the maximum building heights proposed in the Specific Plan.

Battery enclosures and other equipment to a maximum height of 30 feet would sit on concrete pads designed to support their weight. Batteries will be Underwriters Laboratories (UL) certified and include built-in fail-safes and multi-layered fire protection features designed to prevent thermal runaway and the spread of fire. A fire protection suppression plan would be prepared to the satisfaction of the City and North County Fire Authority as part of the site-specific development review process for the facility to ensure fire safety. While normal operations of the utility-scale battery facility would be separate from the rest of the Baylands electrical system, infrastructure will be in place to allow the utility-scale battery facility to supplement Baylands storage resources as needed to achieve energy neutrality.

On-Site Switching Substation

Interconnection(s) to the existing PG&E grid would be delivered by a new dedicated high- and medium-voltage switching substation located within the Sustainable Infrastructure land use area (see **Figure 3-49**). High voltage (115 kV) circuits would be extended underground from the existing Martin Substation to an approximate 2.0- to 3.0-acre switching substation to be constructed within the Baylands. The switching substation would include enclosed high-voltage air or gas insulated switching and outdoor oil-cooled step-down transformers for distributing new medium-voltage circuits within the development capable of supporting approximately 231 MW of on-site load service upon Baylands build-out. The on-site substation would also serve to interconnect the Baylands solar energy generation facilities and up to 30 MW of stationary battery storage capacity.



Switching substation example.

Natural Gas

Consistent with the Baylands Sustainability Framework, the Specific Plan proposes not to extend natural gas service to new development. Existing natural gas service to the Kinder Morgan Tank Farm, Recology uses along Tunnel Avenue, and Golden State Lumber will be maintained. Research and development uses within the Baylands would be required to use on-site propane tanks on an as-required basis.

1. Telecommunications Infrastructure

The Specific Plan proposes to install telecommunications infrastructure, including telephone, cable, and high-speed fiber optics in underground combined joint trenches with electric

facilities. Coordination with AT&T, Comcast, and other providers, along with design plans, would be required prior to approval of construction of Baylands roadways.

Small wireless telecommunications[65] are largely exempt from local regulation and would thus be permitted within roadway rights-of-way and public utility easements within the Baylands. Installation and operation of wireless telecommunications facilities other than small wireless telecommunications facilities within roadway rights-of-way and public utility easements would comply with Brisbane Municipal Code Section 17.32.032, which permits building or roof-mounted as well as pole-mounted antennas outside of residential and open space zoning districts subject to a minimum 600-foot separation from residential districts and approval of an Administrative Permit by the Brisbane Zoning Administrator. A conditional use permit approved by the Planning Commission is required for wireless telecommunications facilities with proposed locations and designs that are not otherwise permitted or subject to approval of an Administrative Permit.

m. Public Services and Facilities

Schools

The Specific Plan area is primarily served by the Bayshore Elementary School District, which currently houses its 347 Pre-Kindergarten (PK) to grade 8 students at the Bayshore School.[66] The entirety of the Baylands is within the Jefferson Union High School District for grades 9–12. To accommodate students generated by Baylands development, a grade 6-8 middle school is proposed to be constructed near Main Street within the Bayshore School District portion of either (1) Block 6, 9, or 10 of the Roundhouse District or (2) Block C2 within the Icehouse Hill District in the area west of Roundhouse Park and the Ecological Park. When it is completed, all

[65] Small wireless facilities are defined in 47 C.F.R. § 1.6002 as "facilities that meet each of the following conditions:

(1) The facilities …
  (i) Are mounted on structures 50 feet or less in height including their antennas as defined in § 1.1320(d); or
  (ii) Are mounted on structures no more than 10 percent taller than other adjacent structures; or
  (iii) Do not extend existing structures on which they are located to a height of more than 50 feet or by more than 10 percent, whichever is greater;
(2) Each antenna associated with the deployment, excluding associated equipment (as defined in the definition of antenna in § 1.1320(d)), is no more than three cubic feet in volume;
(3) All other wireless equipment associated with the structure, including the wireless equipment associated with the antenna and any pre-existing associated equipment on the structure, is no more than 28 cubic feet in volume;
(4) The facilities do not require antenna structure registration under part 17 of this chapter;
(5) The facilities are not located on Tribal lands, as defined under 36 CFR 800.16(x); and
(6) The facilities do not result in human exposure to radiofrequency radiation in excess of the applicable safety standards specified in § 1.1307(b)."

[66] The portion of the Specific Plan area along Industrial Way is within the Brisbane School District for grades Pre-Kindergarten through 8.

Bayshore School District grade 6–8 students would attend the new middle school within the Baylands. All grade PK–5 students within the Bayshore District would attend the Bayshore School, which would be modified for use solely as an elementary school.

State and District approval of the proposed grades 6–8 school within the Baylands is required, and a school site suitability assessment report will need to be prepared pursuant to the state school site approval process.

Fire and Police Protection Facilities

Although the Specific Plan is silent in relation to fire and police protection facilities, a fire protection plan is proposed by the North County Fire Authority and the City of Brisbane, which includes relocating the City's existing station and adding a new station within the Baylands (see Section 3.3.3, below, and Appendix N.1). In addition, the Brisbane Police Department developed a Police Facilities and Staffing Plan (Appendix N.2), which determined that the Department would need to move to a two-beat patrol system and establish a new police substation within the Baylands.

City of Brisbane Fuel Supply Tanks

As part of its ongoing emergency preparedness planning, the City is proposing installation of one 2,000-gallon ethanol/2,000-gallon diesel above-ground storage tank and two 1,000-gallon mobile propane tanks at the Public Works corporation yard within the Baylands. The ethanol/diesel tanks would be used daily by the Brisbane Police and Public Works departments, as well as by the North County Fire Authority. The emergency tanks would provide approximately 72 hours of emergency fuel demands.

n. Consistency with Sustainability Framework Principles

The Specific Plan proposes measures to address the Brisbane General Plan and Measure JJ requirement that Baylands development be consistent with the principles of the Sustainability Framework for the Brisbane Baylands. The Sustainability Framework presented in the Specific Plan is organized to reflect the 10 "One Planet" principles defined in 2003 by Bioregional, a UK-based non-profit, as a framework for sustainable living that formed the basis for the City's 2015 *Sustainability Framework for the Brisbane Baylands*. **Table 3-6**, below, identifies each of the 10 Sustainability Framework principles, along with related Specific Plan principles and sustainability strategies.

o. Restoration of the Historic Roundhouse[67]

Listed on the National Register of Historic Places, the historic Roundhouse exemplifies brick roundhouses built by Southern Pacific Railroad in the late 19th and early 20th centuries. The Specific Plan proposes rehabilitation consistent with Secretary of Interior Standards and adaptive use of the Roundhouse. The Specific Plan's land use plan places the Roundhouse within a 3.5-acre circular park echoing the building's form. Roundhouse Park is, in turn, proposed to connect to the Ecological Park and Baylands Park greenways to encourage walking to explore this cultural heritage site from sites throughout the western portion of the Baylands.

Table 3-6: Sustainability Goals, Performance Standards, and Strategies Described in the Specific Plan for Baylands Development to Achieve One Planet's 10 Sustainability Principles

Sustainability Framework Principle	Proposed Specific Plan Sustainability Principle and Implementation Strategies
Zero Carbon Buildings	**Principle** Make buildings more energy efficient and deliver all energy with renewable technologies. **Strategies** Carbon emissions reductions will be achieved through energy conservation and building efficiency measures and a combination of planning elements, such as transit and pedestrian design features to reduce automobile use, landscaping and lighting designs that reduce energy and water use, and building design standards to reduce energy and water usage. A minimum of 85,000 MWh of electricity annually[a] are proposed to be generated by on-site solar panels installed on buildings and in parking areas, and in a solar farm developed east of the Caltrain right-of-way south of Visitacion Creek. The Specific Plan also provides for distributed battery storage and a utility scale battery storage facility. Electricity needed at the Baylands in addition to that generated on-site is proposed to be 100% from renewable sources. No natural gas infrastructure is proposed within the Baylands.
Zero Waste	**Principle** Reduce waste, re-use and recycle where possible, and send zero waste to landfills. **Strategies** Baylands construction projects are proposed to recycle and/or salvage for reuse a minimum of 65% of nonhazardous construction and/or demolition waste and will reuse 100% of non-hazardous soils excavated during grading operations on-site. Operational solid waste reduction is proposed to consist of informational and technical assistance programs, installation and use of pet waste collection systems, and zero waste programs implemented by Recology for the City and County of San Francisco.

[67] Analysis of the Specific Plan's impacts in relation to the historic Roundhouse is provided in Draft EIR Section 4.7, *Cultural and Tribal Cultural Resources*, Impact CUL-1.

Sustainability Framework Principle	Proposed Specific Plan Sustainability Principle and Implementation Strategies
Sustainable Transportation	**Principle** Reduce the need to travel, encouraging walking, cycling, and low carbon transport. **Strategies** The Baylands Specific Plan proposes a mix of commercial, residential, retail, and recreational uses in a transit-served location. A network of pedestrian and bicycle routes are proposed that connect to regional systems. The Specific Plan proposes electric vehicle (EV) charging infrastructure, a fare-free shuttle system, secure bike parking, and other features to reduce automobile use and fossil fuel consumption. The Specific Plan establishes a maximum number of permitted parking spaces to encourage use of transit and non-motorized travel, as well as to reduce the presence of automobiles within the Baylands. Transportation demand management programs with a target of reducing automobile travel by 25% are proposed to be prepared on a site-specific project by site-specific project basis.
Local and Sustainable Materials	**Principle** Use materials from sustainable sources and promote products which help people reduce consumption. **Strategies** The Specific Plan establishes metrics for local and sustainable materials, with tracking for both health and embodied carbon.
Local and Sustainable Food	**Principle** Promote sustainable humane farming and healthy diets high in local, seasonal organic food and vegetable protein. **Strategies** The Specific Plan proposes permitting food trucks and supporting a farmers' market within the Baylands to support local food suppliers along with encouraging food retailers to source local, sustainable, and organic food products. The Specific Plan also permits community gardens to the extent permitted by approved remediation plans.
Sustainable Water	**Principle** Use water efficiently, protect local water resources and reduce flooding and drought. **Strategies** Water conservation is required for indoor building use and for outdoor landscaping. A dual water system providing for recycled water to be used for outdoor irrigation and designated indoor uses within commercial buildings will be constructed. Once the Baylands development generates a wastewater flow of 0.22 million gallons per day (approximately 20% built out), a water recycling facility will be constructed and operational, at which time potable water would not be used for non-potable purposes. Finished site elevations have been designed to protect against flood risks including risks from sea level rise through the Year 2100 and programs are included in the Specific Plan to protect surface water quality during and after site construction. The Specific Plan's open space program includes provisions for sea level rise resiliency, including protection of 26 acres of existing land area subject to sea level rise through the Year 2100.

Sustainability Framework Principle	Proposed Specific Plan Sustainability Principle and Implementation Strategies
Open Space and Habitat	**Principle** Protect and restore biodiversity and natural habitats through appropriate land use and restoration of habitat and wetland areas. **Strategies** Approximately 29.5% of the Year 2100 land area within the Baylands will be retained in open space, parks, trails, wetlands and habitat, and similar uses.[b] The Specific Plan also preserves the Brisbane Lagoon as open space and restores critical butterfly habitat. Although removal of wetlands is required for site remediation activities, the Specific Plan proposes establishment and maintenance in perpetuity of new wetlands within the Baylands. Specific Plan development is proposed consistent with remediation of operable units OU-SM and OU-2 in accordance with the Remedial Action Plans approved by the Regional Water Quality Control Board and Department of Toxic Substances Control, as well as Title 27-compliant landfill closure in accordance with the Final Landfill Closure Plan approved by the Regional Water Quality Control Board.
Culture and Heritage	**Principle** Nurture local identity and heritage and support the arts. **Strategies** The historic Roundhouse will be rehabilitated for community uses, and a public art program will be implemented.
Economic Vitality with Equity and Ecology	**Principle** Create an ecologically based economy that supports equity and inclusive communities. **Strategies** The Baylands Specific Plan proposes development of the underutilized, contaminated Baylands site into a diverse, mixed-use, sustainable new community with a mix of housing product types to help address an acute regional and state-wide housing shortage while creating a fiscally positive development for the City, including new commercial and hotel uses. Further, new public parks and other amenities will be provided and maintained at no cost to existing city residents and businesses.
Recreation, Health, and Happiness	**Principle** Encourage active, social, meaningful lives to promote good health and wellbeing. **Strategies** The Specific Plan proposes a comprehensive system of active and passive recreational facilities, including outdoor recreation areas, community greens, and urban plaza; private recreation areas within site-specific residential developments; and a system of shared use paths, bicycle facilities, sidewalks, and "green streets," along with off-site pedestrian/bicycle facilities throughout the Baylands that connect to Central Brisbane.

SOURCE: The Baylands Specific Plan, 2025.

NOTES:

a. The anticipated mix of building types that would result from Baylands development along with the proposed 55-acre solar field are anticipated to generate approximately 92.445 MWh of electricity annually.
b. As shown in **Table 3-1**, 157.0 acres of the Baylands 532.3 acres of Year 2100 land area are proposed for open space uses.

The Roundhouse design scheme proposes reusing the existing enclosed structure (east side) as programmed space while reusing the existing open-air part of the structure (west side), which was previously damaged by fire, as a semi-enclosed unprogrammed space (see **Figure 3-50**). Interior design and proposed uses would follow the structure's original column grid and take advantage of existing column locations to create program use separation walls.

The proposed adaptive reuse program provides for a community center, railroad museum, café, and open-air theater in conformance with the Secretary of Interior's *Standards for Rehabilitation*.

In addition, the Specific Plan proposes interpretive design and choice of landscape materials and features that help tell the story of how the turntable pit, "whisker tracks" emanating from the turntable, and other features contributed to the historic use of the Roundhouse.

To provide for protection and rehabilitation of the historic Roundhouse, the applicant commissioned preparation of a Stabilization Plan and Rehabilitation Study (Page & Turnbull 2020) to provide recommendations for:

- Preventing further deterioration of the structure due to water penetration, vandalism, infestation, or overall neglect;
- Protecting the structure from anticipated sea level rise and flooding;[68] and
- Rehabilitating the structure as a community asset.

While the final programming of uses and interior design for the rehabilitated Roundhouse would be determined and submitted for City review prior to approval of permits for grading the Roundhouse site and lifting or deconstructing the existing structure, the Specific Plan proposes the following scenario for use of the rehabilitated Roundhouse:

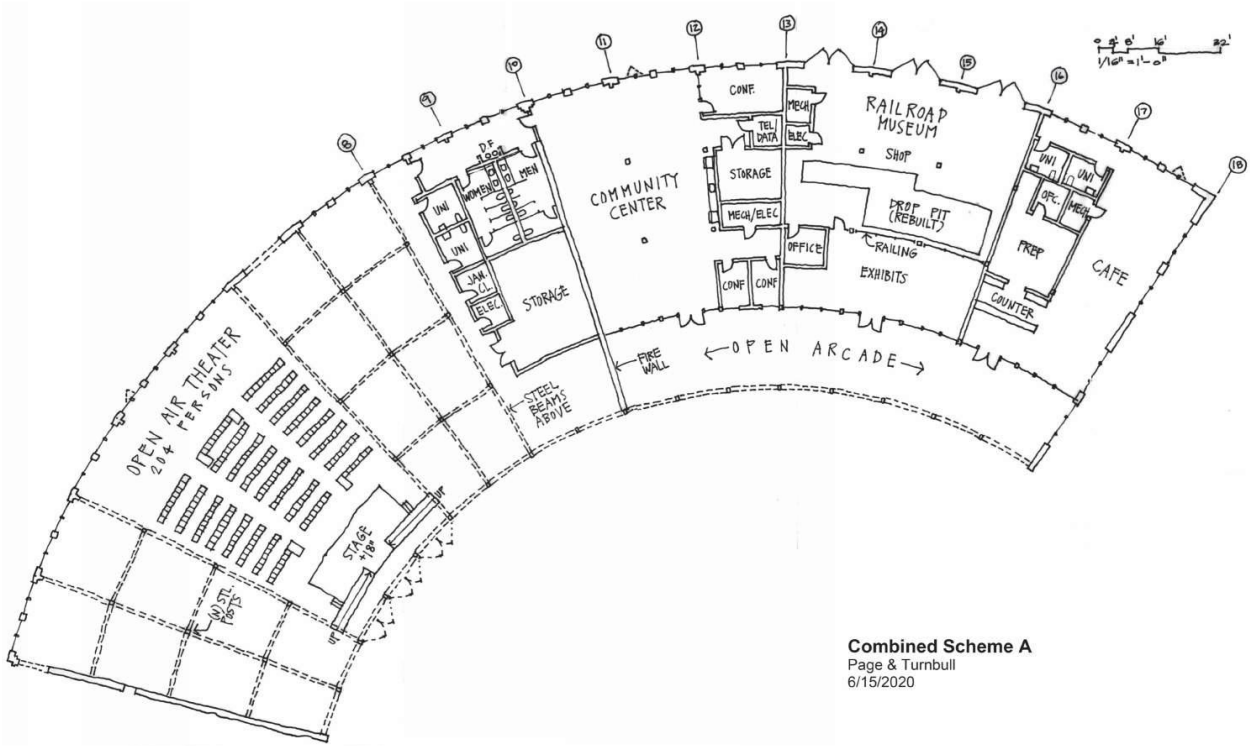
- Open air theater with flexible seating and stage, approximately 4,700 square feet of seating for approximately 200 persons.
- Community Space, approximately 3,700 square feet.
- Railroad Museum, approximately 3,700 square feet.
- Café, approximately 2,400 square feet.
- The rehabilitation design scheme also proposes restrooms, utility space, storage space, and a covered arcade space at the southeastern (park) side of the building that could accommodate outdoor seating for various programming uses.
- Based on the recommendations of the *Brisbane Bayshore Roundhouse Stabilization and Rehabilitation Plan*, the Specific Plan proposes the Roundhouse site would be raised, and the structure would be lifted or deconstructed piece-by-piece and reconstructed at a higher elevation on a new foundation to accommodate sea level rise following site grading. Comprehensive materials testing would be undertaken prior to lifting or deconstructing the Roundhouse to inform the strategy for subsequent restoration and retrofit.

[68] As noted on page 5 of the *Baylands Bayshore Roundhouse Stabilization and Rehabilitation Plan*, the Roundhouse structure and the majority of the proposed Roundhouse Park site are to be affected by an anticipated 6.9 feet of sea level rise. In addition, the Federal Emergency Management Agency (FEMA) has determined that the Roundhouse site has a 0.2 percent annual chance flood hazard. Per the National Park Service Guidelines on Flood Adaptation for Rehabilitating Historic Buildings, the Roundhouse site is within an "established flood risk level." The applicant thus proposes applying these guidelines in the rehabilitation of the Roundhouse.

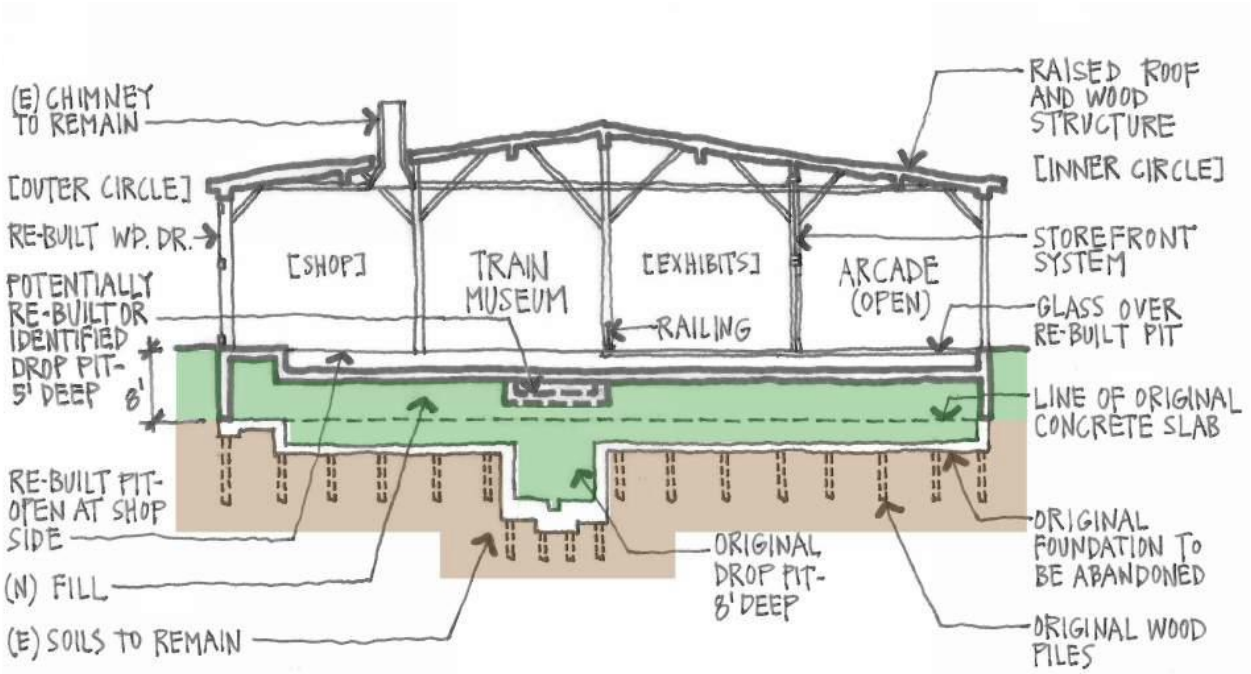
The stabilization and restoration of the Roundhouse is proposed to be completed in five increments:

1. **Safety and Security:** The initial increment of Roundhouse stabilization and rehabilitation would include fencing the site, installing security measures to prevent unwanted access, mitigating imminent hazards, and removal of pests and plants. This increment is proposed to be initiated prior to Specific Plan approval.
2. **Initial Stabilization:** Once security measures have been installed and imminent hazards have been mitigated, the applicant proposes temporarily "mothballing" the Roundhouse to prevent further damage and deterioration. This would include protecting the structure from further moisture penetration and plant and pest infestation, as well as stabilizing the structural components against wind and seismic forces. These stabilization measures are expected to be in place for two to three years.
3. **Raising the Building and Re-Grading the Site:** In response to expected sea level rise, the Roundhouse site would be raised, and the structure would be lifted or deconstructed piece-by-piece and reconstructed at a higher elevation on a new foundation. Comprehensive materials testing would be undertaken prior to lifting or deconstructing the Roundhouse to inform the strategy for subsequent restoration and retrofit.
4. **Second Stabilization:** After the site has been raised, a new foundation would be constructed, and the Roundhouse structure would be connected to or rebuilt atop the new foundation. Some portion of the final retrofit would be installed at this time to stabilize the structure, such as columns that need to be attached to the new foundation, steel framing to brace the brick walls, and repairs to wood roof framing would be installed at this time to stabilize the structure. Protection against moisture and infestation would then be reinstated (similar to the initial stabilization) while awaiting final restoration.
5. **Final Restoration and Retrofit:** The final restoration of the Roundhouse is proposed to include a seismic retrofit and strengthening of the gravity system using the California Historic Building Code to extend the life of the Roundhouse and provide appropriate seismic safety for use and occupancy.

Figure 3-50: Conceptual Rehabilitation of the Historic Roundhouse



CONCEPTUAL FLOOR PLAN



TRANSVERSE SECTION

SOURCE: Page & Turnbull, *Baylands Bayshore Roundhouse Stabilization and Rehabilitation Plan*, November 2020.

p. Site Preparation and Grading

Buildout of the Baylands Specific Plan is anticipated to involve three distinct activities, collectively referred to and analyzed in Chapter 4 as "construction."

- Site preparation, including demolition of existing buildings and removal of existing vegetation and infrastructure in areas to be graded;
- Grading; and
- Construction of infrastructure, buildings, and on-site amenities.

Site Preparation

Preparation of the Baylands for development includes demolition and deconstruction of non-historic buildings, site structures (retaining walls, utility structures), streets and pavement, existing utilities, and landscape elements that are incompatible with the proposed land development program and design. The historic Roundhouse structure will be dismantled for future restoration following site grading. Non-historic buildings and structures to be removed are primarily of wood, masonry, and concrete construction and were formerly used for administration, railyard maintenance, and industrial operations. These include:

- Industrial buildings along Bayshore Boulevard and Industrial Way;
- Buildings along Tunnel Avenue except for structures within the Golden State Lumber site, which would remain;
- Industrial buildings along the south side of Beatty Avenue; and
- Structures within the former landfill footprint.

Demolition and deconstruction are proposed to occur in phases in conjunction with required environmental remediation and landfill closure, proposed site grading, and building construction.

Site Grading

To achieve planned proposed finished grades within the Baylands, a mass grading operation will be undertaken, including approximately 4,300,000 cubic yards of cut within the eastern portion of the site, approximately 1,800,000 cubic yards of which would be temporarily moved to enable construction of ~~an impermeable~~ a low-permeability landfill cap, and then placed within the eastern portion of the site as engineered fill. The remaining 2,500,000 cubic yards of soil cut from the eastern portion of the site would be transported to the western portion of the site and placed as engineered fill. Proposed finished grades are illustrated in **Figure 3-51** and **Figure 3-52**.

Figure 3-51: Proposed Grading East of the Caltrain Right-of-Way



Figure 3-52: Proposed Grading West of the Caltrain Right-of-Way



Excavation of the estimated 4,300,000 cubic yards of soil within the eastern portion of the site is proposed to commence within the Sustainability District and proceed to the created wetlands and stormwater treatment facilities. Excavation activities would then continue within the Sustainable Infrastructure land use designation. The last area to be graded for development purposes following landfill closure is proposed to be the East Campus area.

To achieve proposed finished grades within the western portion of the Baylands, approximately 10,000 cubic yards would be cut and approximately 2,500,000 cubic yards of soil would be moved from the eastern portion of the Baylands. Grading operations within the western portion of the site would be undertaken on a phased basis from south to north.

Due to potential soil loss and compaction during grading operations, up to an additional 400,000 cubic yards of soil is assumed to be moved from the eastern to the western portion of the Baylands from the eastern portion of the site. Thus, the Specific Plan states that while 2,500,000 cubic yards of soil are anticipated to be moved from the eastern to the western portion of the Baylands, up to 2,900,000 cubic yards of soil may ultimately be moved from east to west during mass grading operations. Import or export of fill material into or outside of the Baylands for site development is not anticipated.

Soil materials to be moved from the east side of the Baylands to the west side will be hauled by trucks following a 3.8-mile route using a combination of off-road haul routes and public streets indicated in **Figure 3-53**. The movement of these soils is anticipated to occur over a two-year, 10-month period. During peak times for site grading, approximately 640 daily round trip truck hauls would occur, including approximately 160 round trip truck hauls in the AM peak hour and 160 round trip truck hauls in the PM peak hour.

Proposed Grading East of the Caltrain Right-of-Way

As shown in **Figure 3-51** and Appendix A of the *Brisbane Baylands Infrastructure Plan*, the applicant proposes finished pad and open space grades within the eastern portion of the Baylands between elevations 17 to 51 feet above mean sea level (AMSL) at construction and prior to settlement occurring, with some grades set lower to match existing conditions. Roadway grades generally sawtooth between elevations 12 and 58 feet AMSL, and drain toward:

- The Brisbane Lagoon;
- The drainage channel adjacent to the US 101 freeway, which would remain at its current elevation; and
- The re-constructed Visitacion Creek.

Figure 3-53: Proposed Grading Haul Routes



Proposed Grades adjacent to the Kinder Morgan Tank Farm and Golden State Lumber Sites

Existing grades around the Kinder Morgan Tank Farm range between elevations 13 and 19 feet AMSL, and between elevations 14 and 20 feet AMSL at Golden State Lumber. The Caltrain rail line through the Baylands ranges between elevations of 10 and 20 feet AMSL. The applicant proposes maintaining existing grades for each of these properties, by ensuring that improvements conform to the existing grade adjacent to the property or alternatively, by implementing retaining structures to maintain the integrity of the existing structures.

Proposed Grading West of the Caltrain Right-of-Way

The proposed grading plan for the western portion of the Baylands is dictated by required capping of the contaminated soil and groundwater, historic structures that are proposed to remain, geotechnical and drainage considerations, and proposed roadway connections to Bayshore Boulevard and across the Caltrain right-of-way.

Proposed Grading of the Historic Roundhouse Site

Existing grades around the existing Roundhouse structure range between elevations 8 and 9.5 feet AMSL. To accommodate site remediation, including required capping of contaminated soils, the applicant proposes to raise the Roundhouse site's finished floor elevation to approximately 18.5 feet AMSL, which would provide a minimum of 1 foot of freeboard above the 100-year storm event hydraulic grade line water elevation with tidal flow and estimated sea level rise for the 2100 Medium-High Risk Aversion estimate. The Roundhouse structure would be dismantled prior to site grading to be reconstructed and restored once grading of that area is complete.

Proposed Grades Adjoining Existing Buildings That Are Proposed to Remain

The applicant proposes to retain the existing grade of the property owned by the Bayshore Sanitary District at the corner of existing Industrial Way and Bayshore Boulevard. Existing buildings would remain at the current elevations with property access provided at the existing grades of these sites. Because this property is located at an existing low point along Bayshore Boulevard, the adjacent land within the Baylands is proposed to be raised and pump stations installed to protect Baylands development from the impacts of anticipated sea level rise.

In addition, existing grades within the eastern portion of the Baylands adjacent to the Kinder Morgan Tank Farm, Brisbane corporation yard, and the Caltrain right-of-way are lower than 100-year flood elevations with the addition of estimated mid-century and Year 2100 sea level

rise. The 2025 Specific Plan proposes leaving these properties and their street access at current elevations.[69]

q. Anticipated Phasing and Sequencing of Baylands Land Development, Infrastructure, and Amenities

Site Remediation and Title 27 Final Landfill Closure

Site remediation and final landfill closure will precede Baylands development. Construction and development within the western portion of the Baylands will occur in increments as site remediation activities are completed. Title 27 landfill closure in the eastern portion of the Baylands will progress in increments as soil materials needed for remediation and development of the former railyard are exported from the landfill to the western portion of the site. Development of the eastern portion of the Baylands would follow export of soils to the western portion of the site and the phased Title 27 landfill closure of the former Brisbane Landfill.

Activities related to site remediation within OU-SM and OU-2, as well as Title 27 landfill closure, are required to be undertaken pursuant to the regulatory authority of the Regional Water Quality Control Board and California Department of Toxic Substances Control as a prerequisite to Baylands development. Because Remedial Action Plans for OU-SM and OU-2 and the Title 27 Landfill Closure Plan were approved by the applicable regulatory agencies, including completion of CEQA documentation, prior to release of this Draft EIR, site remediation and Title 27 landfill closure are not addressed in this Draft EIR as construction impacts. Cumulative environmental effects of site remediation, Title 27 landfill closure, and the proposed Specific Plan are addressed in Chapter 7, *Cumulative Environmental Effects*, of this EIR.

Residential and Commercial Land Development, Infrastructure, and Site Amenities

Construction of buildings and amenities within the western portion of the Baylands along with supporting infrastructure facilities within the eastern portion of the site will precede building construction east of the Caltrain right-of-way. The Specific Plan proposes development of the western portion of Baylands prior to development of the eastern portion of the site. **Table 3-7** identifies the Specific Plan's proposed timing relationship between land development; open space, recreation, and amenities; and roadway improvements. **Table 3-8** identifies the sequencing and timing of Baylands development used for analysis of Specific Plan impacts.

[69] The Baylands Infrastructure Report states, "Raising grades in these areas is constrained by existing improvements that are to remain and the need to avoid causing settlement of the railroad tracks. These properties, if they remain at existing grades, will require measures by others to adapt to future conditions. If required in the future, in response to SLR, drainage systems in these areas can be installed with pump stations and back flow devices in order to protect existing streets and buildings during large storm events, subject to approval of the City of Brisbane and property owners" (BKF 2023).

Table 3-7: Relationship between Land Development; Open Space, Recreation, and Amenities; and Roadway Improvements Phasing

Land Development	Open Space, Recreation, and Amenities	Roadways
Phase I		
Bayshore District • Residential • Commercial	• Sunnydale Park • Baylands Park (north of Geneva Avenue) • Caltrain Station Plaza	• All internal roadways
Roundhouse District • Residential • Commercial	• Baylands Park (south of Geneva Avenue) • Roundhouse Park • Ecological Park (north of Main Street)	• Geneva Avenue (west of Caltrain right-of-way) • All internal roadways
Icehouse Hill District • Residential • Commercial	• Ecological Park (south of Main Street)	• Main Street • All internal roadways
Infrastructure and Amenities Concurrent with Start of Construction • Stormwater Detention Facility To Be Completed Prior to Issuance of a Certificate of Occupancy for the 1,001st Dwelling Unit • Community Fields • West Rail Trail and Connection to the Adjacent Crocker Park Recreational Trail To Be Completed Prior to Issuance of a Certificate of Occupancy for any Commercial Development Exceeding 4.0 Million Square Feet • Geneva Avenue Bridge Crossing and Geneva Avenue east of the Caltrain Right-of-Way • Icehouse Hill Enhancement and Restoration		
Phase II		
Sustainability District	Construction overlaps Phase I	
Campus East District	• *Bay Trail and Visitacion Creek.* Must be completed prior to approval of any building permit exceeding 1.25 million square feet. • *Baylands Preserve and Lagoon Park.* Must be completed prior to approval of any building permit exceeding 2.0 million square feet.	• Tunnel Avenue (intersection improvement at realigned Lagoon Road) • Lagoon Road • Sierra Point Parkway • Visitacion Creek Road • All internal roadways
Other Facilities	***Timing***	
Water Recycling Facility	Facility to be constructed and operational concurrent with the first Baylands recycled water demands, initially drawing raw sewage for treatment as needed from the City and Bayshore Sanitary District.	
Renewable Energy Generation and Battery Storage	Building-mounted facilities to be constructed concurrent with building construction. Solar field to be completed prior to completion of Phase 1 development.	

SOURCE: Baylands Specific Plan, 2025

Table 3-8: Anticipated Construction Sequencing of Baylands Residential and Commercial Buildings assumed for Impact Analysis Purposes

Year Permits Are Issued	Residential (dwelling units)	Year Building Construction Is Complete	Commercial Office (square feet)	Year Building Construction Is Complete
Site Grading		**2025**		**2027**
2027	166	2028	1,424,325	2029
2028	686	2029		
2029	337	2030		
2030	281	2031		
2031	333	2032		
2032	108	2033	1,975,675	2033
2033	124	2034		
2034	165	2035		
2035			1,100,000	2037
Phase 1	**2,200**		**4,500,000**	**2037**
2036				
2037				
2038			1,120,000	2040
2039				
2040			1,380,000	2042
Phase 2			**2,500,000**	**December 2042**
BAYLANDS TOTAL	**2,200**		**7,000,000**	**December 2042**

Development West of the Caltrain Right-of-Way

The area west of the Caltrain right-of-way is identified in the Specific Plan as "Phase 1," and would be developed in multiple increments. Major site infrastructure within the eastern portion of the Baylands, such as the solar field, water recycling facility, and constructed wetlands within Visitacion Creek and Lagoon Park would be installed concurrent with development west of the Caltrain right-of-way to provide recycled water, renewable energy generation infrastructure, drainage improvements, and recreational opportunities.

Following completion of remediation in OU-SM (spanning the Icehouse District and Roundhouse District), fill from the former landfill will be placed first within the Icehouse Hill District to achieve the planned finished grade and geotechnical conditions suitable for development, and then move north into the Roundhouse Hill District. Remediation within OU-SM is required to be completed before the geotechnical ground improvement process commences in the Bayshore District.

The construction of park and trail amenities will begin concurrent with the commencement of placement of soil from the former landfill within the Icehouse Hill District.

Anticipated Sequencing of Development

Area West of the Caltrain Right-of-Way

- Grading and infrastructure construction
    - Approximately 2.5 million cubic yards of soil will be moved from atop the former landfill area in the eastern portion of the Baylands to be placed as engineered fill within the area west of the Caltrain right-of-way to achieve final grades and create building pads.
    - Following site preparation and demolition of existing buildings, grading will be undertaken from south to north, completing building pads and infrastructure improvements for each land use district starting with the Icehouse Hill District and progressing north until building pads for the Bayshore District are completed.
- Building Construction
    - Once building pads are created and infrastructure improvements are installed within the Icehouse Hill District, construction of commercial buildings would be initiated. Building construction within the Roundhouse District and then the Bayshore District will be initiated as grading and infrastructure improvements are completed with anticipated buildout of commercial buildings west of the Caltrain right-of-way.
    - Once building pads are created and infrastructure improvements are installed within the Roundhouse District, construction of residential buildings would be initiated. Building construction within the Bayshore District will be initiated as grading and infrastructure improvements within that District are completed with anticipated buildout of residential development.

Area East of the Caltrain Right-of-Way

- Approximately two months after initiating the export of soil materials from the former landfill area within the eastern portion of the Baylands to the area west of the Caltrain right-of-way, grading of those portions of the Baylands east of the Caltrain right-of-way that are outside of the former landfill's footprint would commence to provide for the subsequent construction of infrastructure improvements within the Sustainable Infrastructure District (e.g., water storage tank, water recycling facility, battery storage).
- Once a sufficient amount of soil has been moved from atop the former landfill, the approximately 1,800,000 cubic yards of soil that is proposed to remain within the former landfill's footprint would be temporarily moved within the landfill footprint to enable construction of ~~an impermeable~~ a low-permeability landfill cap on top of the municipal

waste matrix,[70] and then placed within the eastern portion of the site over the landfill cap as engineered fill to facilitate building construction within the former landfill's footprint.

Once engineered fill is in place over the former landfill, construction of buildings within the Campus East District will commence.

As noted in the Specific Plan, certain infrastructure features and project amenities located in the eastern portion of the Baylands (Phase 2 area) would be constructed concurrent with development within the western portion of the site (Phase 1 area), including:

- Infrastructure features located east of the Caltrain right-of-way to be constructed concurrent with Phase 1
    - Water detention facility
    - Water recycling facility
    - Water storage tank
- Specific Plan amenities located east of the Caltrain right-of-way to be constructed concurrent with Phase 1
    - Lagoon Park
    - Visitacion Creek
- Infrastructure features located to be constructed concurrent with Phase 2
    - Geneva Avenue bridge over the Caltrain right-of-way and easterly extension to the US 101 Candlestick interchange.

Realignment of Lagoon Road to connect directly with the existing southbound US 101 freeway on- and off-ramp.

Development East of the Caltrain Right-of-Way

The Campus East District is planned as the final phase of development, since it can occur only after existing soils overlying the former Brisbane Landfill are transported to the western portion of the Baylands and Title 27 landfill closure is completed. The eastern segment of Geneva Avenue and its bridge over the Caltrain right-of-way are proposed to be constructed prior to issuance of a certificate of occupancy for commercial development in excess of 4,000,000 square feet.

[70] Soils within the former landfill footprint will be removed down to the waste matrix to allow for construction of ~~an impermeable~~ a low-permeability cap. The phased removal of soils and ~~impermeable~~ a low-permeability landfill cap under the regulatory authority and oversight of the Regional Water Quality Control Board and the San Mateo County Health System will be followed by the placement of soil as engineered fill on top of the landfill cap.

The specific timing of Baylands development will be based on market conditions. For example, a portion of the site may be remediated, graded, and have streets and subsurface utilities completed, with actual vertical construction and lateral driveway and utility connections to new structures delayed due to then existing market conditions.

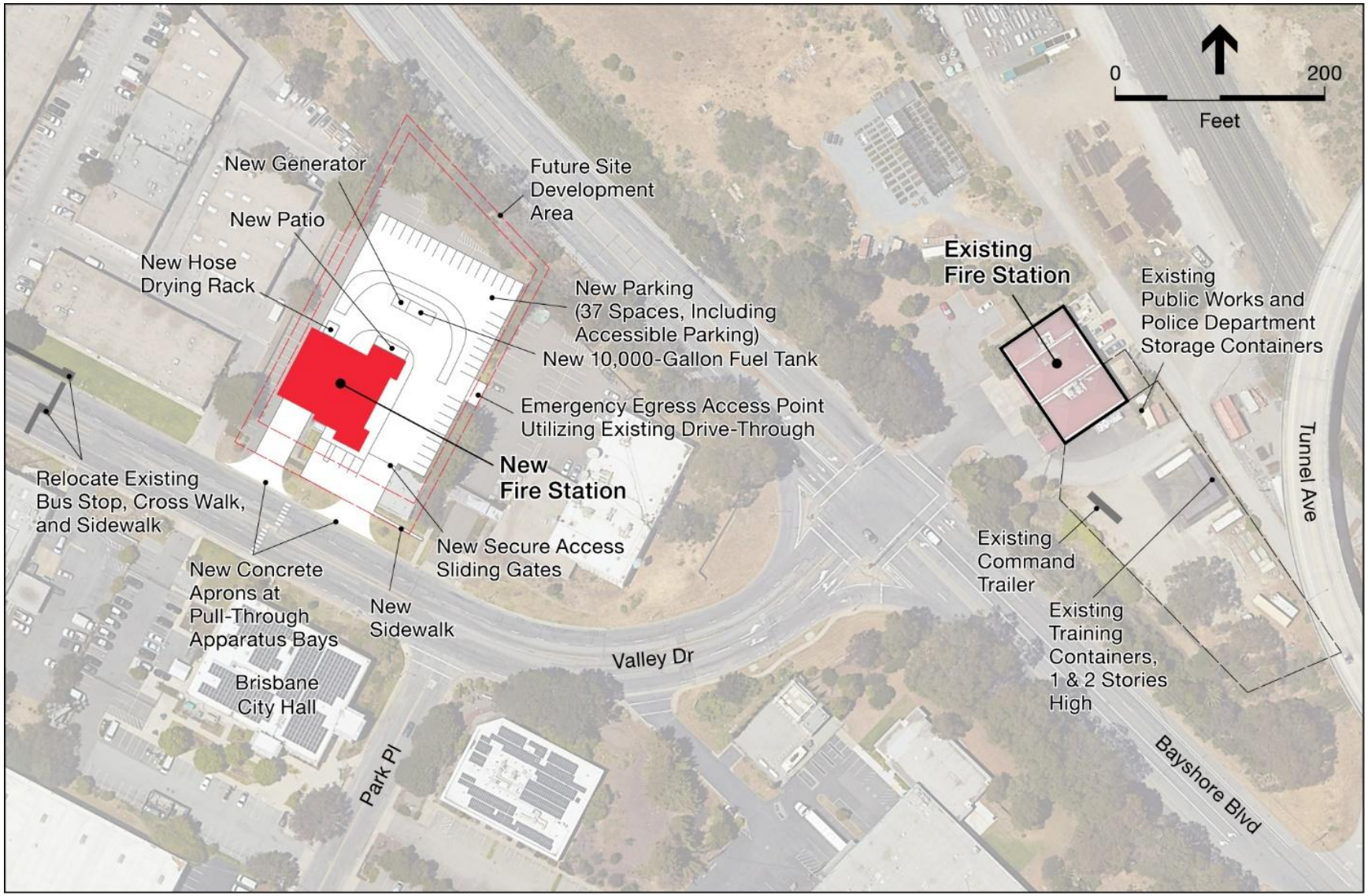
3.3.3 RELOCATION OF THE NORTH COUNTY FIRE AUTHORITY BRISBANE FIRE STATION NO. 81

The North County Fire Authority and City of Brisbane prepared a Fire Protection and Facilities Plan that identifies facilities improvements needed to support Baylands development and maintain fire protection performance standards throughout the City (see Appendix N.2). The North County Fire Authority and City propose relocating the existing Fire Station No. 81 from its existing site at 3445 Bayshore Boulevard to a new 2-story, 10,000-square-foot facility at 140 Valley Drive (see **Figure 3-54**). The existing Fire Station No. 81 site would be used for firefighter training once the new station is operational.

The relocated Station No. 81 would house the existing Engine Company No. 81 and provide training facilities on the second floor that could function as an emergency command center when needed. A 1,000-gallon above-ground tank would be constructed to provide fuel for fire trucks and an emergency power generator. In addition, the relocated fire station would temporarily house a fully staffed (four-person minimum) and equipped ladder truck company until such time as a new fire station within the Baylands would be established. When completed, the new Baylands station would be located adjacent to the west side of the US 101 freeway between Beatty Avenue and the Genera Avenue extension and house the ladder truck company and a squad.[71] The relocated fire station will provide 1:1 replacement of trees removed within the relocation site to the extent compatible with the fire station's emergency services function.

[71] "Squad" refers to a specialized company whose primary focus may be suppression but carry specialized equipment and are trained to perform hazmat, rescue, and other special functions.

Figure 3-54: Proposed Fire Station Relocation Site Plan



SOURCE: North County Fire Authority, Ten Over Studio, 2023.

3.3.4 BAYSHORE MOBILITY PLAN

a. Introduction and Background

The Bayshore Mobility Plan has been proposed by the City of Brisbane to address the effects of regional through traffic within Brisbane and enhance mobility for Brisbane residents and businesses.

General Plan Amendment GP-1-19

In January 2020, the City of Brisbane adopted General Plan Amendment GP-1-19 as a follow-up to General Plan Amendment GP-1-18 and Measure JJ. GP-1-19 states in part, that:

> *"Bayshore Boulevard functions primarily as a regional roadway through the City of Brisbane. Peak hour congestion along Highway 101 causes traffic to be diverted from the freeway onto Bayshore Boulevard through the City of Brisbane as motorists attempt to avoid congested freeway traffic. Depending on the time of day and location, regional through traffic makes up 60 to 80 percent of traffic on Bayshore Boulevard. On a daily basis, only 10 to 15 percent of all trips on Bayshore Boulevard are generated from Brisbane's residential neighborhoods and 15 to 20 percent are generated by Brisbane's employment centers. The majority of traffic on Bayshore Boulevard within Brisbane is between San Francisco and cities to the south, with a smaller amount (approximately 15 percent of all trips) traveling between Daly City and the cities to the south.*
>
> *A principal challenge for the City is maintaining vehicular mobility for Brisbane residents and businesses along Bayshore Boulevard. As large-scale developments occur in cities to the north and south of Brisbane, regional-through traffic and congestion on Bayshore Boulevard is projected to increase. It is also important that Bayshore Boulevard provides safe access and egress for sites located along its frontage while maintaining its ability to move vehicles through the City. Another issue is providing for safe and comfortable access for bicyclists and pedestrians" (City of Brisbane 2020).*

In response to these issues, General Plan Policy C.1 was approved calling for the City's roadway system to be designed "to emphasize mobility for Brisbane residents and businesses, accommodate bicycle and pedestrian in addition to vehicular movement, and provide for comfortable and safe travel within the community to shopping, employment, and recreation, as well as to transit and the Highway 101 freeway."

To implement this policy, General Plan Program C.1.b calls for development of plans for Bayshore Boulevard … "that address the effects of regional through traffic within Brisbane and enhances mobility for Brisbane residents and businesses through a combination of roadway and intersection, transit, bicycle, and pedestrian facility improvements that would not cause a

substantial increase in vehicle miles traveled (VMT) on Bayshore Boulevard or other routes through the City."

The Bayshore Mobility Plan serves as the Bayshore Boulevard design plan required by General Plan Program C.1.b.

Complete Streets Safety Assessment for Bayshore Boulevard

In 2022, a Complete Streets Safety Assessment was conducted by the Safe Transportation Research and Education Center ("SafeTREC") at UC Berkeley in cooperation with the City of Brisbane for the portion of Bayshore Boulevard from San Bruno Avenue to Old County Road. The final recommendations of the study proposed a road diet and a separated multi-use path along the west side of Bayshore Boulevard, along with other improvements within this portion of the corridor.

The Bayshore Mobility Plan builds on the City's 2022 Complete Streets Safety Assessment and expands its recommended road diet, multi-use path along the west side of Bayshore Boulevard, and other improvements north from Old County Road to Geneva Avenue.

b. Purpose of the Bayshore Mobility Plan

The Plan Bayshore Mobility seeks to enhance mobility for Brisbane residents by:

- **Enhancing connectivity for residents and land uses abutting Bayshore Boulevard** such as the Sierra Point Trailer Park on the westside of Bayshore Boulevard just north of San Bruno Avenue.
- **Reducing the prominence of regional through-traffic along Bayshore Boulevard**, making it more of a street serving Brisbane residents.
- **Redesigning Bayshore Boulevard as a multi-modal corridor** to increase the level of comfort and safety for all roadway users including automobiles, emergency response vehicles, transit vehicles, trucks, bicycles, and pedestrians in accordance with General Plan Policy C.1 to "provide for comfortable and safe travel within the community to shopping, employment, and recreation, as well as to transit" and the recommendations of the 2022 Complete Streets Safety Assessment.
- **Increase connectivity between the Baylands and the existing City of Brisbane** for people traveling along and crossing Bayshore Boulevard.
- **Improve the look of the corridor**, providing opportunities for landscaping, gateway features, wayfinding, and other features that increase the prominence of the roadway as a local route for Baylands residents rather than a regional cut-through route.

c. Bayshore Boulevard Design Features

Table 3-9 summarizes proposed design features along the entirety of Bayshore Boulevard within Brisbane. **Figure 3-55a** through **Figure 3-55e** illustrate Bayshore Mobility Plan features. The primary feature of the plan is to reduce the number of travel lanes along Bayshore Boulevard from four lanes (two in each direction) to two lanes (one in each direction) south of Geneva Avenue, along with providing a median, turn pockets, and a multi-use pathway and bicycle facilities along the entirety of the corridor within the City of Brisbane.

Table 3-9: Standard Bayshore Boulevard Design Features

Standard Design Features	
Geometric Design	• Road diet to reduce travel lanes along Bayshore Boulevard from four lanes (two in each direction) to two lanes (one in each direction) south of Geneva Avenue with a median and turn pockets along the entire length of the corridor within Brisbane • Addition of Class I multi-use pathway, with a minimum width of 12 feet and preferred width of 16 feet for a sidewalk level facility • Signage and striping recommendations from the Local Roadway Safety Plan • Improved lighting, including pedestrian-scale lighting along sidewalks and multi-use path • Speed feedback/warning signs
Traffic Signal Considerations	• Signal coordination to allow vehicles to maintain speeds at the posted speed limit • Protected left turn phasing at all intersections • Leading pedestrian intervals at crosswalk locations • Prohibit right turns on red
Emergency Access and Operations	• Traffic signal priority/emergency vehicle pre-emption, median breaks, and queue jumps at intersections to allow emergency vehicles to pass stopped traffic between intersections
Transit Access and Operations	• Traffic signal priority for transit vehicles • Bus boarding islands, 12-foot minimum bus pull out areas, and queue jumps

SOURCE: Fehr & Peers, 2024.

Geometric Design

By removing a travel lane in each direction (i.e., "road diet"), the Bayshore Mobility Plan aims to address the following crash trends identified in C/CAG's Local Roadway Safety Plan:

- Pedestrian/Bicycle Safety
- Nighttime/Low Light Safety
- Motor Vehicle Speed Related Crashes
- High Speed Roadways

Figure 3-55a: Bayshore Mobility Plan – Geneva Avenue to Brisbane Technology Park

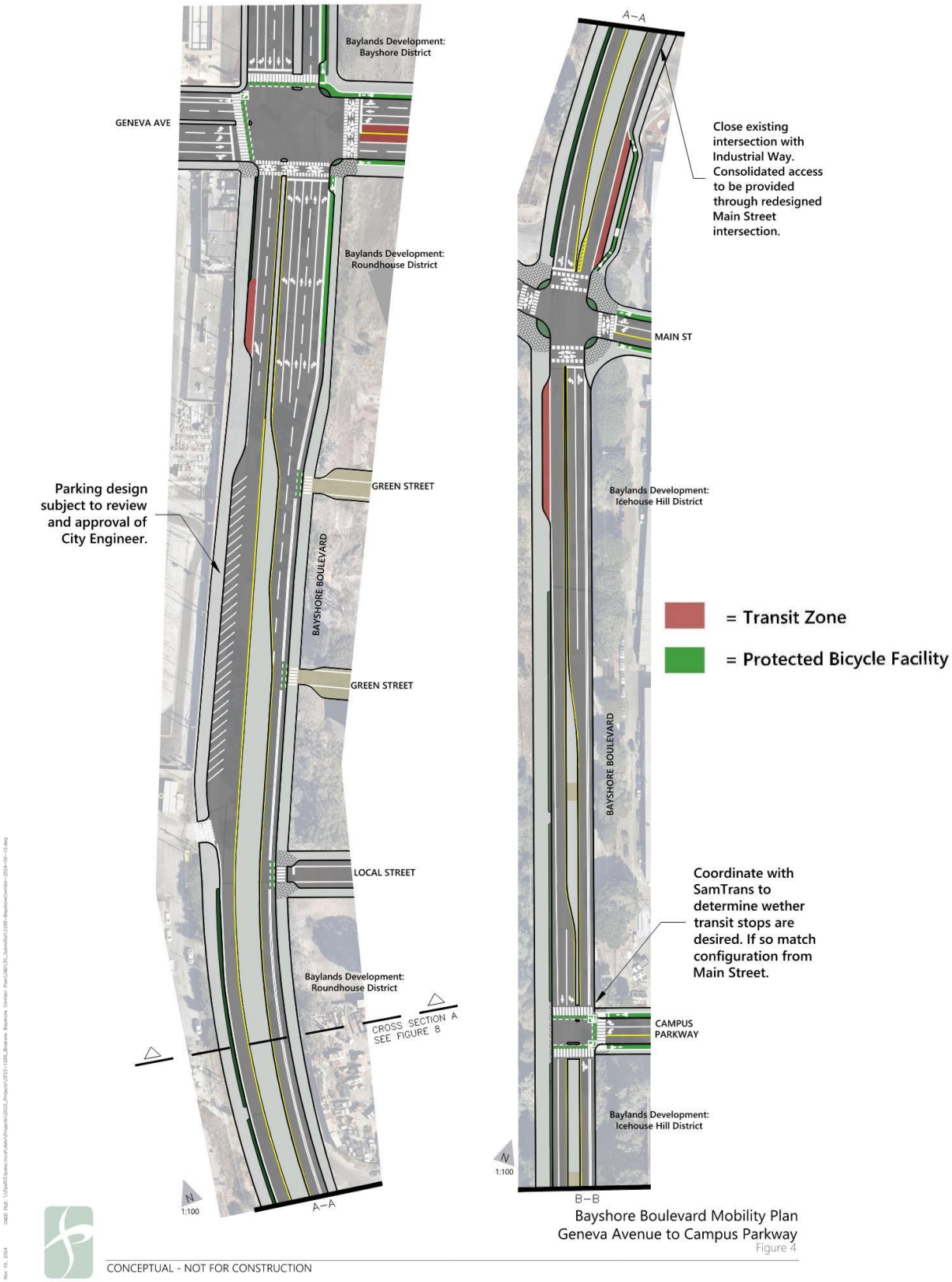


Figure 3-55b: Bayshore Mobility Plan – Brisbane Technology Park to Guadalupe Canyon Parkway

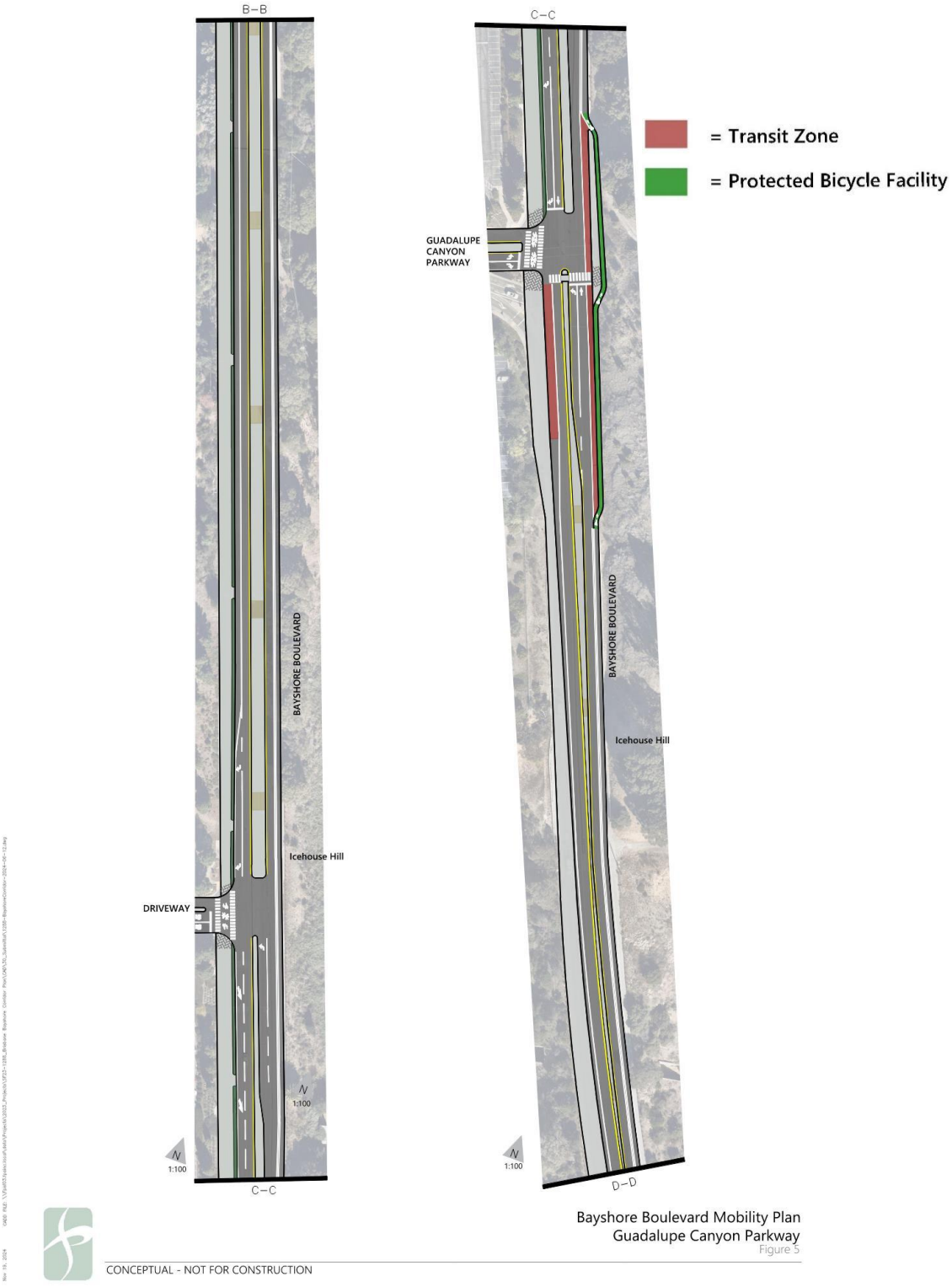


Figure 3-55c: Bayshore Mobility Plan – Valley Drive to Old County Road/Tunnel Avenue Van Waters and Rogers Road South to City Limits

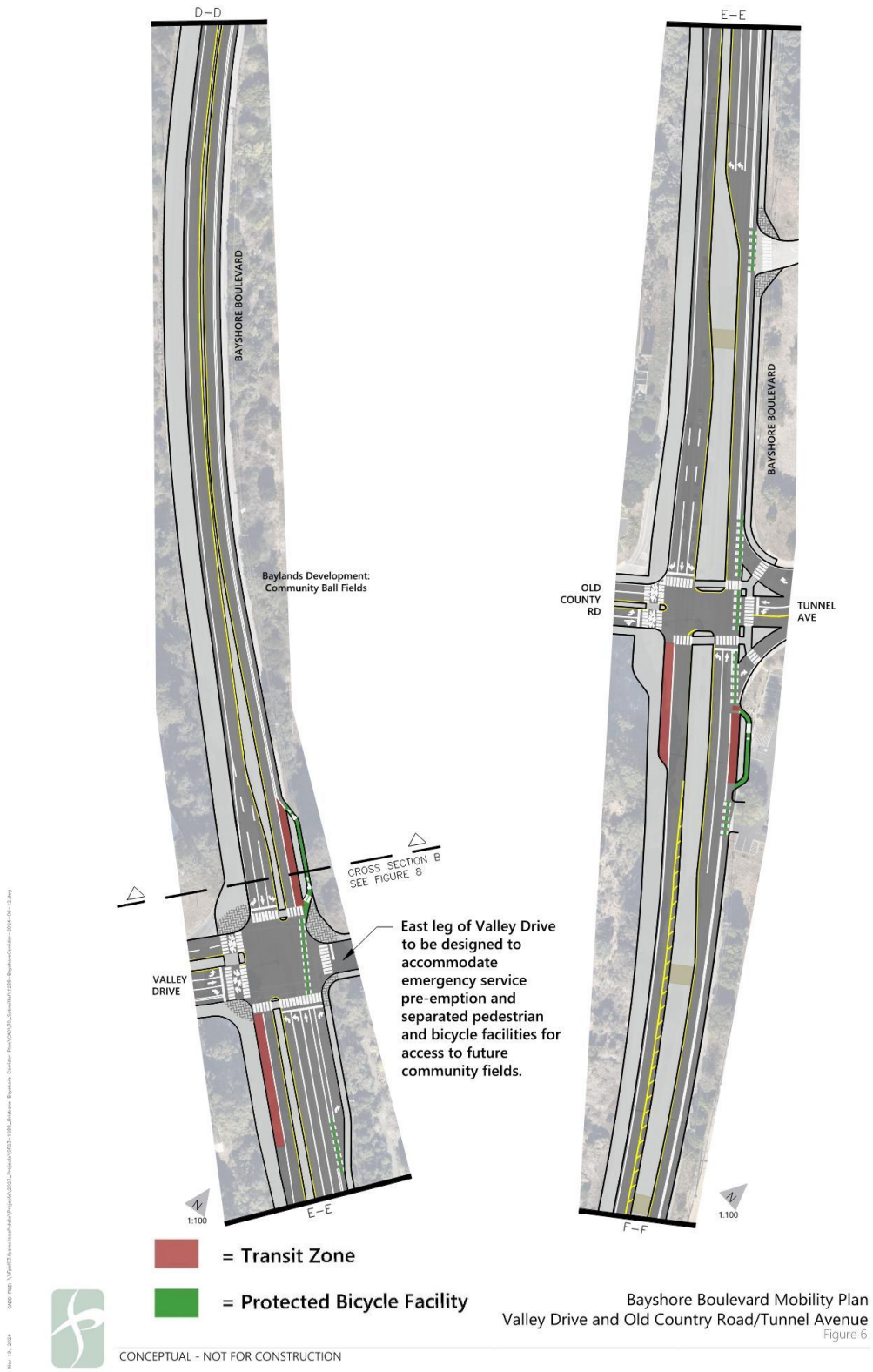


Figure 3-55d: Bayshore Mobility Plan – Van Waters and Rogers Road to San Bruno Avenue

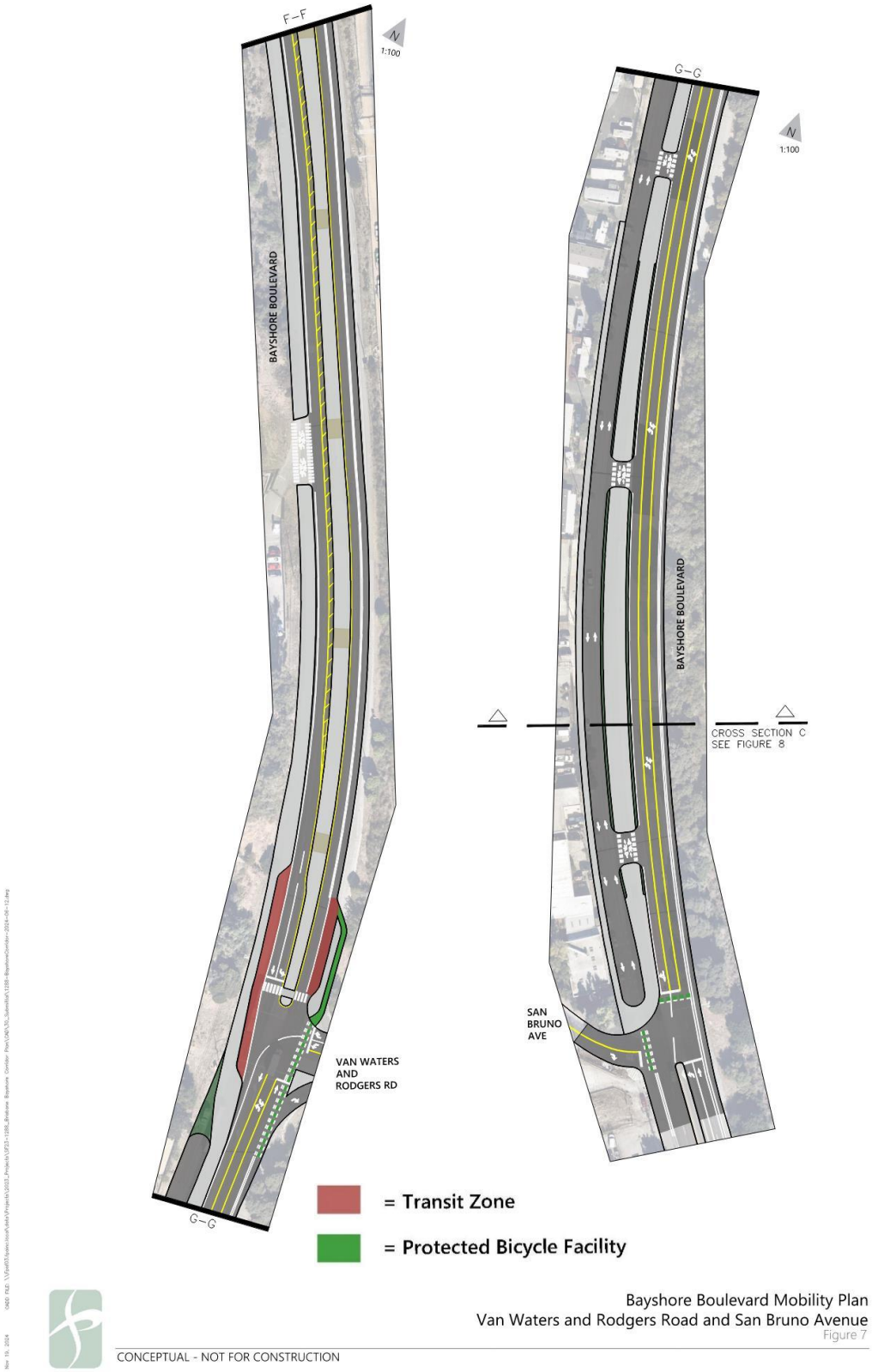
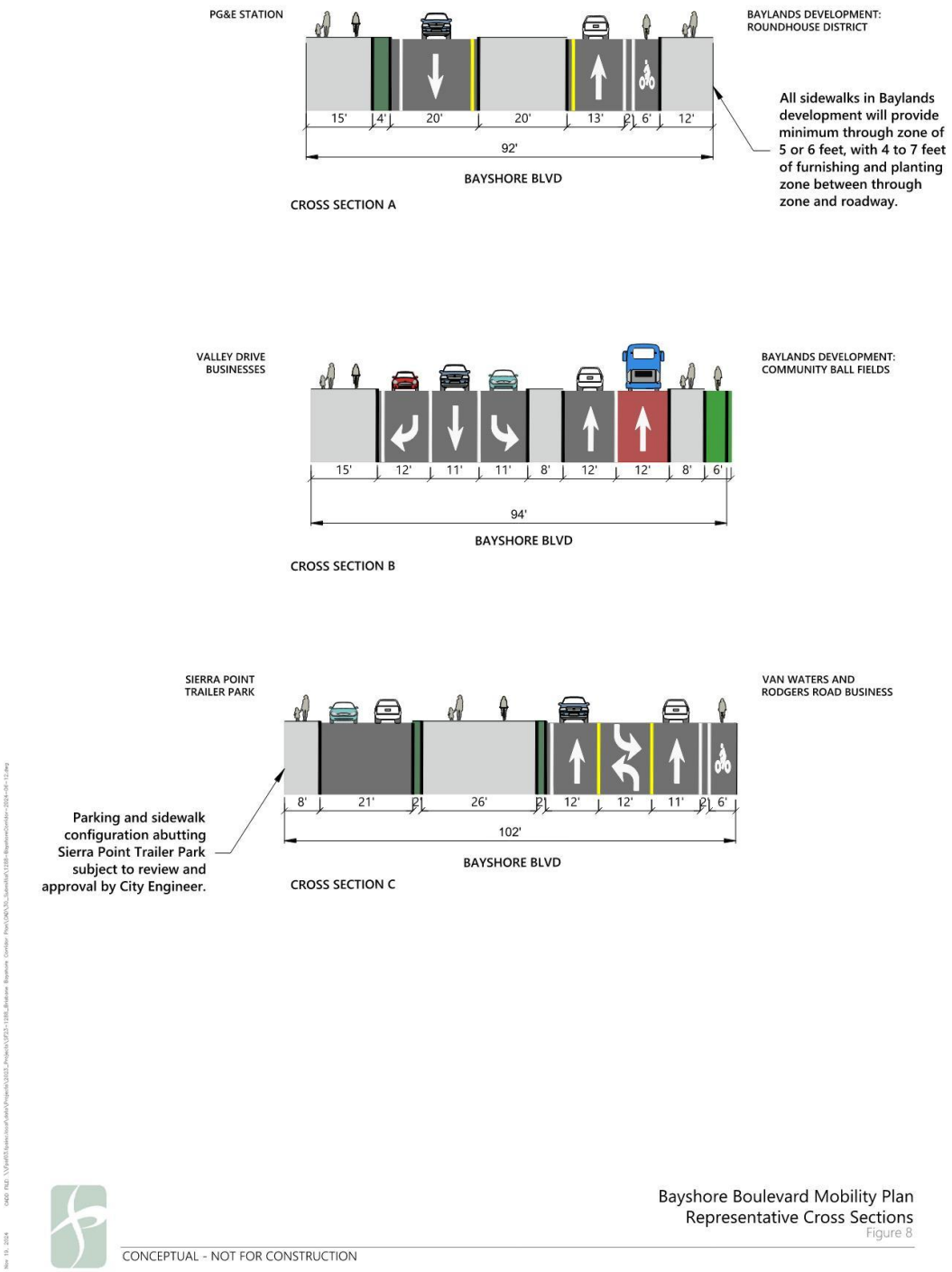


Figure 3-55e: Bayshore Mobility Plan – Cross Sections (see Figures 3-55a, 3-55c, and 3-55d



Reducing the number of lanes along Bayshore Boulevard would reduce the design speed to 35 miles per hour, consistent with other arterials in the Baylands Specific Plan area, and would also reduce the risk of fatal or severe collisions and the desirability of the corridor for regional through traffic.[72] The Mobility Plan would also (1) reduce the number of lane changes motorists would be required to make when turning onto or from Bayshore Boulevard and (2) slow down the speed of vehicles turning onto local streets, minimizing potential points of conflict, and improving traffic flow and the overall safety of the corridor.

By removing one travel lane in each direction, the area currently within the right-of-way would become available for construction of a multi-use Class I path along the west (southbound) side of the corridor to physically separate cyclists and pedestrians from vehicular traffic, thereby reducing the level of traffic stress, providing a safer environment for active transportation, and promoting walking and cycling as viable modes of travel for individuals of all ages and abilities.[73] The existing northbound bicycle lane will remain along Bayshore Boulevard for bicyclists who are comfortable riding adjacent to busy travel lanes, with a wide striped buffer zone to delineate separate spaces for bicyclists and motorists.

The Bayshore Mobility Plan would remove channelized turn lanes that are not required by geometric design and reconfigure those that are required for larger vehicles (such as a truck or fire engine) to make a turn. As a result, potential conflicts between vehicles and pedestrians would be minimized, creating a safer and more accessible environment for all road users. Where free right-turn lanes are to remain, they would be designed to slow vehicle speeds making the turn (FHWA, no date).

Traffic Signal Considerations

The Bayshore Mobility Plan proposes standard safety improvements at all signalized intersections, including features such as protected turn phasing, improved signage, protected pedestrian and bicycle crossings, and signal synchronization for a 35-mph design speed along the corridor. Existing traffic signals would be retimed to reflect the new configuration and would include emergency and transit signal priority measures to enable emergency and transit vehicles to get priority when approaching signals. Traffic signal priority technology will reduce the likelihood of delay for emergency or transit vehicles while removing the need for emergency vehicles to travel through an intersection while the light is red for their approach. Bayshore traffic signals were recently upgraded with new technology that could be leveraged

[72] As noted in C/CAG's LRSP, "Countywide crashes on roadways with posted speeds 40mph or higher had an average crash severity per mile 13 times higher than along roadways with posted speeds of 25 mph or less" and "unsafe speed was the most commonly cited primary crash factor." In Brisbane, "Too fast for conditions" was the top-cited cause of motor vehicle crashes.

[73] Caltrans' guide *Active Transportation Emphasis Area Guidance for Corridor Planning* (February 2022) refers to the NACTO guide found here: https://dot.ca.gov/-/media/dot-media/programs/transportation-planning/documents/active-transportation-complete-streets/20220131active-transportation-emphasis-area-guidance-final-version-v7a11y.pdf.

for the features described in the Mobility Plan as well as other Intelligent Transportations Systems as they become available in the future.

Emergency Access and Operations

The Bayshore Mobility Plan prioritizes emergency vehicle access by providing multiple ways for emergency vehicles to bypass stopped traffic on Bayshore Boulevard. To facilitate emergency vehicle access at intersections:

- Each traffic signal would incorporate signal pre-emption technology that would allow emergency vehicles to trigger a green light as they approach an intersection and thus provide room for vehicle queues to clear and drivers to find space to pull over.
- Each signalized intersection along the corridor would also include bus/emergency vehicle queue space on the right (shared with right-turn pockets were appropriate) that would allow additional room for emergency vehicles to pass where requested by City of Brisbane emergency service providers and approved by the City Engineer.
- The center median and multi-use path will be provided with breaks every 250 feet to allow emergency vehicles to navigate around bottlenecks or congestion for short distances by using the multi-use path or opposite roadway direction.[74] Medians and buffers along the multi-use pathway would be designed and landscaped to provide clear sight lines for emergency vehicles.

Transit Access and Operations

The Bayshore Mobility Plan would provide Transit Signal Priority technology to enhance transit reliability by extending green lights or shortening red lights when a transit vehicle approaches. Transit Signal Priority reduces delays at intersections and wait times for passengers, helps buses adhere more closely to their schedules, and improves service reliability. Bus stops on Bayshore Boulevard would be provided with dedicated loading zones on bus boarding islands. On the west (southbound) side of the corridor, these boarding islands would be adjacent to the multi-use path, and on the east (northbound) side of the corridor, these boarding islands would provide separation for bicyclists. All bus stops would be located on the far side of the intersection in bus pull out areas, except where land use or pedestrian crossing locations would necessitate a near-side stop. Bus stops would also include bus queue jumps[75] to allow for buses

[74] Northbound emergency vehicles would be able to either pass vehicles that pull over into the buffered bike lane or cross to the southbound lane in the median breaks to bypass vehicle bottlenecks. Southbound emergency vehicles would be able to pull into the multi-use pathway or into the northbound travel lane for short stretches to bypass vehicle bottlenecks. The multi-use pathway would be 16 to 18 feet wide, thus providing adequate space for emergency vehicles to travel on for short distances if the other direction is congested.

[75] Bus queue jump lanes combine a short transition area from a bus stop, allowing buses leaving a stop to have priority over vehicular traffic and easily enter traffic flow. Providing buses with a "head start" can significantly improve bus performance, resulting in run-time savings and increased reliability.

to bypass vehicle queues on Bayshore Boulevard where requested by SamTrans and approved by the City Engineer. SamTrans bus stops along Bayshore Boulevard would be provided with all of the amenities recommended in the SamTrans' *Bus Stop Improvement Plan*, such as bus shelters, benches, and real-time information (SamTrans 2024).

Intersection Design Features

Table 3-10 identifies standard intersection treatments to be provided at each intersection along Bayshore Boulevard.

Table 3-10: Standard Intersection Treatments

Standard Intersection Treatments	
Traffic Signal Treatments	• Pedestrian and bicycle signal heads • Protected left turn phasing at all intersections • Emergency vehicle pre-emption and transit-signal priority • Leading pedestrian intervals at crosswalk locations • Signal coordination to maintain vehicle speeds at posted speed limit • Prohibit right turn on red at locations where vulnerable populations may be crossing • Protected bicycle movements for right turns where traffic volumes exceed 150 vehicles
Striping Treatments	• Advance stop bars • High-visibility crosswalks • Conflict markings for bicycles • Two-stage turn boxes for relevant bicycle movements
Hard Infrastructure	• Tighten curb radii to slow vehicle turning speeds while allowing truck turning movements at locations with large numbers of trucks • Curb extensions to reduce the crossing distance for pedestrians • Raised pedestrian crossings for local streets into Baylands • Queue jumps for emergency vehicles and transit services • Removal of channelized right-turn lanes ("Slip Lanes") to reduce conflicts with the west side multi-use path[a]

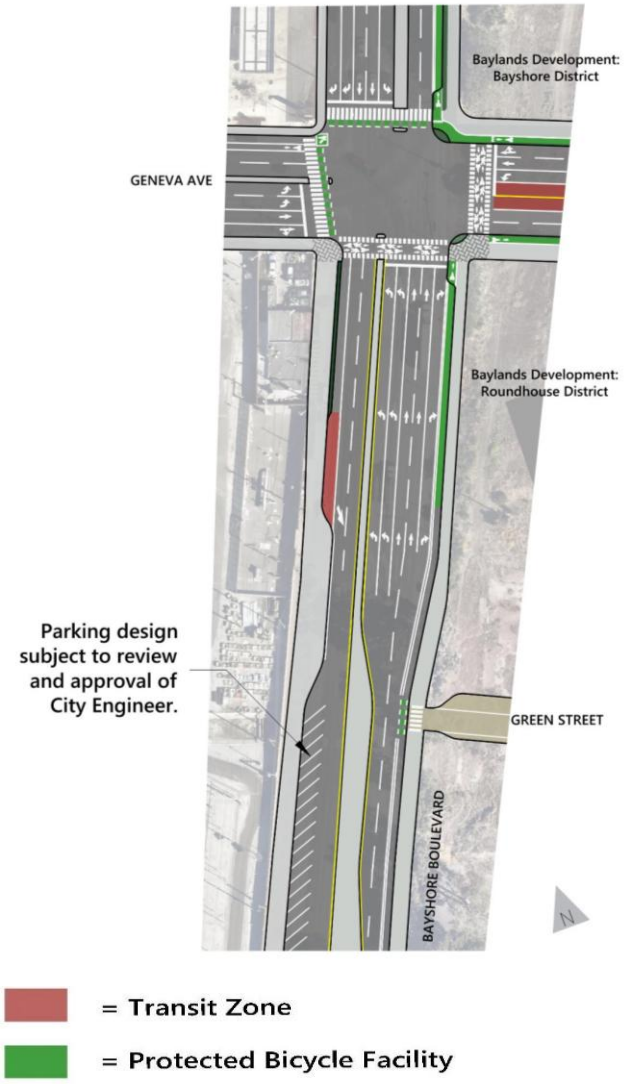
SOURCES: Fehr & Peers, 2024; FHWA.

NOTE:

a. Removal of slip lanes is recommended to improve the safety of non-motorized road users. Slip lane removal is recommended at all intersections where the removal will not impede truck access. Slip lanes on the southeast and northeast corners of Tunnel Avenue are recommended to remain. Where slip lanes are to remain, it is recommended that they are designed in a way to slow vehicle speeds (see: FHWA's guidance on Well Designed Right-Turn Slip Lanes, https://safety.fhwa.dot.gov/saferjourney1/Library/countermeasures/15.htm).

Bayshore Boulevard at Geneva Avenue

Figure 3-56: Bayshore Boulevard at Geneva Avenue and Green Shared Street



The road diet for Bayshore Boulevard would start south of the Bayshore Boulevard – Geneva Avenue intersection. **Figure 3-56** presents the conceptual design for Bayshore Boulevard at Geneva Avenue. The road diet for Bayshore Boulevard would start approximately 300 feet south of the intersection of Geneva Avenue. Thus, the north leg of the intersection would remain in its current configuration, with the addition of project frontage features proposed on the east side of the street in the Baylands Specific Plan. The east leg would match the Specific Plan's design for Geneva Avenue and the west leg would retain Daly City's existing lane configuration and geometry.

The south leg of the intersection would match the Specific Plan's proposed configuration, with the road diet and multi-use Class I path along the west side of Bayshore Boulevard beginning south of Geneva Avenue. Protected pedestrian and bicycle crossings would be provided on the east and south legs of the intersection to facilitate travel from the Class IV bicycle facilities on Geneva Avenue to the Class I pathway on Bayshore Boulevard. Crosswalks and painted bicycle striping would be provided on the north and west legs to allow people to reach the existing Class II bicycle facilities on Geneva Avenue. The existing bus stop and on-street parking on the west side of Bayshore Boulevard south of Geneva Avenue in front of the 7 Mile House would remain. Signal timing would provide protected turn phases for turning movements and bus lanes to support the movement of buses between the west and east legs of Geneva Avenue.

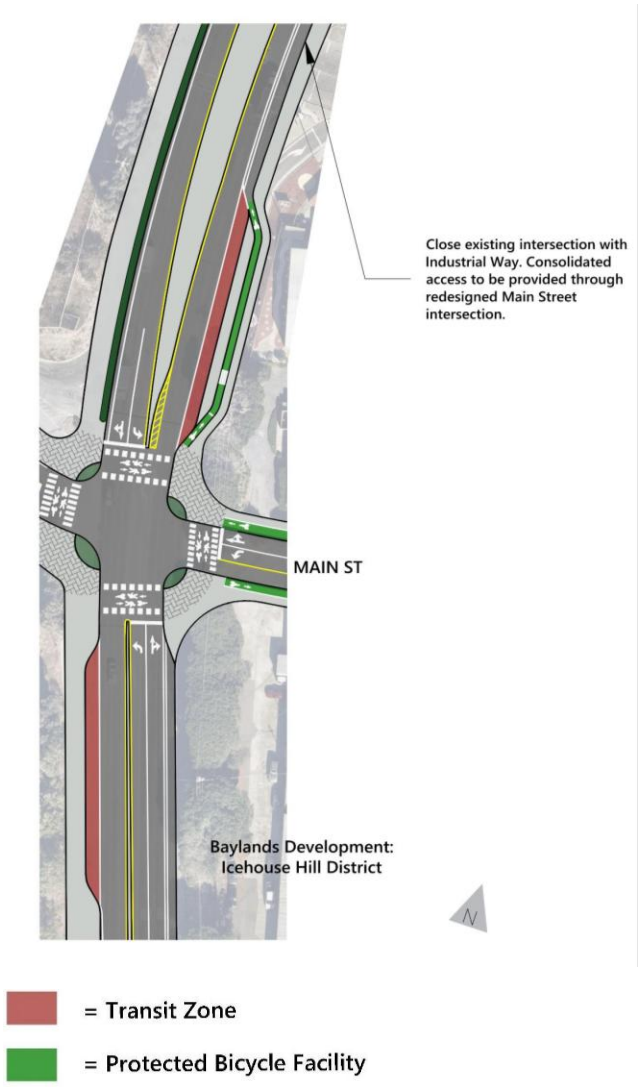
Bayshore Boulevard at Future Baylands Local Streets and Green Streets

The conceptual design for intersections with Baylands local and green streets would match the proposed designs presented in the Baylands Specific Plan and provide for raised crosswalks and right-in and right-out access (see **Figure 3-56**).

Bayshore Boulevard at Main Street and Existing Industrial Way

The existing intersection at Industrial Way would be eliminated. Industrial Way would be provided with a side-street stop-controlled intersection from Main Street (see **Figure 3-57**). This configuration would require shifting the west leg of Main Street south to avoid a skewed intersection. A Class I path would be provided on the north side of Main Street to provide a connection to the Bayshore heights neighborhood of Daly City. Protected pedestrian and bicycle crossings would be provided on the north and east legs of the intersection to facilitate travel from the Class IV facilities on the east leg of Main Street to the Class 1 pathways on Bayshore Boulevard and on the west leg of Main Street. Reconfiguration of the existing skewed configuration would allow the removal of the channelized turn lanes to reduce turning speeds onto Main Street. Reconfigured transit stops would be located on the north side of the new intersection to align with the crosswalk on the north leg, since no sidewalk is provided on the southern side of Main Street on the west leg. The transit stops would be designed with bus pull outs and amenities consistent with SamTrans' *Bus Stop Improvement Plan*, including a northbound bus island with bikeways behind the stop so the Class II bikeway can travel behind the stop. Queue jumps and right-turn pockets could be incorporated if requested by SamTrans or emergency service providers and approved by the City Engineer.

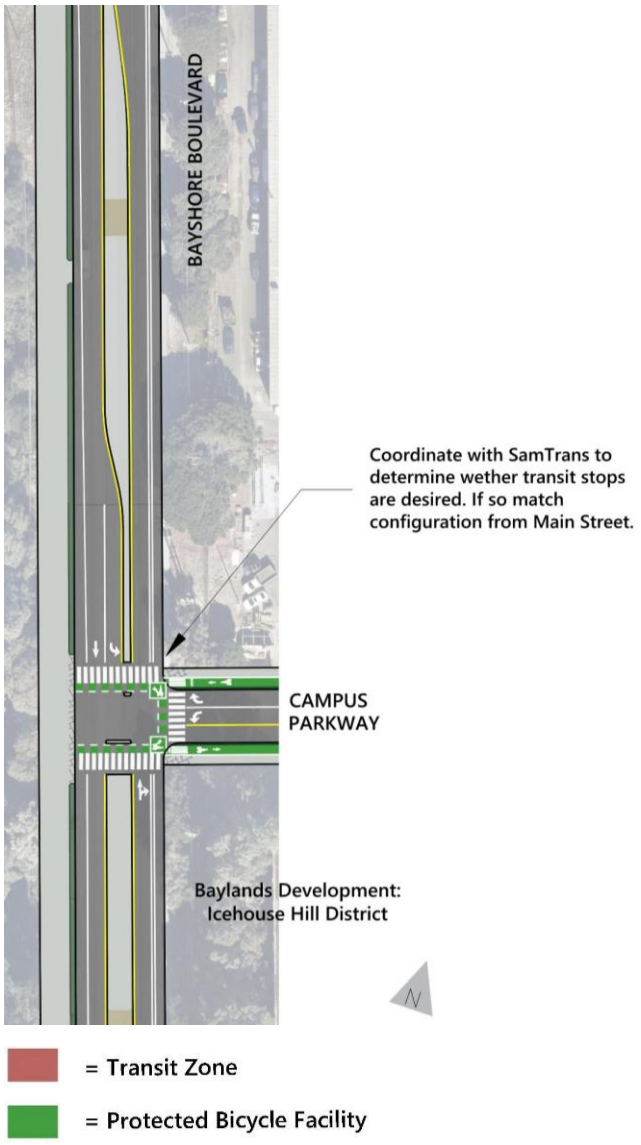
Figure 3-57: Bayshore Boulevard at Main Street and Existing Industrial Way



Bayshore Boulevard at Future Campus Parkway within the Baylands

As shown in **Figure 3-58**, signalized intersection would be provided at Campus Parkway at the proposed Specific Plan. Protected pedestrian and bicycle crossings are provided on the north and east legs of the intersection to facilitate travel from the Class IV facilities on Campus Parkway to the Class I pathways on Bayshore Boulevard and on the west leg of Main Street. Although not proposed in the Specific Plan, bus stops with amenities consistent with SamTrans' *Bus Stop Improvement Plan* and queue jumps could be provided if requested by SamTrans and approved by the City Engineer.

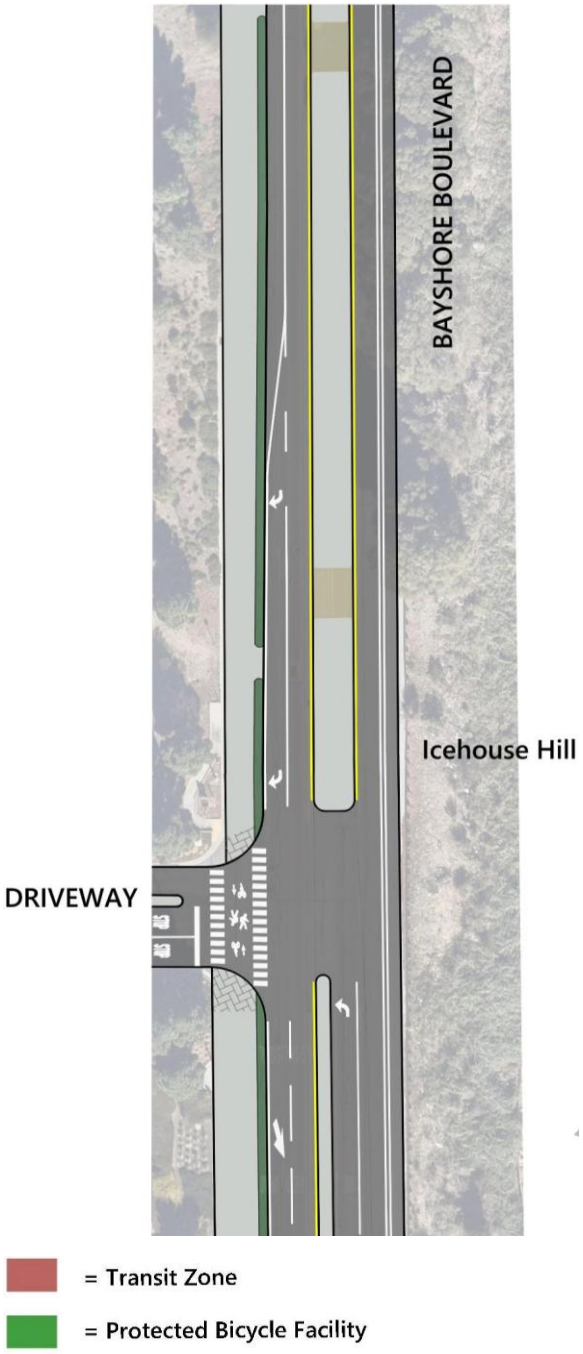
Figure 3-58: Bayshore Boulevard at Campus Parkway



Bayshore Boulevard at the Driveway Entry to the Brisbane Technology Park

As shown in **Figure 3-59**, the conceptual design for the driveway into the Brisbane Technology Park would add a crossing for the new multi-use pathway across the Brisbane Technology Park driveway. The Brisbane Technology Park driveway would maintain all other existing access configurations.

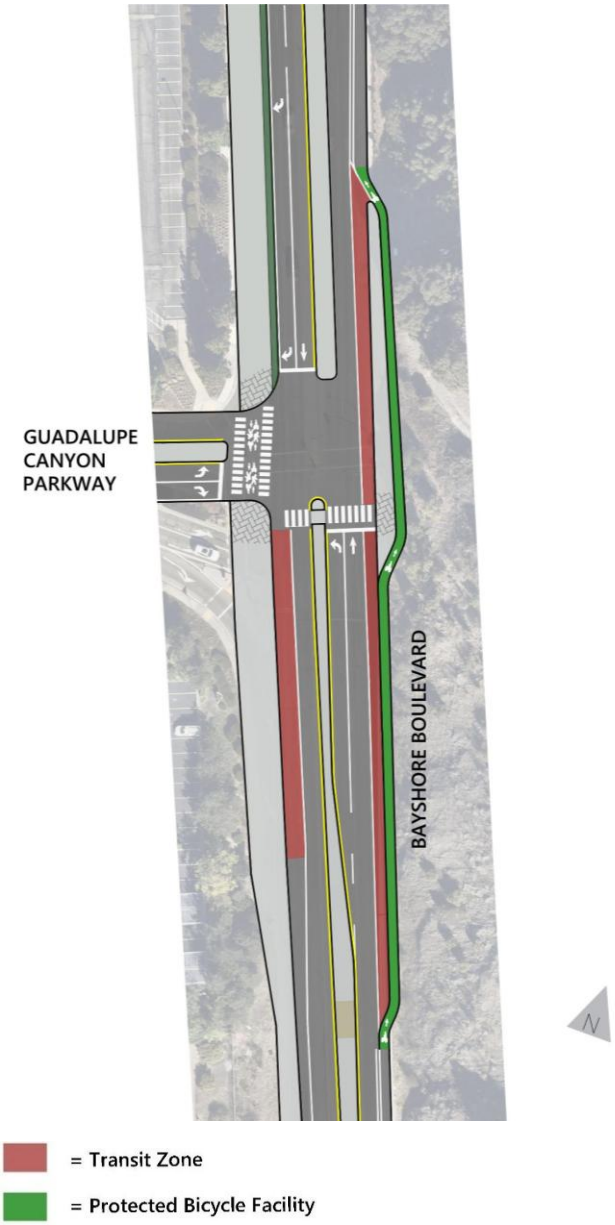
Figure 3-59: Bayshore Boulevard at Technology Park Driveway



Bayshore Boulevard at Guadalupe Canyon Parkway

As shown in **Figure 3-60**, the channelized free right-turn lane at Guadalupe Canyon Parkway would be removed to reduce turning speeds at conflict points for the Class I pathway on the west leg of the intersection. Existing vehicle access would be maintained, although one of the two eastbound left-turn lanes would be removed because there will only be one receiving lane on northbound Bayshore Boulevard. The crosswalk across Bayshore Boulevard would move to the south leg of the intersection so that pedestrians would cross at the same time with right-turning vehicles rather than the faster moving left-turning vehicles. High-visibility crosswalks would be provided across Guadalupe Canyon Parkway and Bayshore Boulevard. Transit stops would remain as far side bus stops and would be designed with queue jumps, bus pull outs, and amenities consistent with SamTrans' *Bus Stop Improvement Plan*. Queue jumps for emergency vehicles and transit vehicles would be provided via the southbound right-turn pocket and a dedicated northbound queue jump shown in red in **Figure 3-60**.

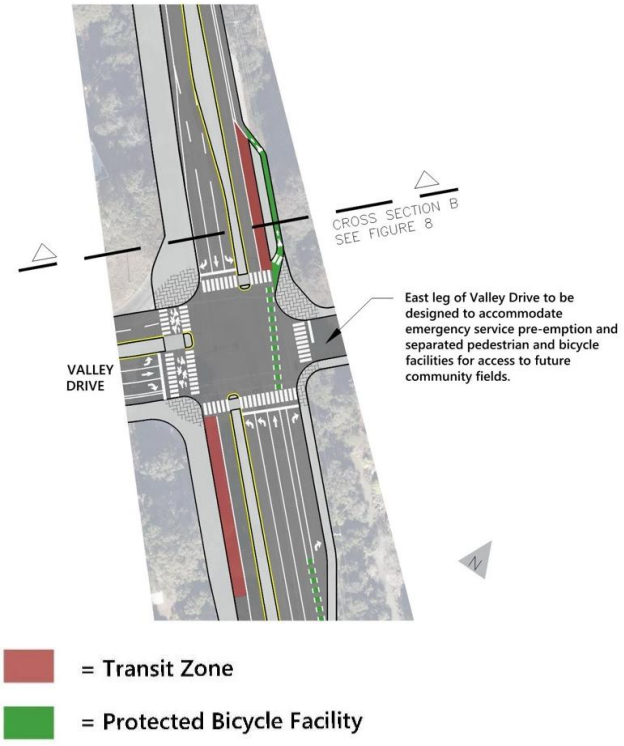
Figure 3-60: Bayshore Boulevard at Guadalupe Canyon Parkway



Bayshore Boulevard at Valley Drive

As shown in **Figure 3-61**, the channelized free right-turn lanes would be removed at the Valley Drive intersection to reduce turning speeds at conflict points for the Class I pathway on the west leg of the intersection. Existing vehicle access would be maintained, although the shared eastbound left-turn lane would be converted to a through-only lane to provide only one lane for left-turning vehicles, which matches the one receiving lane on northbound Bayshore Boulevard. Existing crosswalks would be enhanced to high-visibility crosswalks.

Figure 3-61: Bayshore Boulevard at Valley Drive



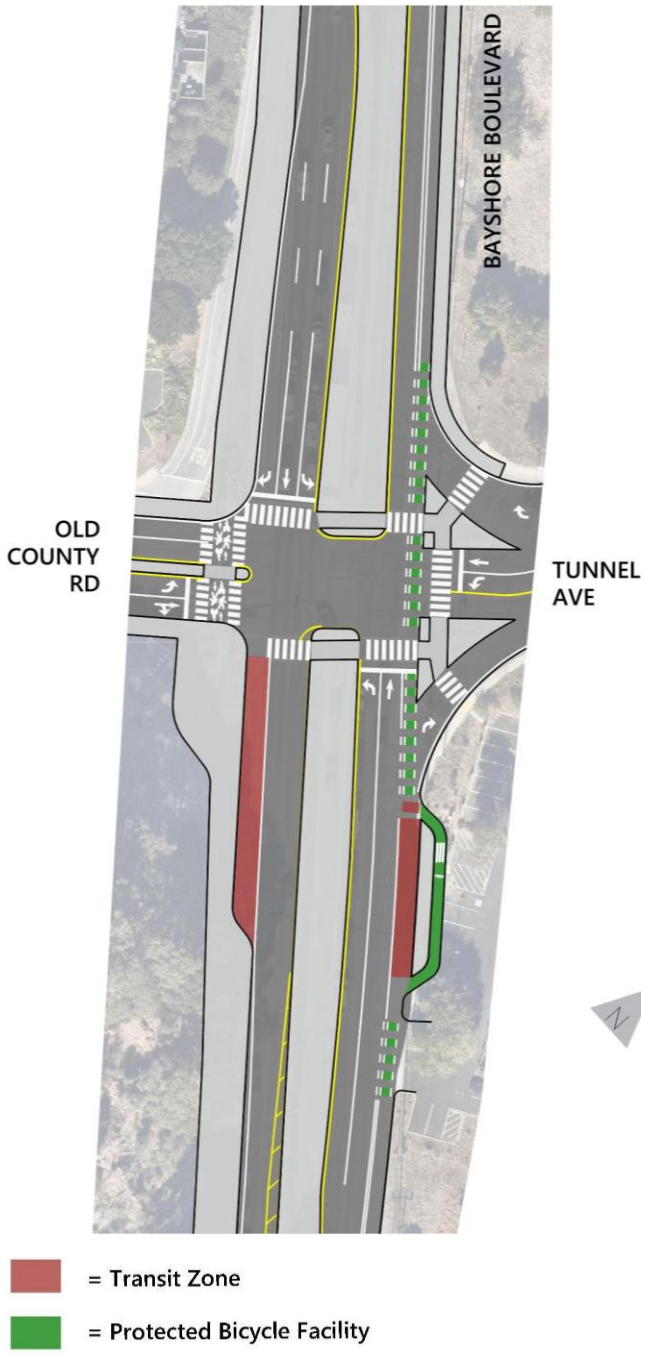
Transit stops would be designed with bus pull outs and amenities to match SamTrans' *Bus Stop Improvement Plan*, including a bus island with bikeways behind the stop. The right-turn pockets could serve as queue jumps for emergency and transit vehicles and would align with the far side transit pull out areas to facilitate a direct line through this intersection. The east leg of Valley Drive would incorporate features to accommodate the mix of emergency service providers, trucks, and people trying to reach the future community fields through emergency vehicle pre-emption and separated pedestrian and bicycle facilities.

Bayshore Boulevard at Tunnel Avenue/Old County Road

The Tunnel Avenue/Old County Road intersection would match the 2022 Complete Streets Safety Assessment (see **Figure 3-62**). Free right-turn lanes would be removed on the west side of the intersection to reduce turning speeds at conflict points for the multi-use pathway. The channelized free right-turn lanes onto Tunnel Avenue would remain on the east side of Bayshore Boulevard given the angle of the intersection approach and the lack of a conflicting Class I pathway. Existing vehicle access would be maintained, and all crosswalks would be enhanced to high-visibility crosswalks.

The transit stops would be designed with bus pull outs and amenities consistent with SamTrans' *Bus Stop Improvement Plan*. This includes a near side stop in the northbound Bayshore Boulevard lane at Tunnel Avenue to provide a direct connection to the park-and-ride lot in the southwest corner of the intersection. A northbound queue jump is not proposed due to the channelized free right-turn lane but could be incorporated within the Bayshore Boulevard footprint if requested by SamTrans or emergency service providers and approved by the City Engineer.

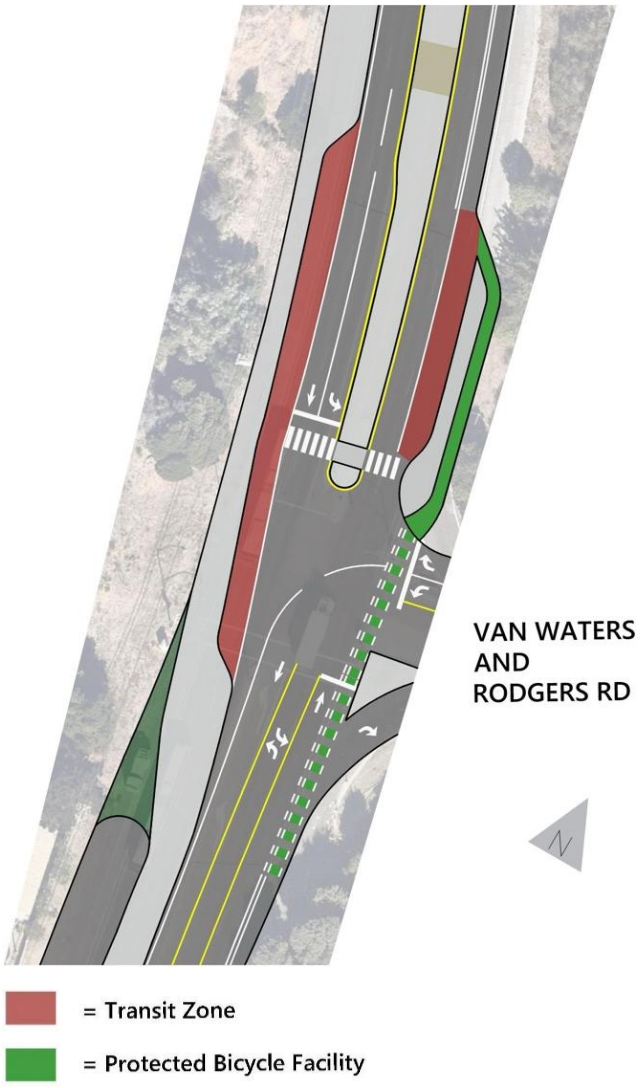
Figure 3-62: Bayshore Boulevard at Old County Road/Tunnel Avenue



Bayshore Boulevard at Van Waters and Rogers Road

This location would match the designs presented in the 2022 Complete Streets Safety Assessment. As shown in **Figure 3-63**, a new high-visibility crosswalk on the north leg of the intersection would replace the existing crosswalk on the south leg. The northbound channelized free right-turn lane at Van Waters and Rogers Road would be removed for a relocated bus stop that aligns with the new crosswalk.

Figure 3-63: Bayshore Boulevard at Van Waters and Rogers Road

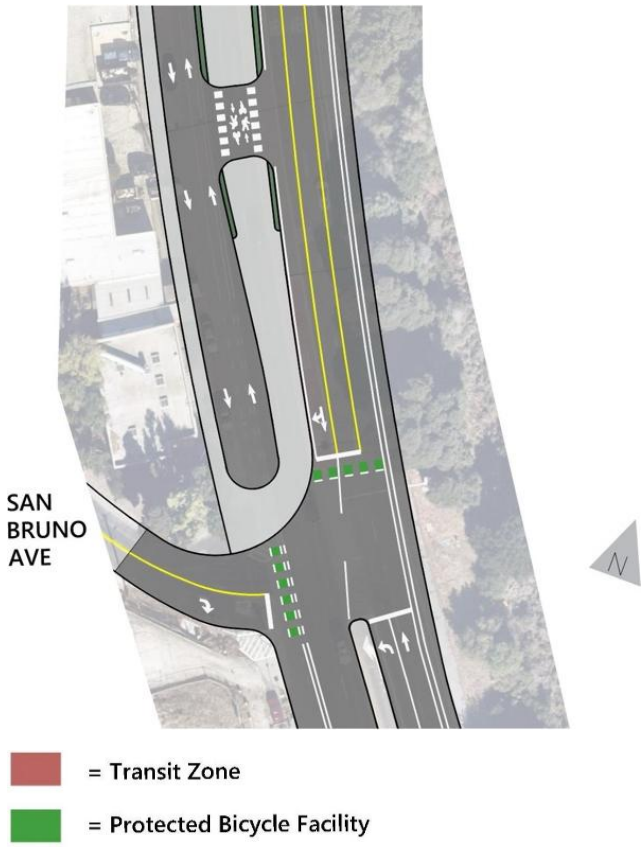


Shifting the crosswalk and bus stop to the north leg of the intersection would improve pedestrian safety by removing conflicts between pedestrians and faster moving vehicles turning left onto southbound Bayshore Boulevard or turning right in a channelized free right-turn lane. The channelized free right-turn lane from northbound Bayshore Boulevard to eastbound Van Waters and Rodgers Road would remain to ensure large vehicles can access the warehousing and distribution facilities on Van Waters and Rodgers. The southbound bus stop would shift to the near side of the intersection, matching SamTrans' *Bus Stop Improvement Plan* due to geometric constraints posed by the access road and parking lane for Sierra Point Trailer Park. A southbound receiving lane through the intersection would allow emergency or transit vehicles to bypass queues on southbound Bayshore Boulevard. A northbound queue jump is not provided due to the channelized free right-turn lane that is required to provide access for large trucks onto Van Waters and Rodgers Road.

Bayshore Boulevard at San Bruno Avenue

The design for San Bruno Avenue (illustrated in **Figure 3-64**) would match the designs presented in the 2022 Complete Streets Safety Assessment except as noted below. Existing turning movements would be retained, including right-turn access only from San Bruno Avenue. Because this intersection represents the southern terminus of the Bayshore Mobility Plan, the road diet and multi-use path would end at San Bruno Avenue. South of the intersection, the roadway would transition to match the existing roadway geometry with two lanes in each direction and the existing Class II facilities on both sides of the corridor. People bicycling would be able to continue south on the existing Class II bicycle lanes. People bicycling northbound would use the two-stage turn queue box at San Bruno Avenue to cross Bayshore Boulevard to reach the Class I multi-use path.

Figure 3-64: Bayshore Boulevard at San Bruno Avenue



3.3.5 NEW MIDDLE SCHOOL WITHIN THE BAYLANDS AND COVERSION OF THE EXISTING BAYSHORE SCHOOL TO AN ELEMENTARY SCHOOL

Baylands development includes a site for a grade 6–8 middle school to be constructed near Main Street within the Specific Plan's Roundhouse or Icehouse Hill District west of Roundhouse Park and the Ecological Park. Upon completion of middle school construction, all Bayshore School District grade 6–8 students would attend the new middle school within the Baylands, and all grade PK–5 students would attend the Bayshore School, which is currently the only school operated by the Bayshore District and would be converted from a PK-8 school to a PK–5 elementary school.

3.3.6 DEVELOPMENT AGREEMENT

The Specific Plan applicant has stated its desire to enter into a Development Agreement with the City to provide a legal instrument that establishes a commitment whereby the City, as the land management agency for the site, agrees to permit the applicant or its successors to develop the Specific Plan under agreed-upon terms, and commits the applicant to the provision of specified public improvements, facilities, services identified in the Specific Plan and required by EIR mitigation measures, along with other public benefits. The Development Agreement would constitute a legal contract between the City and the applicant and commit both parties to the agreed-upon development program, including the Baylands Specific Plan and other agreed-upon public benefits. The Development Agreement would be binding and could exempt the development of the Baylands from future changes to City codes, plans, resolutions, and voter-approved initiatives that might otherwise require revisions to the approved Specific Plan.

3.4 INTENDED USE OF THIS EIR

This EIR is intended to identify and analyze the environmental effects of the development associated with the Brisbane Baylands Specific Plan, including site preparation and grading, building construction, on-site and off-site infrastructure development, and ongoing operations of land uses and facilities proposed in the Specific Plan. The environmental analyses prepared for this EIR have been undertaken at a level of detail commensurate with the information provided by the applicant in the Specific Plan.

This EIR has been prepared by the City of Brisbane, which is the Lead Agency, as a project-level EIR to provide CEQA compliance for the 2025 Baylands Specific Plan project. Pursuant to CEQA, "responsible agencies" from whom further permits or authorizations are needed to implement the Specific Plan and related project components are required to rely on this EIR under routine circumstances.

Additional CEQA review of 2025 Specific Plan project implementation actions by the City as Lead Agency or by responsible agencies is required under Public Resources Code Section 21166 if:

(1) Substantial changes are proposed in the project which will require major revisions of the EIR;

(2) Substantial changes occur with respect to the circumstances under which the project is being undertaken which will require major revisions to the EIR; or

(3) New information, which was not known and could not have been known at the time of the environmental impact report was certified as complete, becomes available.

In addition, state, regional, and local responsible agencies may require additional study, and impose additional conditions of approval, on future Specific Plan implementation activities under the laws and regulations applicable to those agencies independent of CEQA.

3.4.1 REQUIRED DISCRETIONARY ACTIONS, APPROVALS, AND CONSULTATIONS

a. Approvals and Permits Required from the City of Brisbane

Proposed Baylands development encompasses the following City of Brisbane approvals and permits.

City Approvals and Permits Currently Being Considered

- Amend the General Plan Land Use Element to realign the northern boundary of the Baylands Subarea to correspond to the boundary of the Baylands Specific Plan.
- Amend the General Plan Circulation Element to:
    - Realign Lagoon Road to directly access the southbound US 101 freeway ramps at Sierra Point Parkway.
    - Extend Sierra Point Parkway from its current terminus at the southbound US 101 freeway ramps north to Geneva Avenue.
    - Add proposed Baylands roadways to the General Plan circulation map.
    - Designate the Geneva Avenue extension through the Baylands as a Regional Arterial.
    - Add a new roadway type for "green local streets."
    - Remove Industrial Way as a General Plan roadway.

- Approve the Baylands Specific Plan, including a change of zone from Commercial Mixed-Use (C-1), Marsh Lagoon Bayfront (MLB), Manufacturing (M-1) to Baylands Specific Plan.
- Amend Title 17, Zoning, of the Brisbane Municipal Code to establish the land use regulations and development standards set forth in the Specific Plan as the regulatory authority governing future development within the Specific Plan area.
- Approve the Bayshore Mobility Plan.
- Approve a Development Agreement.
- Approve an agreement between the City of Brisbane and California Water Service Company (Cal Water) to provide water service for the Baylands, Sierra Point, and Beatty Subareas.

Anticipated City Approvals and Permits to Be Requested in the Future by Various Applicants

As noted in the Specific Plan, the applicant's proposed development is generally represented by Specific Plan graphics provided in the plan that illustrate residential, commercial, open space, and park site plans; building architecture; and landscaping for site-specific developments, open space and parks, and roadway rights-of-way. While approval of the Baylands Specific Plan establishes zoning and development regulations for the Baylands, site=specific development projects would require site plans, building architecture, and landscaping to be reviewed and approved by the City. This would include site-specific design plan review for non-residential development, housing development permits, conditional use permits, and minor administrative permits to be submitted to the City for prior to issuance of applicable site-specific development permits.

b. Approvals and Permits Required from Responsible and Trustee Agencies

In addition to future City approvals, Baylands development would require permits, authorizations, or other approvals from the following state, regional and local public agencies other than the City of Brisbane.

- Water service for the Baylands, Sierra Point, and Beatty Subareas.
    - Approval by the San Mateo County Local Agency Formation Commission ~~to modify the Municipal Service Review for the City of Brisbane~~ to identify Cal Water rather than the ~~City of Brisbane~~ Guadalupe Valley Municipal Improvement District as the water service agency for the~~, Beatty, and Sierra Point~~ southwesterly portion of the Baylands Subarea~~s~~. As a result, Cal Water would serve the entirety of the Baylands, Beatty, and Sierra Point Subareas.

  - Approval by the California and San Francisco Public Utilities Commission for Cal Water to expand its service area to include the Baylands, Beatty, and Sierra Point Subareas within the City of Brisbane.
  - Certificate of Public Convenience and Necessity for the expansion of Cal Water's service area(s) to include the Baylands, Beatty, and Sierra Point areas that are within areas or regions under the SFPUC's jurisdiction.
  - Approval by the Regional Water Quality Control Board and the San Francisco Public Utilities Commission of a discharge permit for the Baylands Recycled Water Facility.
  - Water supply permit amendment from the State Water Resources Control Board, Division of Drinking Water Santa Clara District.

- Agreements to coordinate and implement roadway and other transportation improvements and services within and adjacent to the Baylands Specific Plan area between the City of Brisbane and the City and County of San Francisco, San Francisco County Transportation Authority, San Mateo Congestion Management Agency, San Mateo County Transit District, Caltrans, City of South San Francisco, and the City of Daly City.
- Approvals of requests by developers of the Baylands for habitat, recreational improvements, and/or roadway bridge improvements within:
  - The 100-foot shoreline band along Visitacion Creek and the Brisbane Lagoon (Bay Conservation and Development Commission [BCDC]); and
  - Filled and unfilled tidelands and submerged lands sold into private ownership by the State Lands Commission that remain submerged (State Lands Commission).
- Lease(s) for any habitat or recreational improvements within the Guadalupe Canal (State Lands Commission) within those portions of the Baylands subject to State Lands Commission jurisdiction.
- Approval of requests by future developers of the Baylands for infilling of existing riprap lining the Brisbane Lagoon (BCDC, Regional Water Quality Control Board [RWQCB], State Lands Commission, US Army Corps of Engineers [USACE]).
- Water quality certification, NPDES permit, and waste discharge requirement compliance for future Baylands development (RWQCB).
- Incidental Take Permit, if necessary, for Baylands development affecting special-status species (CDFW).
- Streambed Alteration Agreement (CDFW) and Section 404 permit (USACE) for activities in or around Visitacion Creek as part of landfill closure requirements of the RWQCB.

- Bay Trail Review (Association of Bay Area Governments) requested by future developers of the Baylands.
- Air quality permits (BAAQMD) requested by future developers of and specific uses within the Baylands requiring such permits.
- Approval for construction of the Geneva Avenue bridge crossing over the existing Caltrain right-of-way (California Public Utilities Commission) as requested by future developers of the Baylands.
- Approval of utility-scale battery storage facility requested by developers of the Baylands (California Independent System Operator).
- Approval for development of an electrical substation, along with electrical facilities, undergrounding of existing overhead electrical lines within the Baylands, construction of new underground electrical facilities to serve new development, connections of facilities to the existing Pacific Gas and Electric (PG&E) Martin Substation, and improvements within the Martin Substation (California Public Utilities Commission) as requested by PG&E.
- Encroachment permits for:
    - The northerly extension of Sierra Point Parkway and the Bay Trail adjacent to the existing US 101 southbound on- and off-ramps, as well as any other construction activities that need to occur within the California Department of Transportation right-of-way (Caltrans);
    - Construction of recycled water lines within the City of South San Francisco; and
    - Construction of a gen-tie electrical line within Geneva Avenue within the City of Daly City.
    - Any grading, construction, or maintenance activity within the right-of-way owned by the SFPUC.
- Encroachment permits, should any construction be required within the right-of-way owned by the Peninsula Corridor Joint Powers Board (Caltrain).
- Required approvals for location, design, and construction of a middle school to serve Baylands students (State of California and Bayshore School District).

3.5 REFERENCES

Baylands Development, Incorporated. 2025. *The Baylands Specific Plan*. January 2025.

Biohabitats. 2023. *Brisbane Baylands Open Space Adaptive Management Plan*. January 2023.

Biohabitats. 2023. *The Baylands Biological Assessment*. January 2023.

Biohabitats. 2023. *The Baylands Butterfly Protection Plan*. January 2023.

Biohabitats. 2023. *The Baylands Habitat Assessment*. January 2023.

Biohabitats. 2023. *The Baylands Marsh Wildlife & Habitat Protection Plan*. January 2023.

Biohabitats. 2023. *The Baylands Wetland Delineation Report*. January 2023.

Biohabitats. 2023. *The Baylands Wetland Mitigation Plan*. January 2023.

BKF Engineers in collaboration with Brown and Caldwell, Geosyntec, ENGEO, OJB, Biohabitats, Radius Design, and Meyers+. 2023. *The Baylands Infrastructure Report*. January 27, 2023.

City of Brisbane. 2020. *Circulation Element General Plan*. Amended January 2020. ~~https://www.brisbaneca.org/sites/default/files/fileattachments/community_development/page/2401/006_chaptervi-circulationelement.pdf~~ https://www.brisbaneca.gov/DocumentCenter/View/613/Chapter-VI-Circulation-Element-PDF.

EKI. 2023. *Hydraulic Modeling Evaluation for the Brisbane Baylands Conceptual Water System – Technical Memorandum*. April 4, 2023.

Federal Highway Administration (FHWA). No Date. Road Design: 15. Well Designed Right–Turn Slip Lanes. https://safety.fhwa.dot.gov/saferjourney1/Library/countermeasures/15.htm.

Fehr & Peers. 2024. *Baylands Safe Routes to School Study*. August 2024.

Fehr & Peers. 2024. *Bayshore Mobility Plan*. November 2024.

GI Energy. 2021. *Meeting Measure JJ Requirements through Solar PV and Energy Storage – Brisbane Baylands*. November 2020, Revised May 2021.

Integral Group. 2015. *Sustainability Framework for the Baylands Final Report*. October 2015. Accepted by the City Council November 5, 2015.

Page & Turnbull. 2020. *Baylands Bayshore Roundhouse Stabilization and Rehabilitation Plan*. November 17, 2020.

SamTrans. 2024. *Bus Stop Improvement Plan*. April 2024. https://www.samtrans.com/projects/bus-stop-improvement-plan.

Thornton Tomasetti Inc. 2021. *The Baylands Energy Plan*. May 2021.

CHAPTER 4 ENVIRONMENTAL SETTING, IMPACTS, AND MITIGATION MEASURES

4.1 INTRODUCTION TO THE ANALYSIS

This chapter focuses upon evaluating and mitigating the significant physical environmental effects of the Baylands Specific Plan ("Specific Plan") and other project components (together, referred to as the "2025 Specific Plan project") described in Chapter 3, *Project Description*. For each environmental issue addressed in detail, this chapter describes the physical environmental setting (baseline), as well as the physical environmental changes (impacts) that would directly or indirectly result from the 2025 Specific Plan project. Finally, for each significant impact, this chapter identifies mitigation measures to avoid or reduce significant environmental effects along with an evaluation of the effectiveness of these mitigation measures and any environmental impacts that may result from their implementation.

The evaluations contained in this chapter reasonably assume that Baylands construction and development adheres to applicable federal, state, and local regulatory and permitting requirements.

4.1.1 STRUCTURE OF ENVIRONMENTAL ANALYSES

Analysis of the Baylands Specific Plan's environmental impacts are organized as follows:

4.2 Effects Found Not to Be Significant
4.3 Land Use and Planning Policies
4.4 Population and Housing
4.5 Aesthetic and Visual Resources
4.6 Biological Resources
4.7 Cultural Resources and Tribal Cultural Resources
4.8 Transportation
4.9 Air Quality
4.10 Greenhouse Gas Emissions
4.11 Energy Resources
4.12 Noise and Vibration
4.13 Hazards and Hazardous Materials
4.14 Hydrology and Water Quality
4.15 Geology, Soils, and Seismicity
4.16 Utilities, Service Systems, and Water Supply
4.17 Public Services and Facilities
4.18 Recreational Resources
4.19 Wildland Fire
4.20 Significant Unavoidable Effects
4.21 Program EIR Mitigation Measures

Sections 4.3, *Land Use and Planning Policies*, through 4.19, *Wildland Fire*, include the following main subsections:

- *Introduction*, outlining the issues addressed in the section along with definitions of technical terms used in the section.
- *Environmental Setting*, describing existing physical environmental conditions (environmental baseline) related to the environmental topic being analyzed.
- *Regulatory Context for Baylands Development*, describing federal, state, regional, and local laws, plans, programs, and regulations that provide requirements for avoiding or reducing environmental impacts and would also shape implementation of the 2025 Specific Plan project.
- *Relevant Specific Plan Provisions*, describing relevant provisions of the Baylands Specific Plan that would reduce or avoid significant environmental effects.
- *Significance Criteria*, setting forth the thresholds of significance used to determine whether the 2025 Specific Plan project's impacts would be "significant" and therefore require mitigation.
- *Project Impacts and Mitigation Measures*, setting forth and analyzing one or more impacts for each identified significance threshold. The analysis of each impact provides the following:
    - A description of the methodology used to analyze the direct and indirect physical environmental effects and determine the significance of impacts that would result from the 2025 Specific Plan project.
    - Analysis of the physical environmental effects that would directly or indirectly result from the 2025 Specific Plan project.
    - A significance conclusion comparing the physical environmental effects that would result from the 2025 Specific Plan project relative to the applicable threshold of significance. The following classifications are used to describe whether resulting impacts would be significant (and therefore require mitigation) or less than significant (and therefore not require mitigation):

CEQA Guidelines Section 15382 Significant Effect on the Environment (Significant Impact)

"'Significant effect on the environment' means a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant."

Significant impacts require implementation of feasible mitigation measures, whereas mitigation measures are not provided for less than significant impacts.

- **No Impact.** No effect on the physical environment would occur, and mitigation measures are not required.
- **Less than Significant Impact.** One or more physical environmental effects would occur that would not reach or exceed the defined significance threshold based on the specified methodology. Therefore, no mitigation is required.
- **Significant Impact.** The impact would reach or exceed the defined significance threshold based on the specified methodology and therefore require mitigation.

An initial significance conclusion is made for each threshold comparing the physical environmental effects that would result from development of the 2025 Specific Plan project with the reasonable assumption that such development complies applicable laws, plans, programs, and regulatory requirements, as well as Specific Plan requirements.

- *Relevant Program EIR Mitigation Measures*. Relevant Program EIR mitigation measures are identified and evaluated in relation to their ability to:
  - Avoid the significant impact;
  - Minimize the severity of the significant impact;
  - Rectify the significant impact by repairing, rehabilitating, or restoring the affected physical environment;

Consideration and Discussion of Mitigation Measures (CEQA Guidelines Sections 15126.4, 15364, and 15091)

For each identified significant effect, CEQA Guidelines Section 15126.4(a)(1) requires the EIR to "describe feasible measures which could minimize significant adverse impacts, including where relevant, inefficient and unnecessary consumption of energy." CEQA Guidelines Section 15364 defines "feasible" as "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors."

Formulation of mitigation measures cannot be deterred; however, the specific details of a mitigation measure may be developed after project approval when it is impractical or infeasible to include those details if the lead agency (1) commits itself to the mitigation, (2) adopts specific performance standards the mitigation will achieve, and (3) identifies the type(s) of potential action(s) that can feasibly achieve the performance standard and that will be considered, analyzed, and potentially incorporated into the mitigation measure.

Mitigation measures must be "fully enforceable through permit conditions, agreements, or other legally binding instruments," including a plan, policy, or regulation (CEQA Guidelines Section 15091(d)).

Mitigation measures are not required for less than significant impacts. Mitigation measures must also be consistent with applicable constitutional requirements, including the following (CEQA Guidelines Section 15126.4(a)(4)):

A. There must be a nexus between the mitigation measure and a legitimate governmental interest; and
B. The mitigation measure must be "roughly proportional to the impacts of the project."

- Reduce or eliminate the significant impact over time through preservation and/or maintenance operations during the life of the development permitted by the Specific Plan; and/or
- Compensate for the impact by replacing or providing substitute resources or environmental conditions.[76]

- *Significance Conclusion with Implementation of Program EIR Mitigation Measures.* Discussion of whether mitigation measures carried forward from the Program EIR would avoid or reduce significant impacts to less than significant is provided. The following classifications are used to describe the significance of impacts following implementation of Program EIR mitigation measures:
  - **Less than Significant with Mitigation Incorporated.** If implementation of mitigation measures carried forward from the Program EIR would reduce the significant impact to a less than significant level, the impact is considered to be *less than significant with mitigation incorporated*.
  - **Significant.** If mitigation measures carried forward from the Program EIR would not reduce the significant impact to less than significant, the impact would remain *significant*.
- *Additional mitigation measures*. Should implementation of mitigation measures carried forward from the Program EIR not reduce the significant impact to less than significant, additional mitigation measures are proposed.

Consideration and Incorporation of Program EIR Mitigation Measures

Section 4.21 identifies all Program EIR mitigation measures along with an evaluation of each measure to determine its applicability to the 2025 Specific Plan project. Each Program EIR mitigation measure is identified as being:

- Implemented by Baylands development as described in Chapter 3, *Project Description* (e.g., the content of the Specific Plan incorporates the mitigation measure), and is therefore considered in this EIR's pre-mitigation impact conclusions;
- Applicable to the current project and to be carried forward into the environmental analyses of this Chapter; or
- Not applicable to the 2025 Specific Plan project.

Section 4.21 provides specific explanations for these determinations for each Program EIR mitigation measure.

Section 4.21 also indicates proposed revisions, if any, for each Program EIR mitigation measure carried forward into the Program EIR in underline/~~strikeout~~ text along with the reasons for such modifications.

[76] See Section 4.21 for a listing of all Program EIR mitigation measures and discussion as to whether each measure was carried forward or not carried forward from the Program EIR.

- *Significance Conclusion with Implementation of Program EIR Mitigation Measures.* Such conclusions are based on analysis of the effectiveness of identified Program EIR and additional mitigation measure(s) to avoid or reduce significant impacts to less than significant. The following classifications are used to describe the significance of impacts following implementation of all prescribed mitigation measures:
  - **Less than Significant with Mitigation Incorporated –** If implementation of Program EIR and additional mitigation measures would reduce the significant impact to less than significant, the impact is considered to be *less than significant with mitigation incorporated*.
  - **Significant and Unavoidable Impact –** If mitigation measures would not reduce the impact to a less than significant level, the impact is considered to be *significant and unavoidable*.

  The final determination regarding the adoption of mitigation measures and alternatives is made by the Lead Agency's decision-makers.
- *Analysis of environmental impacts that would result from mitigation measures.* Where relevant, analysis of the significance of any physical environmental effects of mitigation measures is provided.

- *References*, listing the background information used to prepare the analysis in the section.

This Draft EIR identifies thresholds of significance, impacts, and mitigation measures with an alpha-numeric designation that corresponds to the environmental topic addressed in each section (e.g., "TRA" for Transportation). The numbering of thresholds, impacts, and mitigation measures is as follows:

- Significance thresholds are provided with numbers related to the section in which they are found. For example, significance thresholds in Section 4.8, *Transportation*, are numbered **Threshold TRA-1** through **Threshold TRA-4**.
- Impacts are numbered based on the environmental threshold they address. For example, **Impact TRA-1** provides analysis in relation to **Threshold TRA-1**.
- Mitigation measures are numbered based on the impact number they address. For example, **Mitigation Measure MM TRA-1** addresses **Impact TRA-1**. Where more than one mitigation measure is proposed for an impact, each mitigation measure is numbered to correspond to the impact and threshold that it addresses. For example, **Mitigation Measure MM TRA-2a** and **Mitigation Measure TRA-2b**, both address traffic **Impact TRA-2**, which analyzes significant in relation to **Threshold TRA-2**.

4.1.2 ENVIRONMENTAL BASELINES USED IN THIS EIR

"Environmental setting" subsections in this chapter describe existing conditions pursuant to California Environmental Quality Act (CEQA) Guidelines Section 15125, which states follows:

(a) An EIR must include a description of the physical environmental conditions in the vicinity of the project. This environmental setting will normally constitute the baseline physical conditions by which a lead agency determines whether an impact is significant. The description of the environmental setting shall be no longer than is necessary to provide an understanding of the significant effects of the proposed project and its alternatives. The purpose of this requirement is to give the public and decision makers the most accurate and understandable picture practically possible of the project's likely near-term and long-term impacts.

(1) Generally, the lead agency should describe physical environmental conditions as they exist at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced, from both a local and regional perspective. Where existing conditions change or fluctuate over time, and where necessary to provide the most accurate picture practically possible of the project's impacts, a lead agency may define existing conditions by referencing historic conditions, or conditions expected when the project becomes operational, or both, that are supported with substantial evidence. In addition, a lead agency may also use baselines consisting of both existing conditions and projected future conditions that are supported by reliable projections based on substantial evidence in the record.

(2) A lead agency may use projected future conditions (beyond the date of project operations) baseline as the sole baseline for analysis only if it demonstrates with substantial evidence that use of existing conditions would be either misleading or without informative value to decision-makers and the public. Use of projected future conditions as the only baseline must be supported by reliable projections based on substantial evidence in the record.

(3) An existing conditions baseline shall not include hypothetical conditions, such as those that might be allowed, but have never actually occurred, under existing permits or plans, as the baseline.

CEQA Guidelines and case law recognize that the date for establishing an environmental baseline cannot be rigid (see CEQA Guidelines Sections 15146, 15151, and 15204). The Notice of Preparation (NOP) for this Draft EIR was published on February 20, 2020, and a revised NOP was circulated on April 26, 2023. In some instances, information is presented in the environmental setting that differs from the precise time of the recirculated NOP. Environmental conditions may vary from year to year, and in some cases, it is necessary to consider conditions over a range of time. Descriptions of the environmental setting for each environmental issue area can be found in Sections 4.3, *Land Use and Planning Policies*, through 4.19, *Wildland Fire*.

4.2 EFFECTS FOUND NOT TO BE SIGNIFICANT AND DISMISSED FROM FURTHER REVIEW

Pursuant to CEQA Guidelines Section 15128,[77] the following describes the analysis undertaken to conclude that certain physical environmental effects of Baylands Specific Plan development would not be significant and would therefore not require additional detailed environmental analysis in the EIR.

4.2.1 AGRICULTURAL AND FORESTRY RESOURCES

CEQA Guidelines Appendix G Questions:

Would the project:

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)[78]), timberland (as defined by Public Resources Code Section 4526[79]), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g)[80])?

The Baylands does not contain any Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, nor does such land exist within the City of Brisbane. In addition, no forestry resources occur on or in the vicinity of the Baylands or within the City of Brisbane.

[77] CEQA Guidelines Section 15128 states that an EIR "shall contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the EIR."

[78] California Public Resources Code Section 12220(g) defines forest as "land that can support 10 percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits."

[79] Public Resources Code Section 4526 defines Timberland as "land, other than land owned by the federal government and land designated by the board as experimental forest land, which is available for, and capable of, growing a crop of trees of a commercial species used to produce lumber and other forest products, including Christmas trees. Commercial species shall be determined by the board on a district basis."

[80] Government Code Section 51104 provides a process to facilitate establishment of timberland preserve zones pursuant to the Z'berg-Warren-Keene-Collier Forest Taxation Reform Act of 1976, which requires counties and cities to provide for the zoning of land used for growing and harvesting timber. Timberland preserve zones establish a 10-year restriction on the use of land for growing and harvesting timber, as well as compatible uses approved by the county (or city). In return, taxation of land within a timberland preserve zones is based only on the land's value for such use.

The Baylands and adjacent lands are designated as "Urban and Built-up Land" according to the California Department of Conservation, California Important Farmland Finder mapping system (2016). Urban and Built-up Land is characterized as being occupied by structures with a building density of at least one unit to 1.5 acres, or approximately six structures to a 10-acre parcel. Common examples include residential, industrial, commercial, institutional facilities, cemeteries, airports, golf courses, sanitary landfills, sewage treatment facilities, and water control structures.

The Baylands site is not designated or zoned for agricultural or forestry use by the City of Brisbane, nor is the site subject to a Williamson Act contract. There are no lands within or adjacent to the Baylands that would meet the definition of timberland or could qualify for establishment of a timberland preserve. Thus, the Specific Plan would have no impact on agricultural or forestry resources, and no impacts related to agricultural or forestry resources.

4.2.2 MINERAL RESOURCES

CEQA Guidelines Appendix G Questions:

Would the project:

a) Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?

b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

Neither the City's General Plan nor the State of California have identified the Brisbane Baylands or any surrounding land as a potential location for extraction or management of mineral resources of state-wide, regional, or local significance. Therefore, no impacts on mineral resources would result from the Baylands Specific Plan.

4.3 LAND USE AND PLANNING POLICIES

4.3.1 INTRODUCTION

a. Overview

This section describes land use characteristics of the Baylands and surrounding lands and examines whether the 2025 Specific Plan project would cause a significant environmental impact by:

- Eliminating or reducing existing levels of connectivity within Brisbane or other communities; or
- Conflicting with a relevant land use plan, policy, or regulation that has been adopted for the purpose of avoiding or mitigating an environmental effect, including the Brisbane General Plan, Plan Bay Area 2050, MTC Transit-Oriented Communities Policy (Resolution No. 4530), the San Francisco Bay Plan, or the Airport Land Use Compatibility Plan for the Environs of San Francisco International Airport (see CEQA Guidelines Section 15125(d)).

b. Definitions

Airport Influence Area encompasses the area that is flown by an aircraft to or from an airport at an altitude of 10,000 feet or less above mean sea level a minimum of once weekly. Unless otherwise specified, "Airport Influence Area" refers to the Airport Influence Area of San Francisco International Airport (SFO).

Density/Intensity of use refers to the relative concentration of development. Typically, "density" refers to residential development and is expressed as the number of dwelling units per acre of land, while "intensity" refers to non-residential or mixed-use development and is expressed as the ratio of building area to land area and called floor area ratio (FAR).

Existing Land Use consists of the use of land at the time of the baseline used in this Draft EIR for analysis of land use and policies, which corresponds to the public review period for the revised Notice of Preparation, spring 2023.

General Plan refers to the comprehensive, long-term plan for the physical development of a city or county adopted pursuant to the requirements of California Government Code Sections 65300–65303.4. Unless otherwise specified, "General Plan" refers to the officially adopted General Plan of the City of Brisbane as amended.

Permitted Land Uses refer to the specific uses consistent with the applicable General Plan and zoning (or Specific Plan) designations. Unless otherwise specified, "permitted land uses" refers to the land uses permitted or conditionally permitted by the Baylands Specific Plan.

Planned Land Use refers to the uses described in General Plan land use designations. Unless otherwise specified "planned land uses" refers to the City of Brisbane's General Plan land use designations as amended.

Site-Specific Development Project refers to future development proposals for individual portions of the Baylands.

Transit Priority Area is defined in California Public Resource Code Section 21099 as an area within one-half mile of an existing major transit stop of a planned major transit stop that is scheduled to be completed within the planning horizon included in a Transportation Improvement Program or applicable regional transportation plan.

Land Use Compatibility

"Land use compatibility" refers to the characteristics of different uses or activities that permit them to be located near each other without conflict. Because it is not a distinct CEQA significance threshold, the extent to which Baylands development would or would not be "compatible" with adjacent land uses is addressed in relation to the following specific physical environmental effects:

- **Aesthetics and Visual Resources** – impacts on scenic vistas, nighttime lighting, and daytime glare.
- **Air Quality** – health effects on sensitive uses (e.g., residential) due to emissions of criteria pollutants and toxic air contaminants.
- **Hazards and Hazardous Materials** – construction and post-construction activities that could result in hazards to the public.
- **Hydrology and Water Quality** – flooding, drainage, and water quality conditions.
- **Land Use** – loss of connectivity between established communities.
- **Noise and Vibration** – temporary or permanent increases in ambient noise and vibration levels.
- **Transportation** – impacts related to circulation and access, including the potential for hindering normal or emergency access.

Zoning refers to the written regulations and laws that implement the City's General Plan and define how property in specific geographic zones can be used pursuant to the planning and zoning law of the State of California, as contained in Government Code Title 7, Division 1, Chapter 4 (commencing with Section 65800). Zoning specifies the permitted uses within zones and regulates lot size and placement, bulk, and height of structures. Unless otherwise specified, "zoning" refers to regulations set forth in Title 17 of the Brisbane Municipal Code as amended.

4.3.2 PHYSICAL ENVIRONMENTAL SETTING

a. Baseline

Release of the second Notice of Preparation during Spring 2023 is used as the baseline to describe existing conditions and for analysis of the Specific Plan's impacts in relation to Land Use and Planning Policies.

b. Existing Land Uses within the Baylands

Natural features within the Baylands include Brisbane Lagoon, Visitacion Creek, and Icehouse Hill. The existing 121.8-acre lagoon includes water area and lagoon wetland area. Visitacion Creek bisects the eastern half of the Baylands as an open channel and includes the waterway and bank between US Highway 101 and Tunnel Avenue. To the west of the rail corridor is Icehouse Hill, most of which consists of undisturbed natural area.

While the Baylands is surrounded on three sides by residential, commercial, and industrial development within Brisbane, San Francisco, and Daly City, the site itself is largely characterized by disturbed open lands that were formerly part of the Brisbane Landfill (east of the rail corridor) and the former SPRR maintenance yard (west of the rail corridor), with remnant railroad buildings, such as the Roundhouse and the Machinery & Equipment building. The historic significance of these railyard remnants is described in detail in Draft EIR Section 4.7, *Cultural and Tribal Cultural Resources*.

The Brisbane Bayshore Industrial Park, which contains warehousing and supply-related service uses that occupy the area east of Bayshore Boulevard along Industrial Way. Mission Blue Nursery, a native plant nursery operated by the Friends of San Bruno Mountain, is also present within the western portion of the Baylands.

Since the landfill's closure in 1967, the eastern portion of the Baylands has been used as a repository and recycling area for materials from construction sites in the region, such as sand, dirt, and gravel. Soil recycling operations have ceased operation; Brisbane Recycling Company continues to operate on the former landfill. Several interim uses operate along Tunnel Avenue south of Golden State Lumber.

The City's existing corporation yard is located along Tunnel Avenue south of the Kinder Morgan tank farm on land leased from Kinder Morgan.

The Bayshore Caltrain station platform is located in the northernmost portion of the Baylands, including a parking lot west of Tunnel Avenue.

Existing Land Uses Anticipated to Remain within the Baylands

The Specific Plan area encompasses certain existing uses that are not expected to change their use or expand over time. These uses, which the Specific Plan designates as "Existing Use Area," include:

- Satellite facilities associated with the Recology solid waste transfer facility located along Tunnel Avenue south of the future Geneva Avenue extension;
- Golden State Lumber, which is a 5.3-acre lumberyard located along Tunnel Avenue;

- The 23.5-acre Kinder Morgan Energy Bulk Terminal (tank farm) is located near the center of the Baylands between the Caltrain line and Tunnel Avenue. This fuel storage facility supplies jet fuel for aircraft at San Francisco International Airport, located south of Brisbane;
- A Bayshore Sanitary District pumping facility; and
- Machinery & Equipment, Inc., which buys and sells used industrial machinery, is located in the historic Pacific Fruit Express/Visitacion ice manufacturing plant (commonly referred to as the Machinery & Equipment building).

The existing Mission Blue Nursery is proposed to be relocated from its current location west of the Caltrain rail line to the site of the existing police shooting range on Icehouse Hill.

Following its relocation, the existing Fire Station #81 will be used for firefighter training purposes.

Uses Adjacent to the Baylands Specific Plan

Adjacent to the northeastern portion of the Baylands is the 44.2-acre Recology San Francisco solid waste management facility, which is located partly within both Brisbane and San Francisco.

Outside of the Baylands are a variety of residential, commercial, and industrial uses. To the north within San Francisco is the former Schlage Lock factory, which is currently undergoing site remediation for development of 1,679 dwelling units and up to 46,000 square feet of commercial use as part of a project called "Baylands North." The Bayview/Hunters Point Redevelopment Project, which has been approved for development of 10,250 dwelling units and 6.4 million square feet of commercial use, is also located within San Francisco northeast of the Baylands across US Highway 101.

Along Bayshore Boulevard, uses to the northwest of the Baylands include San Francisco's Visitacion Valley residential neighborhood, and to the west, land uses include residential, commercial, and manufacturing uses within Daly City, and the PG&E Martin substation. Also located within Daly City, approximately five blocks west of the Baylands along Geneva Avenue is the Cow Palace, an indoor arena used for public events such as concerts, sporting events, and conventions. The Northeast Ridge residential area in Brisbane is south of the PG&E substation, and the 250-acre Crocker Industrial Park is nestled between the Northeast Ridge area and Central Brisbane. Central Brisbane is located at the southwest edge of the Baylands, west of Brisbane Lagoon. Land uses in Central Brisbane are primarily residential, with retail located along Old Country Road and Visitacion Avenue.

Southeast of the Baylands and east of US Highway 101 is the Sierra Point Business Center, which currently encompasses a number of life science and office buildings, two hotels (Doubletree Hotel and Homewood Suites), and the Brisbane Marina. Few undeveloped

properties remain within the Sierra Point subarea with recent approvals and construction of a biotech campus (The Shore at Sierra Point) consisting of 540,000 square feet in five buildings and an above-ground parking structure on approximately 23 acres along the south edge of Sierra Point and a three-building 560,000 square foot biotech campus (Genesis-Marina) on approximately 9 acres at the northwestern corner of Sierra Point.

In addition to the existing buildings and projects currently under construction are two proposed projects—Sierra Point Towers Project and the Sierra Point Hotel and Life Science Project. The Sierra Point Towers Project consists of two new life science buildings totaling approximately 811,000 square feet, an amenity building, and a new parking structure on a 16-acre site in the middle of the subarea that is currently developed with two existing office buildings that will remain. The Sierra Point Hotel and Life Science Project consists of a 600-room hotel and 657,000 square foot life science tower on a 6-acre site adjacent to the Brisbane Marina.

4.3.3 REGULATORY CONTEXT FOR BAYLANDS DEVELOPMENT

a. Federal Laws, Plans, Programs, and Regulations

There are no federal laws, plans, programs, or regulations addressing land use planning policy issues that would affect Baylands development.

b. State Laws, Plans, Programs, and Regulations

General Plan Requirements

State law (Government Code 65302, et seq.) requires that every California city and county prepare and adopt a "comprehensive, long-term general plan for the physical development of the county or city, and of any land outside its boundaries which in the planning agency's judgment bears relation to its planning." According to State guidelines for the preparation of general plans, the role of the General Plan is to establish a document that will "… act as a 'constitution' for development, the foundation upon which all land use decisions are to be based. It expresses community development goals and embodies public policy relative to the distribution of future land use, both public and private."

In addition, the General Plan serves to:

- Identify land use, circulation, environmental, economic, and social goals and policies for the City and its surrounding planning area as they relate to land use and development;
- Provide a framework within which the City's Planning Commission and City Council can make land use decisions;

- Provide citizens the opportunity to participate in the planning and decision-making process affecting the City and its surrounding planning area; and
- Inform citizens, developers, decision-makers, and other agencies, as appropriate, of the City's basic rules that will guide both environmental protection and land development decisions within the City and surrounding planning area.

Government Code Section 65860 requires that a city's zoning ordinance be consistent with its General Plan, thus requiring that the various land use permitted by a community's zoning be "compatible with the objectives, policies, general land uses, and program specified in the plan."

Specific Plan Requirements

Government Code Section 65451 sets forth the following requirements for specific plans:

(a) A specific plan shall include a text and a diagram or diagrams, which specify all of the following in detail:

  (1) The distribution, location, and extent of the uses of land, including open space, within the area covered by the plan.

  (2) The proposed distribution, location, and extent and intensity of major components of public and private transportation, sewage, water, drainage, solid waste disposal, energy, and other essential facilities proposed to be located within the area covered by the plan and needed to support the land uses described in the plan.

  (3) Standards and criteria by which development will proceed, and standards for the conservation, development, and utilization of natural resources, where applicable.

  (4) A program of implementation measures, including regulations, programs, public works projects, and financing measures necessary to carry out paragraphs (1), (2), and (3).

(b) The specific plan shall include a statement of the relationship of the specific plan to the general plan.

Per Government Code Section 65452, a specific plan "may address any other subjects which in the judgment of the planning agency are necessary or desirable for implementation of the general plan." Government Code Section 65454 requires specific plans to be consistent with the agency's adopted General Plan.

c. Regional Plans, Programs, and Regulations

Plan Bay Area 2050

Plan Bay Area 2050 is the current long-range Regional Transportation Plan (RTP) and Sustainable Communities Strategy (SCS) for the nine-county San Francisco Bay Area jointly prepared and adopted by the Association of Bay Area Governments (ABAG) and the Metropolitan Transportation Commission (MTC).[81] Plan Bay Area 2050 discusses how the Bay Area will grow through 2050 and describes the growth pattern, transportation needs and supporting transportation investment strategy, and other key actions needed to address GHG emission reduction, provide needed housing, preserve the character of communities throughout the region, facilitate mobility, and adapt to the challenges of future population growth. The Sustainable Communities Strategy lays out how the region will meet GHG reduction targets set by CARB, which call for a regional 10 percent per-capita vehicular GHG emissions reduction by 2020 and 19 percent by 2035 from a 2005 baseline (CARB 2018).

A central GHG emissions reduction strategy of Plan Bay Area 2050 is to concentrate future growth in Priority Development Areas and Transit Priority Areas. To be eligible for designation as a Priority Development Area, an area must be within an existing community, near existing or planned fixed transit or served by comparable bus service and planned for more housing. A Transit Priority Area is an area within one-half mile of an existing or planned major transit stop such as a rail transit station, a ferry terminal served by transit, or the intersection of two or more major bus routes (MTC and ABAG 2013). The Specific Plan area is located in both a Priority Development Area and a Transit Priority Area.

Plan Bay Area 2050 can be found at:

https://mtc.ca.gov/planning/long-range-planning/plan-bay-area-2050

Plan Bay Area 2050 presents a 30-year plan comprised of 35 strategies to improve housing, the economy, transportation, and the environment across the Bay Area's nine counties: Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma. This long-range plan lays out a $1.4 trillion vision for a more equitable and resilient future for Bay Area residents. Overall, Plan Bay Area 2050:

- Details housing and economic strategies ("land use") to invest $702 billion in expected revenues to accommodate 2.7 million new persons, 1.4 million new households, 1.5 new forecasted housing units, and 1.4 million new jobs between 2015 and 2050;

[81] ABAG and MTC are empowered by state law to assess regional housing needs and provide a specific allocation of housing needs for all economic segments of the community for each of the region's counties and cities. The determination of each city's and county's share of regional housing needs that is required by law to be reflected in municipal general plan housing elements is based on the growth projections of the RTP/SCS.

- Details transportation strategies to invest $579 billion in expected revenues from federal, State, regional, and local sources over the next 30 years;
- Details environmental strategies to invest $102 billion in expected revenues to protect the region from at least 2 feet of future permanent sea level rise inundation, reduce climate emissions, and maintain and expand the region's parks and open space system; and
- Complies with Senate Bill (SB) 375, the State's SCS law, which requires integration of land use and transportation planning to reduce per-capita passenger vehicle GHG emissions by 2035 and provide adequate housing for the region's forecast of 2.7 million new persons and 1.4 million new households.

Plan Bay Area 2050 Objectives, Guiding Principles, and Themes

Plan Bay Area 2050's adopted vision is to "ensure by the year 2050 that the Bay Area is affordable, connected, diverse, healthy, and vibrant for all." After this vision was adopted, the MTC and ABAG planning team developed 35 strategies along with five guiding principles or themes. Together, Plan Bay Area 2050's guiding principles and performance metrics serve as the basis for the following objectives:

1. Address climate change by reducing carbon dioxide emissions; specifically, meet or exceed a 19 percent reduction in per-capita emissions from cars and light-duty trucks by 2035 relative to 2005 levels.
2. House 100 percent of the region's projected growth by income level, and without increased in-commuters to the Bay Area over the baseline conditions.
3. Ensure that all current and future Bay Area residents and workers have sufficient housing options they can afford by reducing housing and transportation costs and by producing and preserving more affordable housing.
4. Support an expanded, well-functioning, safe, and reliable multimodal transportation system by improving access to destinations.
5. Support an inclusive region where people from all backgrounds, abilities, and ages can remain in place with full access to the region's assets and resources by creating more inclusive communities and reducing the risk that Bay Area residents are displaced.
6. Conserve the region's natural resources, open space, clean water, and clean air with the intent of improving health of Bay Area residents and workers and improving the health of the environment locally and globally.
7. Support the creation of quality job opportunities for all and ample fiscal resources for communities by more evenly distributing jobs and housing in the Bay Area.

CROSS-CUTTING THEMES	RESILIENCE AND EQUITY
Vision	To ensure by the year 2050 that the Bay Area is affordable, connected, diverse, healthy and vibrant for all.
GUIDING PRINCIPLE	DESCRIPTION
AFFORDABLE	All Bay Area residents and workers have sufficient access to housing options they can afford — households are economically secure.
CONNECTED	An expanded, well-functioning, safe and multimodal transportation system connects the Bay Area — fast, frequent and efficient intercity trips are complemented by a suite of local transportation options, connecting communities and creating a cohesive region.
DIVERSE	The Bay Area is an inclusive region where people from all backgrounds, abilities, and ages can remain in place with access to the region's assets and resources.
HEALTHY	The region's natural resources, open space, clean water and clean air are conserved — the region actively reduces its environmental footprint and protects residents from environmental impacts.
VIBRANT	The Bay Area region is an innovation leader, creating job opportunities for all and ample fiscal resources for communities.

SOURCE: Adopted by MTC and ABAG in September 2019.

Plan Bay Area 2050 is defined by four elements: housing, economy, transportation, and environment. Within each, there are 11 central themes under which the 35 strategies described below are nested. Equity and resilience—the cross-cutting themes of Plan Bay Area 2050—are integrated into each element, theme, and strategy.

Housing

Plan Bay Area 2050's housing strategies provide for accommodating 1.5 million new housing units over the next 30 years. These strategies reflect a commitment to "focused growth" while also protecting current residents from displacement, preserving existing affordable housing, and producing new housing to secure long-term affordability within the Bay Area.

- **Protect and Preserve Affordable Housing.** Plan Bay Area 2050 recognizes that the depth of the Bay Area's housing crisis is so great that it is unlikely that increased housing construction alone could ensure every Bay Area resident has access to a safe and affordable home. Protecting and preserving existing affordable housing is thus critical.

Strategies build upon existing legislation to protect renters from discriminatory actions or untenable rent increases to limit displacement. Strategies also include an investment to ensure that today's affordable housing remains affordable.

- **Spur Housing Production at all Income Levels.** The Bay Area has historically fallen short of producing housing for all income levels, particularly low- and moderate-income households. Plan Bay Area 2050 notes that spurring housing production at all income levels "will likely require a mix of land use reforms, new requirements for housing developers, and financial incentives to… produce housing affordable to low- and moderate-Income families." Plan Bay Area 2050 proposes achieving sufficient housing to accommodate projected population growth through a greater mix of housing densities and types within priority development and transit areas, increased funding for construction of deed-restricted affordable housing, and requirements for 10–20 percent of new market-rate housing developments with five or more units to be affordable to low-income households.
- **Create Inclusive Communities.** Strategies that increase access to wealth-building opportunities, such as home ownership or owning a personal business, as well as leveraging public and community-owned land for housing and service provision, are proposed with the intent of improving conditions for "Black, indigenous, and Latinx people who have been historically excluded from such opportunities."

Economy

Plan Bay Area 2050's economic strategies provide for accommodating a forecasted 1.4 million new jobs over the next 30 years by concentrating development of new employment centers within the existing urban development footprint and close to housing and transit stations.

- **Improve Economic Mobility.** Plan Bay Area 2050 addresses the types of jobs available to Bay Area residents that have made the traditional path to the middle class through blue-collar manufacturing labor more elusive due to a cycle of higher-wage high tech job growth and rising housing costs increases the Bay Area's cost of living. Plan Bay Area 2050 recognizes that a stronger safety net, coupled with pathways to middle-wage jobs, is "critical to ensuring that no one is priced out of the Bay Area."
- **Shift the Location of Jobs.** Plan Bay Area 2050 addresses the Bay Area's "decades in the making" imbalance between the location of jobs and housing, a transportation system designed to meet peak hour demand, and the power of high-tech jobs being clustered in the Peninsula and South Bay.

Transportation

Plan Bay Area 2050 transportation strategies provide for carrying millions more passengers on the area's trains, ferries, buses, and roads, while also increasing telecommuting. The plan

identifies funding to operate and maintain the Bay Area's existing system of transit routes, roads and bridges; reverse pandemic-related cuts to transit service; and create a seamless transit experience. In addition, roads would be made safer for drivers, cyclists, and pedestrians through speed limit reductions and a network of protected bike lanes and trails designed for people of all ages and physical abilities. Finally, Plan Bay Area 2050 proposes investments in transit to deliver fast, frequent, and reliable service throughout the region.

- **Maintain and Optimize the Existing System.** Plan Bay Area 2050 envisions a future transit system that is maintained in good working order with transit service hours restored to pre-COVID levels and transit fares are simplified. Road-widening projects are proposed to provide short- to medium-term congestion relief before a new per-mile fee is applied on select highways with transit alternatives to help relieve congestion and significantly reduce GHG emissions.
- **Create Healthy and Safe Streets.** A well-connected "Complete Streets" network with 10,000 new miles of protected bike lanes and off-street paths is proposed, including investments in regional multi-use trails for commuting or recreation and completion of the San Francisco Bay Trail. In addition to on-street infrastructure, investments would provide bicycle parking at transit stations, pedestrian lighting, and intersection safety improvement projects to support non-motorized mobility as a safe and comfortable choice for people of all ages and abilities.
- **Build a Next-Generation Transit Network.** Plan Bay Area 2050 proposes to enhance the frequency, reliability, and capacity of existing local transit systems, including investment in bus and light rail systems. Plan Bay Area 2050 proposes new local transit lines, including heavy rail (e.g., BART, Caltrain), light rail, and bus rapid transit. A limited selection of freeway widening projects are proposed to make better use of the existing network. Plan Bay Area 2050 includes an integrated regional network of 600 miles of express lanes for express bus service and carpool trips. Plan Bay Area 2050 also links planning for freeway express lanes with strategies to implement per-mile tolling on select freeways with transit alternatives.

Priority Development Areas

Priority Development Areas serve as the basis for reducing greenhouse gas emissions and beginning to solve the region's housing crisis. Their purpose is to bring transit, jobs, and housing together in downtown areas, along major streets, and in proximity to rail stations. Because Priority Development Areas are in locations with existing transit infrastructure, they are intended to maximize use of public investments, limit impacts of new development on communities and the environment and enable people to live a car-free or car-light lifestyle. The Specific Plan area is located within a bi-county Priority Development Area along with adjacent lands in San Francisco.

Connected Community Priority Development Area VMT Reduction Policy

Priority development areas are required to adopt either citywide or area-specific VMT reduction policies/plans using either both Options A1 and A2 or both Options B1 and B2, below.

A1. Parking and Transportation Demand Ordinance

The Parking and Transportation Demand Management ordinance, code update, or related policy must provide a framework for assessing VMT impacts and planning VMT mitigation strategies as part of the review and permitting process for both new residential and commercial developments either citywide or for a specific PDA. The framework should support and align with the community's General Plan and any applicable Specific Plan and be compliant with SB 743.

Important elements must include but are not limited to:

- Defining applicability for each policy;
- Performance requirements, such as a percent reduction in single occupancy vehicle trips to a development or a target average vehicle occupancy for employee trips to an employer site;
- Process for ensuring compliance, including options that provide flexibility and offer effective parking solutions (such as reduced parking requirements, parking pricing, and parking management) and trip reduction approaches (such as vehicle trip caps, multimodal infrastructure requirements, bicycle parking, carsharing, and transit passes); and
- Process for monitoring and enforcement, including penalties for non-compliance.

A2. Transportation Impact Fee

A Transportation Impact Fee to provide a mechanism for funding multimodal infrastructure and other transportation improvements, such as corridor-level and active transportation projects (e.g., transit improvements, bicycle and pedestrian infrastructure) in addition to intersection-level improvements. Important elements of a Transportation Impact Fee include, but are not limited to:

- Assessment and description of transportation investment needs, which should be aligned with SB 743 mitigation measures;
- Estimated costs of providing the transportation improvements and list of projects eligible for impact fee funding;
- Analysis of different development types and associated fees for nexus study;
- Recommended transportation mitigation impact fees and description of how the fees will be used; and

- Plan for publicly publishing the study and annual fee reports and updating impact fees.

B1. Vision Zero/Local Road Safety Plan

A Vision Zero Plan or Local Road Safety Plan focused on improving pedestrian and bicycle safety provides a framework for identifying, analyzing, and prioritizing local roadway safety improvements tailored to local needs. It should facilitate a proactive approach to identifying safety improvement projects by completing a system-wide, data-driven analysis of collisions. A Local Road Safety Plan will be required to be eligible for future Highway Safety Improvement Program funding. Important elements of a Vision Zero/Local Road Safety Plan include but are not limited to:

- Collision database development and proactive analysis of local collision data;
- Identification of high-risk locations and collision patterns;
- Identification and prioritization of system-wide; prioritization should identify "Quick-Build" or other types of rapid implementation projects that can be accomplished, along with longer-term countermeasures; and
- Development of metrics to help secure funding and address key safety issues.

The Vision Zero and Safety Plan activities will inform the Bicycle and Pedestrian Infrastructure Action Plan (B2).

B2. Bicycle and Pedestrian Infrastructure Action Plan

A Bicycle and Pedestrian Infrastructure Action Plan consisting of a set of near-term improvements aligned with a jurisdiction's longer-term plans (e.g., Bicycle, Pedestrian, Active Transportation, Vision Zero Safety, Transportation, First/Last Mile, Corridor, PDA, or Specific Plan). The Action Plan should focus on near-term (primarily 1-3 year timeframe, and within a 5-year maximum) or quick-build infrastructure improvements for people biking, walking, or scooting. It should identify the timeline actions to bring high-priority projects to construction or implementation. For two-wheeled improvements, the action plan should prioritize Class 2 or better bikeways. In addition to stand-alone actions, Plans are encouraged to include actions that incorporate bicycle/pedestrian safety into other local processes, such as pedestrian signal timing adjustments, integration of striping that increases bike/ped safety into paving contracts, establishment of new high-visibility crosswalk standards, inter-agency coordination around school safety, etc.

Environment

Plan Bay Area 2050 prioritizes the preservation and improvement of land, air, and water in the Bay Area through strategies to conserve and better use current resources, mitigate the effects of

climate change, adapt to hazardous climate events, and minimize the impacts of disastrous seismic events.

- **Expand Access to Parks and Open Space.** Plan Bay Area 2050 proposes strategies to expand and modernize open space areas ranging from ecosystem-critical conservation to community-building gathering spaces like parks, trails, and recreation facilities. In addition, the Plan proposes using urban growth boundaries and other existing environmental protections to focus new development within the existing urban footprint or areas otherwise suitable for growth, as determined by local jurisdictions.
- **Reduce Climate Emissions from Vehicles.** The Plan seeks to mitigate emissions and reduce future climate impacts by expanding commute trip reduction programs at major employers. The plan also encourages Bay Area residents to drive less through transportation demand management initiatives.
- **Reduce Risks from Hazards.** Plan Bay Area 2050 proposes adaptation measures to address climate change and other natural hazards. Seismic and wildfire impacts include means-based financial support to retrofit residential buildings. Plan Bay Area 2050 also proposes to fund sea level rise adaptation measures along with energy upgrades to enable carbon neutrality in all commercial and public buildings are proposed.

Transit-Oriented Communities Policy (Metropolitan Transportation Commission Resolution 4530)

MTC's Transit-Oriented Communities Policy implements Plan Bay Area 2050 by creating communities around transit stations and along transit corridors that not only support transit ridership, but that are places where Bay Area residents of all abilities, income levels, and racial and ethnic backgrounds can live, work, and access services, such as education, childcare, and healthcare (MTC 2024).[82] As noted in MTC's Administrative Guidance: Transit-Oriented Communities Policy, "To ensure eligibility for OBAG 4[83] funding and any other discretionary funding that may be linked to TOC Policy compliance, jurisdictions should anticipate demonstrating compliance prior to adoption of OBAG 4, expected in 2026" (MTC 2024).

MTC's Transit-Oriented Communities Policy addresses areas within one-half mile of existing and planned fixed-guideway transit stops and stations serving regional rail, commuter rail, light-rail transit, bus rapid transit, and ferries. As presented in MTC's Administrative Guidance,

[82] For more information, visit: https://mtc.ca.gov/sites/default/files/documents/2023-03/MTC_Draft_TOC_Policy_Administrative_Guidance_Mar2023.pdf. The TOC policy provides the following definition: "Fixed guideway means a public transportation facility that uses and occupies a separate right-of-way or rail line for the exclusive use of public transportation and other high occupancy vehicles, or uses a fixed catenary system and a right of way usable by other forms of transportation. This includes, but is not limited to, rapid rail, light rail, commuter rail, automated guideway transit, people movers, ferry boat service, and fixed-guideway facilities for buses (such as bus rapid transit) and other high occupancy vehicles" (49 CFR Section 611.105).

[83] "OBAG 4" refers to the fourth round of "One Bay Area Grants."

areas within Brisbane that are within one-half mile of the Bayshore Caltrain station and T Third Muni stops must meet the requirements for a Tier 3 stop/station, except for the minimum residential density, which may use Tier 4 requirements.[84] Other SamTrans or Muni bus stops do not qualify as fixed-guideway transit with a separate right-of-way (as would be present for bus rapid transit) and therefore do not qualify for MTC's Transit-Oriented Communities designation. MTC has not included the planned Geneva Avenue bus rapid transit route identified in the 2011 San Francisco / San Mateo Bi-County Transportation Study as a transit-oriented community as of October 2024.[85]

Within Brisbane, the area within one-half mile of the Bayshore Caltrain station and T Third Muni stops is shown on **Figure 4.8-3**. However, this does not include other SamTrans or Muni bus stops, given the requirement for a fixed-guideway transit that occupies a separate right-of-way to qualify as bus rapid transit. Given this level of transit service, Brisbane is classified as a "Tier 3" city, which include the following transportation features:

- Parking maximum of one space per unit or lower for residential buildings and 2.5 spaces per 1,000 square feet or lower for commercial buildings;[86]
- A minimum of one secure bicycle parking space per dwelling unit;
- A minimum of one secure bicycle parking space per 5,000 occupied square feet for office commercial;
- Allow unbundled parking;
- Allow shared parking between different land uses;
- Adopt policies and design guidelines to comply with MTC's Complete Streets Policy;
- Complete access gap analysis for station access within a 10-minute walk;
- Identify opportunities to implement mobility hubs at locations identified by MTC.[87]

[84] As shown in Table 1, Tier 3 TOC areas in jurisdictions with 30,000 residents or fewer may use Tier 4 standards for residential density. All other requirements must meet Tier 3 standards.

[85] As presented in MTC's map of TOC communities and list of station areas and jurisdictions on MTC's TOC website, accessed here by Fehr & Peers on October 18, 2024: https://mtc.ca.gov/planning/land-use/transit-oriented-communities-toc-policy.

[86] The MTC TOC policy notes that the "standards may apply to individual projects or may be met through creation of a parking district that provides shared vehicle parking for multiple land uses within an area."

[87] Potential mobility hub locations adjacent to the project site include the Bayshore Caltrain station and other sites along Bayshore Boulevard north of Geneva Avenue: https://mtc.maps.arcgis.com/apps/webappviewer/index.html?id=2885234dd1b447a6907aba83b343a0de.

Transit-Oriented Communities Policy standards[88] applicable to the Baylands include:

- Average residential density for new development within one-half mile of a Caltrain stop.
    - Residential density of 25-35 dwellings per acre or higher measured on a block-by-block basis (applicable to communities such as Brisbane with a population less than 30,000). Average commercial development intensity for new development within one-half mile of a Caltrain stop as measured on a block-by-block basis.
    - Floor area ratio of 2.0 to 4.0 as measured on a block-by-block basis.
- Affordable housing production.
    - 15 percent of units in new residential development projects to be deed-restricted affordable to low-income households.[89]
- Ministerial Approval
    - Grant ministerial approval of residential developments with 15 percent affordable units for projects with 11+units or that exceed inclusionary or density bonus affordability requirements and do not exceed 0.5 parking spaces per unit.
- Stabilizing businesses to prevent displacement.
    - Give priority and a right of first offer to local small businesses and/or community-serving non-profits when selecting tenants for new market-rate commercial space.
- Parking management.
    - Residential Development: No minimum parking requirement to be applied with no more than 1.0 space per unit to be permitted as measured on a district-by-district basis.
    - Commercial Development: No minimum parking requirement to be applied with no more than 2.5 spaces per 1,000 square feet to be permitted as measured on a district-by-district basis.
- Transit Station Access.
    - Adopt policies and design guidelines that comply with MTC's Complete Streets Policy (MTC Resolution No. 4493).

[88] Transit-Oriented Communities Policy development standards can be found at https://mtc.ca.gov/sites/default/files/documents/2022-10/MTC_Resolution_4530.pdf.

[89] A lower percentage may be applied if a satisfactory financial feasibility analysis demonstrates the 15 percent affordability standard is not feasible.

  - Provide improvements to allow station access via a 10-mintue walk (including for people who use wheelchairs or other mobility aids) and 15-minute bicycle or bus/shuttle trip for uses within one-half mile of the transit station.

- Bicycle Parking.

  All new residential or general and neighborhood-serving commercial development to provide

  - Minimum of one secure bicycle parking space per dwelling unit
  - Minimum of one secure bicycle parking space per 5,000 occupied square feet of office space.

Complete Streets Policy (Metropolitan Transportation Commission Resolution 4493)

The goal of MTC's Complete Streets Policy is to ensure people biking, walking, rolling, and taking transit are safely accommodated within the transportation network. This policy implements Plan Bay Area 2050 strategies, including mode shift, safety, equity, VMT, and greenhouse gas emission reductions, and support local compliance with applicable complete streets-related laws, policies, and standards. This is primarily accomplished by requiring a Complete Streets checklist from projects seeking discretionary funding or funding endorsements from MTC.

Complete Streets

Complete streets are roadway facilities that are planned, designed, operated, and maintained to provide safe mobility for users of all ages and physical abilities, including bicyclists, pedestrians, transit users, and motorists and truckers, appropriate to the function and context of the facility.

The complete streets concept embodies four core principles:

1. Accommodate all modes of travel including:
   a. Safety and accessibility for pedestrians of all ages and physical abilities;
   b. Meeting the needs of bicyclists by providing dedicated bicycle infrastructure;
   c. Integrating public transit into the transportation network; and
   d. Safe and efficient vehicle movement.
2. Provide efficient multi-modal access between destinations throughout the community.
3. Enhance the public realm along streets and create multi-functional places that attract people and commerce.
4. Sustainable design that integrates green infrastructure into the roadway network.

Thus, complete streets optimize comfort and safety for all users and incorporate design best practices for safe street crossings, pedestrian and Americans with Disabilities Act (ADA) accessibility at transit stops, and bicycle/micromobility.

San Francisco Bay Plan

A portion of the Baylands is within a 100-foot shoreline band surrounding San Francisco Bay subject to the jurisdiction of the San Francisco Bay Conservation and Development Commission (BCDC). Portions of the Baylands subject to BCDC jurisdiction include areas subject to tidal action, including marshlands lying between mean high tide and 5 feet above mean sea level (land lying between mean high tide and mean low tide) along Visitacion Creek and the Brisbane Lagoon, as well as submerged lands (land lying below mean low tide).

BCDC's purpose is to protect and enhance San Francisco Bay for public and environmental benefit and to encourage responsible use. BCDC ensures that development within the shoreline band is consistent with the *San Francisco Bay Plan*, which contains policies and findings that guide appearance, design, and scenic views of future development around the Bay and encourage new shoreline development to provide public access to the Bay to the maximum extent feasible.

Objectives of the San Francisco Bay Plan

Objectives of the *San Francisco Bay Plan* are to:

- Protect the Bay as a great natural resource for the benefit of present and future generations.
- Develop the Bay and its shoreline to their highest potential with a minimum of Bay filling.

BCDC's "Major Conclusions and Policies"[90]

The major conclusions and policies of the San Francisco Bay Plan include the following:

1. **The Bay.** The Bay is a single body of water, and a Bay Plan can be effectively carried out only on a regional basis.
2. **Uses of the Bay.** The most important uses of the Bay are those providing substantial public benefits and treating the Bay as a body of water, not as real estate.
3. **Uses of the Shoreline.** All desirable, high-priority uses of the Bay and shoreline can be fully accommodated without substantial Bay filling and without loss of large natural resource areas. But shoreline areas suitable for priority use-ports, water-related industry, airports, wildlife refuges, and water-related recreation-exist only in limited amounts and should be reserved for these purposes.
4. **Justifiable Filling.** Some Bay filling may be justified for purposes of providing substantial public benefits—such as shoreline recreational facilities (e.g., parks and

[90] https://www.bcdc.ca.gov/resources/plans/san-francisco-bay-plan/.

marinas), port terminals, or airport terminal expansions—if these same benefits could not be achieved equally well without filling.

5. **Effects of Bay Filling.** Bay filling that is consistent with the purposes listed above can provide substantial benefits to the Bay. However, filling can be harmful to the Bay, and thus, there are some tradeoffs when fill is used. Bay filling can negatively affect fish and wildlife habitat, increase water pollution, decrease the air-cooling effect of the bay, and diminish scenic beauty. Bay fill can also restore habitat for some native organisms and facilitate sea level rise. Projects must balance these effects to maximize benefits.

6. **Pressures to Fill.** As the Bay Area's population increases, pressures to fill the Bay for many purposes will increase. New flat land will be sought for many urban uses because most, if not all, of the flat land in communities bordering the Bay is already in use for residences, businesses, industries, airports, roadways, etc. Past diking and filling of tidelands and marshlands has already reduced the size of the Bay from about 787 square miles in area to approximately 442 square miles. Although some of this diked land remains, at least temporarily, as salt ponds or managed wetlands, it has nevertheless been removed from the tides of the Bay. The Bay is particularly vulnerable to diking and filling for two reasons:

    a. The Bay is shallow. About two-thirds of it is less than 18 feet deep at low tide; in the South Bay and in San Pablo Bay, the depth of the water 2 or 3 miles offshore may, at low tide, be only 5 or 6 feet, or even less.

    b. Ownership of the Bay is divided. Private owners claim about 22 percent of the Bay (including extensive holdings in the South Bay) because of sales by the state government 90 or more years ago. Cities and counties have received free grants of land from the state totaling about 23 percent of the Bay. The state now owns only about 50 percent of the Bay, and the federal government owns about 5 percent. The lands that are closest to shore, which are the most shallow and thus easiest to fill, are held by either private owners or local governments that may wish to fill for various purposes irrespective of the effects of filling on the Bay as a whole.

7. **Water Quality.** San Francisco Bay receives wastes from many municipal, industrial, and agricultural sources. Because of the regulatory authority of the State Water Resources Control Board, the San Francisco Bay Regional Water Quality Control Board, the U.S. Environmental Protection Agency, and the U.S. Army Corps of Engineers, the Bay Plan does not deal extensively with the problems and means of pollution control. Nevertheless, the entire Bay Plan is founded on the belief that water quality in San Francisco Bay can and will be maintained at levels sufficiently high to protect the beneficial uses of the Bay.

8. **Fill Safety.** Virtually all fills in San Francisco Bay are placed on top of Bay Mud. The construction of buildings on such fills creates a greater number of potential hazards to

life and property, during normal settling and during earthquakes, than does construction on rock or on dense, hard soil deposits. Adequate design measures can be taken, however, to reduce these potential hazards to acceptable levels.

BCDC's "Major Proposals of the Bay Plan"[91]

Major San Francisco Bay Plan proposals include:

1. **Develop Maritime Ports.** Port expansion and development should be planned for Alameda, Benicia, Oakland, Redwood City, Richmond, San Francisco, and Selby.
2. **Deepen Shipping Channels.** Major shipping channels from the Golden Gate to the Delta, and to Oakland, Redwood City, Richmond, and San Francisco should be deepened if they limit marine terminal activity and are economically and environmentally acceptable.
3. **Develop and Preserve Land for Water-Related Industry.** Waterfront land now used by industries that require access to deep water shipping should be continued in this use, and sufficient additional waterfront acreage should be reserved for future water-related industry.
4. **Develop Waterfront Parks and Recreation Facilities.** New shoreline parks, beaches, marinas, fishing piers, scenic drives, and hiking or bicycling pathways should be provided in many areas. The Bay and its shoreline offer particularly important opportunities for recreational development in urban areas where large concentrations of people now live close to the water but are shut off from it. Highest priority should be given to recreational development in these areas, as an important means of helping immediately to relieve urban tensions.
5. **Expand Airport Facilities on Land.** Airports around the Bay serve the entire Bay Area, and future airport planning can be effective only on a regional basis. The Bay provides an open area for aircraft to take off and land without having to fly over densely populated areas, and this is an excellent use of the water. But terminals and other airport facilities should be on existing land wherever feasible. Future airport development should be based on a regional airport plan, which should be prepared as soon as possible by a governmental agency with regionwide responsibilities for transportation planning. Studies leading to this airport plan should evaluate all reasonable alternatives for meeting the Bay Area's growing need for aviation facilities, and should specifically evaluate the needs of commercial, military, and general (small plane) aviation. Airport expansion or construction on Bay fill should be permitted only if no feasible alternatives are available.

[91] https://www.bcdc.ca.gov/resources/plans/san-francisco-bay-plan/

Development of the Bay and Shoreline: Findings and Policies[92]

Appearance, Design, and Scenic Views

The Bay Plan policies related to water quality and hydrology applicable to the Specific Plan are as follows:

- **Water Quality**
    - **Policy 1:** Bay water pollution should be prevented to the greatest extent feasible. The Bay's tidal marshes, tidal flats, and water surface area and volume should be conserved and, whenever possible, restored and increased to protect and improve water quality. Fresh water inflow into the Bay should be maintained at a level adequate to protect Bay resources and beneficial uses.
    - **Policy 3:** New projects should be sited, designed, constructed and maintained to prevent or, if prevention is infeasible, to minimize the discharge of pollutants into the Bay by: (a) controlling pollutant sources at the project site; (b) using construction materials that contain nonpolluting materials; and (c) applying appropriate, accepted and effective best management practices, especially where water dispersion is poor and near shellfish beds and other significant biotic resources.
    - **Policy 4:** When approving a project in an area polluted with toxic or hazardous substances, the Commission should coordinate with appropriate local, state, and federal agencies to ensure that the project will not cause harm to the public, to Bay resources, or to the beneficial uses of the Bay.
    - **Policy 6:** To protect the Bay and its tributaries from the water quality impacts of nonpoint source pollution, new development should be sited and designed consistent with standards in municipal stormwater permits and state and regional stormwater management guidelines, where applicable, and with the protection of Bay resources. To offset impacts from increased impervious areas and land disturbances, vegetated swales, permeable pavement materials, preservation of existing trees and vegetation, planting native vegetation, and other appropriate measures should be evaluated and implemented where appropriate.
    - **Policy 7:** Whenever practicable, native vegetation buffer areas should be provided as part of a project to control pollutants from entering the Bay, and vegetation should be substituted for rock riprap, concrete, or other hard surface shoreline and bank erosion control methods where appropriate and practicable.

[92] Only policies relevant to the Baylands Specific Plan are included. Numbering reflects the policy numbers adopted by BCDC in the Bay Plan.

- **Climate Change**
    - **Policy 2:** When planning shoreline areas or designing larger shoreline projects, a risk assessment should be prepared by a qualified engineer and should be based on the estimated 100-year flood elevation that takes into account the best estimates of future SLR and current flood protection and planned flood protection that will be funded and constructed when needed to provide protection for the proposed project or shoreline area. A range of SLR projections for mid-century and end of century based on the best scientific data available should be used in the risk assessment. Inundation maps used for the risk assessment should be prepared under the direction of a qualified engineer. The risk assessment should identify all types of potential flooding, degrees of uncertainty, consequences of defense failure, and risks to existing habitat from proposed flood protection devices (BCDC 2024).

The portion of the Project Site within 100 feet of the shoreline of San Francisco Bay is subject to permitting regulations of the BCDC because San Francisco Bay and "all areas that are subject to tidal action from the south end of the Bay to the Golden Gate … including all sloughs, and specifically, the marshlands lying between mean high tide and 5 feet above mean sea level (AMSL); tidelands (lands lying between mean high tide and mean low tide); and submerged lands (lands lying below mean low tide)" are included in BCDC jurisdiction (BCDC 2020). Specifically, all of the Brisbane lagoon is in BCDC Bay jurisdiction, as well as the length of Visitacion Creek and another tidally influenced creek (Guadalupe Creek) encompassing the northernmost portion of the lagoon. The BCDC shoreline band jurisdiction extends 100 feet from Bay jurisdiction around the entirety of the lagoon and along both sides of Visitacion Creek and the tidally influenced creek to the north of the lagoon (BCDC 2020).

Airport Land Use Compatibility

San Mateo County Airport Land Use Commission

With limited exceptions, California law requires each county with an airport within its boundaries to maintain an Airport Land Use Commission (ALUC) "to protect public health, safety, and welfare by ensuring the orderly expansion of airports and the adoption of land use measures that minimize the public's exposure to excessive noise and safety hazards within areas around public airports to the extent that these areas are not already devoted to incompatible uses." In San Mateo County, the C/CAG Board acts as the Airport Land Use Commission with three primary responsibilities:

- Coordinate airport land use compatibility planning at the state, regional, and local levels;

- Prepare and adopt an Airport Land Use Compatibility Plan[93] for each public-use airport in its jurisdiction; and
- Review plans, regulations, and other actions of local agencies and airport operators.

Airport Land Use Compatibility Plan for the Environs of San Francisco International Airport

In 2012, the San Mateo County ALUC adopted the Airport Land Use Compatibility Plan for the Environs of San Francisco International Airport. The plan includes Federal Aviation Administration (FAA)-accepted Noise Exposure Maps, a diagram that illustrates the configuration of the preliminary Airport Influence Area boundary for San Francisco International Airport (SFO), and an updated diagram of the Federal Aviation Regulations Part 77 airspace protection surfaces.

The Baylands Specific Plan is located within SFO Area A of the Airport Influence Area. The Specific Plan is in an area with 3,651 or more flights per year, or an average of 10 or more flights per day, originating from or returning to SFO. In accordance with California Business and Professions Code Section 11010 and SFO's Comprehensive Airport Land Use Plan, development within the Baylands requires a real estate disclosure of potential airport/aircraft impacts such as noise and other impacts due to the property's location within an Airport Influence Area, as part of any real estate transaction. The area is not subject to Federal Aviation Regulations Part 77 restrictions or within SFO's noise or runway safety compatibility zones.

d. City of Brisbane Plans, Ordinances, and Regulations

General Plan

The Brisbane General Plan is the primary policy document governing land use within the Baylands and the City of Brisbane. The General Plan provides the blueprint for land use and development in the city and addresses land use and community character, housing, traffic and transportation, natural resources, open space, safety, noise, local economic development, community services, and recreation. The currently adopted General Plan includes more than 900 policies and programs.

Land Use Designations

The Brisbane General Plan land use diagram designates the Specific Plan area *Baylands Planned Development* (Baylands Subarea), with the area north of the Geneva extension, east of the

[93] The Airport Land Use Plan establishes the procedures that C/CAG uses in reviewing proposed local agency actions that affect land use decisions in the vicinity of the County's airports, including San Francisco International Airport. Airport planning boundaries define the area where height, noise, and safety standards, policies, and criteria are applied to certain proposed land use policy actions.

Caltrain railroad, within the Beatty Subarea designated *Heavy Commercial* (see **Figure 3-3** in Chapter 3, *Project Description*).

The *Baylands Planned Development* designation requires that a single specific plan be prepared and adopted for the entirety of the Baylands prior to its development. The *Baylands Planned Development* designation also requires that a minimum of 25 percent of the surface land area be maintained in open space and/or open area. Residential development within the *Baylands Planned Development* designation is limited to the area west of the Caltrain right-of-way and north of the easterly extension of Main Street from its current terminus at Bayshore Boulevard.

The General Plan describes *Heavy Commercial* designation as providing for "bulk sales, offices, meeting halls, vehicle storage and equipment maintenance. It also allows outside storage of vehicles and equipment. No materials storage, other than that associated with bulk sales and no processing of materials are permitted. Subareas designated Heavy Commercial are required to have an adopted specific plan to guide development in the area."

The Brisbane Lagoon is designated *Marsh/Lagoon/Bayfront*, including *Lagoon* and *Bayfront* in the Baylands Subarea and *Bayfront* in the Beatty Subarea.

Allowable Maximum Development Intensity

The General Plan limits the maximum building intensity for site-specific development and sets open space requirements for each of the Baylands land use designations as follows:

- **Baylands Subarea**
    - *Baylands Planned Development:* 1,800 to 2,200 dwelling units with a maximum of 6.5 million square feet of commercial/office development and an additional 500,000 square feet of hotel use. Maximum floor area ratio (FAR)[94] of 2.4 south of Visitacion Creek and a maximum FAR of 4.8 north of the creek. A minimum of 25 percent of the area to be retained as open space/open area.
    - *Bayfront and Lagoon:* 100 percent of the area is to be retained as open space/open area. The maximum floor area ratio is therefore 0.0.
- **Beatty Subarea**
    - *Heavy Commercial:* Allowable floor area ratio of 0 - 1.0. Open space/open area to be provided per zoning ordinance requirements.
    - *Bayfront:* 100 percent of the area to be retained as open space/open area.

[94] FAR refers to the total gross floor area of buildings divided by gross land area of a given site.

General Plan Policies

In addition to land use designations and development intensity, the General Plan includes citywide policies affecting development within the Baylands along with policies specific to the Baylands. These policies, along with an analysis of the consistency of proposed Baylands development with those policies, are provided in **Table 4.3-1**.

Sustainability Framework for the Brisbane Baylands

Brisbane General Plan Policy BL.1 G, states that the "required specific plan for the Baylands shall include a sustainability program for new development consistent with the principles of the Sustainability Framework for the Brisbane Baylands Framework," which was the final report of a committee appointed by the City Council to create an approach to achieving sustainable development within the Baylands. The Framework, which was intended as an aspirational rather than a regulatory document was accepted by the City Council on November 5, 2015.

The Sustainability Framework identifies key sustainability principles to establish a balance whereby people enjoy a high quality of life within the productive capacity of the environment, and humanity's ecological demands do not exceed nature's capacity to sustain life and replenish natural resources.

The Sustainability Framework is organized around the following 10 principles that are referenced in General Plan Policy BL.1 G:

1. **Zero Carbon Buildings.** Making buildings more energy efficient and delivering all energy with renewable technologies.
2. **Zero Waste.** Reducing waste, reusing where possible, and ultimately sending zero waste to landfills.
3. **Sustainable Transportation.** Using low carbon modes of transport and good planning to reduce emissions and the need to travel with.
4. **Local and Sustainable Materials.** Using sustainable healthy products, with low embodied energy, sourced locally, made from renewable or waste resources.

Relationship between CEQA and Sustainability Principles

CEQA focuses on identifying and mitigating the significant physical environment that will occur as the result of discretionary actions taken by public agencies. In doing so, CEQA addresses a broad spectrum of environmental topics, including many, but not all, of the issues inherent in the sustainability principles addressed in the *Sustainability Framework for the Baylands*.

While many sustainability measures, such as global climate change (GHG emissions), resource depletion, water supply, and declining wildlife habitats, are directly or indirectly addressed by CEQA, other sustainability principles such as economic vitality, social equity, and promoting meaningful lives and well-being are not addressed in CEQA. In the traditional (and simplified) view of "sustainability" as consisting of environmental quality, economic vitality, and social equity, CEQA addresses only environmental quality. Thus, many sustainability issues become part of a project's *planning* process, rather than its *environmental* review.

While CEQA is a valuable tool to evaluate and mitigate the significant adverse effects of a project, the planning review process and implementation of a community's General Plan provide a broader set of actions that can be used to promote community sustainability.

5. **Local and Sustainable Food.** Choosing low impact, local, seasonal, and organic diets and reducing food waste.
6. **Sustainable Water.** Using water more efficiently in buildings and in the products people buy, and addressing local flooding, wetland, and stormwater pollution.
7. **Open Space and Habitat.** Protecting and restoring biodiversity and natural habitats through appropriate land use and integration into the built environment.
8. **Culture and Heritage.** Reviving local identity and wisdom; supporting and participating in the arts.
9. **Economic Vitality with Equity and Ecology.** Creating ecologically based economies that support equity and inclusive communities.
10. **Health, Safety, and Happiness.** Encouraging active, safe, meaningful lives to promote good health and well-being.

4.3.4 RELEVANT SPECIFIC PLAN REQUIREMENTS

The Specific Plan proposes a land use development program to implement General Plan Amendment GP-1-18 and Measure JJ, including a maximum of 2,200 dwelling units, 6.5 million square feet of commercial, and 500,000 square feet of hotel use (see Draft EIR **Figure 3-5** and **Table 3-1)**. The Specific Plan also commits 29.5 percent of its Year 2100 land area to habitat preservation and recreational use. The Specific Plan's land use program defines permitted land uses, building types, and intensity of development overall (see EIR Section 3.3.2 c). Development of the Baylands land use plan would be required to comply with the Specific Plan's zoning and development standards, which are presented at district, block, and building levels.

In addition to land use and development standards, Specific Plan Section 3.3.2 e describes the proposed circulation network and identifies the components and design standards for movement of vehicles, pedestrians, and bicyclists; and access to transit to provide connectivity within and through the Baylands. A phasing program that ties development of residential and commercial uses to the provision of infrastructure and site amenities is also provided.

4.3.5 SIGNIFICANCE CRITERIA

The following criteria were used to determine the significance of land use and planning impacts.

Threshold LUP-1: **The Baylands Specific Plan would cause a significant impact if connectivity within Brisbane or other communities would be eliminated or reduced to the extent that:**

- **A neighborhood or community would become physically separated from one or more other neighborhoods or communities;**
- **Residents would have their access to transit, commercial centers, employment areas, schools, parks, or governmental services or facilities substantially diminished; or**
- **Employees would have their access to transit, commercial centers, or governmental services or facilities substantially diminished.**

Threshold LUP-2: **The Baylands Specific Plan would cause a significant impact due to a conflict between the Baylands Specific Plan and a land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect if a conflict with the provisions of any of the following documents would result in a significant physical environmental effect not disclosed elsewhere in this EIR:**

- **Brisbane General Plan (City of Brisbane)**
- **Plan Bay Area 2050 (Metropolitan Transportation Commission [MTC], Association of Bay Area Governments [ABAG])**
- **MTC Transit-Oriented Communities Policy (Resolution No. 4530)**
- **San Francisco Bay Plan (Bay Conservation and Development Commission [BCDC])**
- **Airport Land Use Compatibility Plan for the Environs of San Francisco International Airport (San Mateo County Airport Land Use Commission [ALUC])**

4.3.6 PROJECT IMPACTS AND MITIGATION MEASURES

a. Impact LUP-1: Physically Divide an Existing Community

Methodology for Determining Significance

Analysis of this impact includes an evaluation of existing physical barriers between the Baylands and surrounding areas, such as the Central Brisbane and Sierra Point areas within Brisbane, as well as existing physical barriers between the Baylands and lands to the west, northwest, and north in Daly City and San Francisco.

The analysis of Threshold LUP-1 recognizes that:

- The Specific Plan area is already physically divided from the balance of the Brisbane community by Bayshore Boulevard, and the site itself is physically divided along a north-south axis by the Caltrain railroad right-of-way. In addition, the Recology solid waste facility physically separates the Baylands from areas to the north and northeast in San Francisco (e.g., Candlestick Point, Hunter Point).
- Because there may be multiple routes available between any two given points, creating a barrier may or may not actually physically divide a community but still adversely affect connectivity between neighborhoods or communities. Thus, the analysis of this threshold focuses on the extent to which the Specific Plan might substantially diminish vehicular, pedestrian, and bicycle connectivity between neighborhoods or communities, as well as access to transit.
- The Specific Plan area would be constructed in increments over time during which surrounding neighborhoods and communities would evolve and change.[95]

Proposed grading for Baylands development encompasses moving 2,500,000 cubic yards of soil by truck from the eastern portion of the site to the western portion of the site to be placed as engineered fill. Because (1) Beatty Avenue and Lagoon Road provide connectivity between the existing Brisbane community and the US 101 freeway, and (2) Lagoon Road serves as the sole roadway connection between the Sierra Point area and the Brisbane community and beyond, disruptions of these roadways by haul trucks during construction could have an adverse effect on community connectivity, the potential for which is analyzed below. In addition, two large-scale Brisbane businesses—Golden State Lumber and the Kinder Morgan tank farm—are located on Tunnel Avenue. Because disruption to that roadway could also have a substantial adverse effect on community connectivity, the extent of such disruption during Baylands grading activities is analyzed.

Proposed grading activities and roadway construction could adversely affect community connectivity and result in a significant impact if Beatty Avenue, Lagoon Road, or Tunnel Avenue were to be temporarily closed or have traffic flow substantially disrupted during site grading or construction. The extent to which site grading and construction within the Baylands would maintain or temporarily eliminate or disrupt existing connectivity along these roadways is therefore evaluated.

The extent to which the Baylands Specific Plan's land development and on- and off-site infrastructure might create new physical barriers or increase the effectiveness of existing barriers is also examined, including the potential for temporary barriers to be created during Baylands construction. This analysis includes consideration of development standards and

[95] The assumed sequencing of Baylands development used to evaluate physical environmental impacts is presented in **Table 3-8**.

requirements contained in the Baylands Specific Plan such as the extension of Geneva Avenue from Bayshore Boulevard to Beatty Avenue, as well as roadway, pedestrian, bicycle, and transit connections intended to improve connectivity and mobility.

Baylands development would adversely affect future connectivity between neighborhoods and communities and result in a significant impact if it would eliminate or substantially reduce the ability to provide expanded vehicular, pedestrian, and bicycle connectivity, as well as access to transit needed to meet the needs of future neighborhoods or communities.

Impact Assessment

The Baylands site sits along the edge of San Francisco Bay and the US 101 freeway and is separated from lands to the west by Bayshore Boulevard and the office and light industrial buildings at Crocker Industrial Park; from lands to the north by the Recology facility; and from lands to the south by the Brisbane Lagoon. The Baylands site itself is physically divided into east and west areas by the existing Caltrain right-of-way and is further divided between north and south by Visitacion Creek. Existing connections between US 101 freeway interchanges and Sierra Point through the Baylands to Bayshore Boulevard and Central Brisbane are circuitous.

Construction Impacts

While construction activities are temporary conditions and do not result in permanent changes to land use or the transportation network, Baylands construction activities are expected to occur from 2027 through 2042 (see **Table 3-8**). Baylands development would require temporary use of public roadway rights-of-way for activities such as staging of construction materials or equipment within the sidewalk or adjacent parking areas and/or travel lanes. Compliance with Brisbane Municipal Code Chapter 12.04 would require applicants for site-specific development and infrastructure projects to secure encroachment permits and approval of Traffic Control Plans for any construction activity that occurs within City rights-of-way. In addition, construction activities affecting state facilities, such as freeway interchanges at Alana Way and Beatty and Sierra Point Parkway are subject to Caltrans encroachment permits.

Baylands construction activities could require temporary lane closures or otherwise temporarily reduce connectivity at the following locations/times:

- **Site grading.** Tunnel Avenue will retain its existing configuration with one through lane in each direction throughout Baylands grading operations and serve as a haul route for the movement of soil from the eastern to the western portion of the site, accommodating round trip truck hauls throughout the day, including the AM and PM peak hours. Depending on the number of haul trips at any given time, traffic flow would be disrupted and connectivity reduced along Tunnel Avenue, particularly if queueing of haul trucks waiting to load or unload spills out onto area roadways.

- **Realignment of Lagoon Road.** Lagoon Road is proposed to be realigned to protect it from sea level rise and to connect directly to the existing southbound US 101 off- and on-ramps. Potential disruptions to traffic and loss of connectivity along the existing Lagoon Road could occur at the westernmost point of the realigned road section and at the current southbound US 101 off- and on-ramps. Because existing Lagoon Road, in combination with existing Sierra Point Parkway, is a vital link that connects much of Brisbane to the US 101 freeway and connects Sierra Point to the balance of Brisbane, any closure of these existing roadways, even temporarily, would substantially reduce connectivity for Brisbane residents and Sierra Point workers and hotel visitors.
- **Connection of the Geneva Avenue extension to Beatty Avenue.** Temporary lane closures and narrowing of lanes with resulting loss of connectivity would occur at the existing Beatty Avenue-Alana Way intersection when construction of the Geneva Avenue extension connects Geneva Avenue to that existing intersection.
- **Improvements to Tunnel Avenue.** Following grading operations, Tunnel Avenue will be improved to include a two-way center left-turn lane along with one lane in each direction, construction of which would result in temporary disruption to traffic flow and reduced accessibility to the Caltrain Bayshore station due to temporary lane closures and narrowing of travel lanes.
- **Bayshore Mobility Plan improvements.**[96] Construction of Bayshore Boulevard improvements would occur within existing roadway rights-of-way and could cause temporary lane closures and delays along the corridor and its intersections with Geneva Avenue and Main Street.
- **Construction of off-site potable water lines**. Construction of off-site water lines within Bayshore Boulevard and Guadalupe Canyon Parkway would occur beneath the roadway and require temporary lane closures.
- **Off-site recycled water line improvements.** Construction of off-site water lines within Bayshore Boulevard, Airport Boulevard, and streets within the Sierra Point and Oyster Point portions of the City of South San Francisco would occur beneath these roadways and require temporary lane closures.
- **Construction of buildings and aboveground infrastructure within the Baylands**. Construction of buildings and aboveground infrastructure would require temporary lane narrowing or closures when connecting sites to underground infrastructure.

[96] Public Resources Code Section 21080.25(b)(1) exempts "Pedestrian and bicycle facilities that improve safety, access, or mobility, including new facilities, within the public right-of-way" from CEQA. The Bayshore Mobility Plan meets the relevant criteria set forth in Public Resources Code Section 21080.25(c), such as being located in an urbanized area in an existing public right-of-way would not demolish affordable housing units and would not increase automobile capacity.

- **Fire Station construction at 140 Valley Drive.** Temporary narrowing of the travel lane adjacent to the site would be required for relocation of the bus stop and crosswalk, as well as for construction of driveway access.
- **Off-site electrical utility line improvements.** Trenching for an underground utility line across Bayshore Boulevard and along Geneva Avenue to connect the Baylands to the Martin Substation would cause temporary lane closures and disrupt operations at the heavily traveled intersection of Bayshore Boulevard and Geneva Avenue.
- **Deliveries of equipment and construction materials**. Deliveries of construction equipment and materials could disrupt traffic and reduce connectivity unless adequate staging areas are well located and capable of accepting multiple simultaneous deliveries.

Long-Term Post-Construction Operational Impacts

Under existing conditions, the Specific Plan area is already physically divided from the rest of the Brisbane community and surrounding lands by Bayshore Boulevard, industrial uses, the Recology solid waste management facility, and the Brisbane Lagoon. The Specific Plan would not create or expand any existing physical barriers between established neighborhoods or communities or create any new barriers.

The Specific Plan would improve connectivity between existing residential neighborhoods and employment centers. Geneva Avenue would be extended from Bayshore Boulevard to Beatty Avenue, providing a more direct and convenient route from Central Brisbane and nearby portions of Daly City to the Bayshore Caltrain station and the US 101 freeway. The Specific Plan would also realign Lagoon Road to provide more direct access to the US 101 freeway and protect it from future sea level rise. Sierra Point Parkway would be extended from its current terminus north to the future Geneva Avenue extension. The provision of shuttle systems as part of Baylands development would also enhance connectivity between the Baylands, Central Brisbane, hotels, office buildings within Sierra Point, and the Caltrain Bayshore station.

The Geneva Avenue extension would provide for the establishment of bus rapid transit service between developing areas in San Francisco north and northeast of the Baylands and the Bayshore Caltrain station; however, the Specific Plan proposes merging exclusive bus rapid transit lanes with other roadway lanes over the Genera Avenue bridge, while providing exclusive bus rapid transit lanes along the rest of the Geneva Avenue extension. The Specific Plan includes a comprehensive plan for bicycle and pedestrian mobility within the Baylands, including connections between the Baylands and Central Brisbane. The Specific Plan also provides for shuttle connections between the Baylands and Central Brisbane.

As shown in **Table 4.3-1**, General Plan Program C.1.b requires development and implementation of a Bayshore Boulevard design plan that would facilitate turning movements onto and from Bayshore Boulevard for Brisbane residents and businesses and thereby increase connectivity between existing neighborhoods within Brisbane along with enhanced pedestrian

and bicycle facilities (see Draft EIR Section 3.3.4, *Bayshore Mobility Plan*, and Section 4.8.4, *Transportation Improvements in Addition to the Specific Plan*).

Significance Conclusion for Impact LUP-1

Construction

Hauling soil from the eastern to the western portion of the Baylands along Tunnel Avenue and other two-lane roadways would result in traffic delays and reduced connectivity, particularly if queueing of haul trucks spills out onto public roadways adjacent to sites being graded.

Roadway improvements, installation of underground utilities, and construction of buildings and aboveground infrastructure would require temporary roadway lane closures and cause temporary delays along area roadways. In addition, deliveries of construction equipment and materials could disrupt traffic and reduce connectivity unless off-street staging areas are capable of accepting multiple simultaneous deliveries and avoid queueing of delivery trucks on adjacent public roadways. Construction activities within roadway rights-of-way would be required to meet applicable requirements for issuance of encroachment permits that would minimize disruptions and ensure traffic safety; however, connectivity would be substantially reduced due to temporary:

- Blockage of access to existing facilities within the Baylands, including but not limited to:
    - Recology solid waste management facilities;
    - Golden State Lumber Company;
    - Kinder Morgan tank farm;
    - City of Brisbane Corporation Yard; and
    - Bayshore Sanitary District pump station.
- Loss of (1) turning movements at existing intersections or (2) use of existing crosswalks and bus stops.
- Blocking use of bicycle, pedestrian, or transit facilities; parking lot or garage access; or access for residents through residential neighborhoods, such as Blanken Avenue, due to hauling of soils on public roadways, construction staging, or movement of construction materials, vehicles, or equipment.

Long-Term Post-Construction Operational Impacts

No new physical barriers between existing neighborhoods or communities would be constructed. By extending Geneva Avenue, improving Tunnel Avenue, and realigning Lagoon Road, connectivity between (1) the Brisbane community and (2) the US 101 freeway as well as Sierra Point would be enhanced. In addition, Specific Plan development would provide a

shuttle system connecting the Baylands, Sierra Point, and Central Brisbane, and would enhance bicycle and pedestrian system within the Baylands.[97]

Improvements would be constructed along Bayshore Boulevard providing safe movement onto and from the roadway, enhancing mobility for Brisbane residents and employees due to improved access to transit, commercial and employment centers, schools, parks, and public services and facilities. These improvements would also provide for ongoing through traffic movements for daily commuters along Bayshore Boulevard between San Francisco and Daly City to the north and northwest and San Mateo County and Silicon Valley to the south.

A less than significant operations impact would therefore result.

Program EIR Mitigation Measures

MM LUP-1a: Construction Management Plans (Program EIR Mitigation Measure 4.N-12). In conjunction with all construction permits, site-specific development projects shall develop, submit for City review and approval, and implement Construction Management Plans that specify measures that would reduce impacts on motor vehicle, bicycle, pedestrian, and transit circulation. Construction Management Plans shall include, but not necessarily be limited to, the following:

- Location of construction staging areas for materials, equipment, and vehicles.
- Notification procedures for adjacent property owners and public safety personnel regarding timing of major deliveries, detours, and lane closures.
- Identification of haul routes for movement of construction vehicles that would minimize impacts on vehicular and pedestrian traffic, circulation, and safety; and provision for monitoring surface streets used for haul routes so that any damage and debris attributable to the haul trucks can be identified and corrected by the project applicant.
- Provisions for removal of trash generated by construction activity.
- A process for responding to, and tracking, complaints pertaining to construction activity, including identifying an on-site complaint manager.

[97] Impact TRA-2 concludes that not providing continuous bus rapid transit lanes on the Geneva Avenue bridge would have a significant impact on transit usage. However, because the extension would provide a roadway connection that does not currently exist, overall connectivity would be improved. In addition, because trail systems do not currently exist through the Baylands, gaps that would be created between Baylands trails and trails in the adjacent area would result in a significant impact in relation to bicycle and pedestrian travel. Thus, while Impact TRA-2 would be significant and require mitigation, loss of connectivity and Impact LUP-1 would be less than significant in relation to operations.

Significance Conclusion for Impact LUP-1 with Implementation of Program EIR Mitigation Measures

Mitigation Measure MM LUP-1a requires preparation and implementation of a Construction Management Plan for each construction permit and site-specific development project associated with the Baylands Specific Plan. These Construction Management Plans would be required to specify the measures that would be undertaken to reduce impacts and would be subject to City review and approval. As a result, significant impacts could still result, and additional mitigation is required.

Additional Mitigation Measures

MM LUP-1b: Maintain Connectivity along Area Roadways during Construction. The Construction Management Plan required by Mitigation Measure MM LUP-1a for City approval in compliance with Brisbane Municipal Code Chapter 12.04 shall include provisions to meet the following performance standards:

- Access to the following facilities shall remain open all times throughout Baylands construction:
  - Recology solid waste management facilities;
  - Golden State Lumber Company;
  - Kinder Morgan tank farm;
  - City of Brisbane Corporation Yard; and
  - Bayshore Sanitary District pump station.
- Turning movements at existing intersections shall be maintained at all times during construction. If existing crosswalks and bus stops cannot feasibly be available for use at all times during construction, appropriate alternative facilities shall be provided.
- Site grading and each site-specific development project shall provide sufficient construction staging in appropriate locations such that construction staging, including construction vehicles or materials, will not block bicycle; pedestrian facilities, or transit facilities; roadway travel lanes; or parking garage access.
- The identification of haul routes for movement of construction vehicles shall be designed to minimize impacts on vehicular and pedestrian traffic, circulation, and safety through use of arterials or designated truck routes, avoiding travel on local or collector roadways through residential neighborhoods, such as Blanken Avenue, and provision of traffic control

measures at construction driveways as required through Brisbane Municipal Code Chapter 12.04.

- Identify the routes that construction vehicles will use for the delivery of construction materials (e.g., lumber, tiles, piping, windows) to access the site, including any needed traffic controls and detours.
- Allow hauling or transport of oversize loads between 9:00 a.m. and 3:00 p.m. only, Monday through Friday, unless approved otherwise by the City Engineer.
- Require all construction-related parking and staging of vehicles to be kept out of the adjacent public roadways and instead be kept on site.

Significance Conclusion for Impact LUP-1 with Implementation of All Mitigation Measures

Implementation of Mitigation Measures MM LUP-1a and MM LUP-1b would maintain connectivity (one through lane in each direction) along Lagoon Road between Tunnel Avenue and Sierra Point Parkway, as well as Sierra Point Parkway between the US 101 southbound and northbound on- and off-ramps at all times throughout Baylands construction, thereby reducing construction impacts to less than significant.

b. Impact LUP-2: Conflicts with Adopted Plans, Policies, or Regulations

Methodology for Determining Significance

Environmental Effects Resulting from Inconsistencies with Plans, Policies, or Regulations

Analysis of the 2025 Specific Plan project's consistency with local and regional plans and policies is intended to fulfill the requirements of CEQA Guidelines Section 15125(d), focusing on whether conflicts with plans, policies, and regulations adopted for the purpose of avoiding or mitigating an environmental effect would have a significant environmental effect. Because any particular inconsistency would not necessarily lead to a physical environmental effect, only those provisions of relevant plans, policies, and regulations for which inconsistencies could directly or indirectly cause or contribute to a physical environmental effect are analyzed. The consistency of the 2925 Specific Plan project with relevant provisions of the Brisbane General Plan, Plan Bay Area 2050, the Metropolitan Transportation Commission's Transit-Oriented Communities Policy (Resolution 4530), the San Francisco Bay Plan, and the Airport Land Use Compatibility Plan for the Environs of San Francisco International Airport was then analyzed and is documented in **Table 4.3-1** and **Table 4.3-2**.

General Plan Inconsistencies:

Relationship between Identifying a Significant CEQA Impact and Determining the Specific Plan to be Inconsistent with the General Plan

Inconsistency with any particular provision of the General Plan would result in a significant CEQA impact if the inconsistency would cause or contribute a significant environmental effect. However, such an inconsistency would not necessarily mean that the Specific Plan is inconsistent with General Plan.

Courts have acknowledged that general plans attempt to balance a range of competing interests, and that it is nearly, if not absolutely, impossible for a project to be in perfect conformity with each and every provision. Additionally, in reaching consistency conclusions, state law permits consideration of the consequences of a project denial, which can result in other policy inconsistencies. For example, Government Code Section 65589.5 explains that the potential consequences of limiting the approval of housing are "reduced mobility, urban sprawl, excessive commuting, and air quality deterioration."

Consistency with the general plan is therefore determined by considering consistency with the plan as a whole and not with each individual provision. The Baylands Specific Plan would be considered to be consistent with the General Plan if it would meet the general intent of the plan and not preclude the attainment of the General Plan's primary goals and objectives. See Appendix A.3 for analysis of the Baylands Specific Plan's consistency with the Brisbane General Plan.

Impact LUP-2 would be significant if an inconsistency with a provision of these plans would directly or indirectly cause or contribute to a significant environmental effect for which mitigation is required.

Impact Assessment

Environmental Effects Resulting from Inconsistencies with Plans, Policies, or Regulations

Table 4.3-1, below, evaluates the consistency of Baylands development with General Plan policies and the potential for significant environmental effects to result from any inconsistencies with the specific provisions of the plan.

Consistency of the Baylands Specific Plan with regional plan policies, including Plan Bay Area 2050, MTC's Transit-Oriented Community policy, and the San Francisco Bay Plan is evaluated in **Table 4.3-2** in relation to the potential for significant environmental effects to result from inconsistencies with the specific provisions of these plans.

Significance Conclusion for Impact LUP-2

Environmental Effects Resulting from Inconsistencies with Plans, Policies, or Regulations

As demonstrated in **Table 4.3-1**, the Baylands Specific Plan would be inconsistent with the following General Plan Policies and Programs:

- **General Plan Policy LU.11 and Program BL.3b** in relation to views of San Francisco Bay, which causes a significant Aesthetics and Visual Resources Impact (AES-1a).
- **General Plan Policy C.41**, in relation to parking standards, which exacerbates a significant and unavoidable GHG emissions impact (GHG-1).[98]
- **Policy 176** in relation to noise from pile driving operations required for constructing buildings (Impact NOI-1).

As demonstrated in **Table 4.3-2**, the Specific Plan would also be inconsistent with MTC's Transit-Oriented Community policy. Thus, Impact LUP-2 would be significant.

[98] See also **Table 4.3-2** in relation to MTC Transit-Oriented Communities Policy (Resolution No. 4530).

Table 4.3-1: Consistency of the Baylands Specific Plan with the Brisbane General Plan

General Plan Policies and Programs	Specific Plan Consistency with General Plan Policy/Program	Would a Significant Physical Environmental Effect Result from an Inconsistency with this provision?
General Plan Land Use and Development Intensity Requirements		

The General Plan limits the maximum building intensity for site-specific development and sets open space requirements for each of the land use designations within the Project Site as follows:
• **Baylands Subarea**
  ○ *Baylands Planned Development:* 1,800 to 2,200 dwelling units with a maximum of 6.5 million square feet of commercial/office development and an additional 500,000 square feet of hotel use. Maximum floor area ratio (FAR) of 2.4 south of Visitacion Creek and a maximum FAR of 4.8 north of the creek. A minimum of 25 percent of the area to be retained as open space/open area.
  ○ *Bayfront and Lagoon:* 100 percent of the area is to be retained as open space/open area. The maximum floor area ratio is therefore 0.0.
• **Beatty Subarea**
  ○ *Heavy Commercial:* Allowable floor area ratio of 0 - 1.0. Open space/open area to be provided per zoning ordinance requirements.
  ○ *Bayfront:* 100 percent of the area to be retained as open space/open area.
The proposed fire station relocation site is designated Trade Commercial, which represents a mix of commercial uses including warehouses, distribution facilities, offices, retail uses, restaurants, commercial recreation, personal services, as well as light industrial,
	The Specific Plan's development program provides for development of 2,200 dwelling units with a maximum of 6.5 million square feet of commercial/office development and an additional 500,000 square feet of hotel use.
	While the Specific Plan permits a maximum of 2,200 dwelling units consistent with the General Plan, each of the Specific Plan's residential land use categories permits a range of building types with no minimum density requirements. For example, while the Multi-Family High land use designation provides for 20+ story buildings up to 270 in height, it also permits three-story townhome development. As a result, areas designated Multi-Family High could theoretically be developed largely or even exclusively with three-story townhomes. Other residential land use designations could also theoretically be developed with similar lower density development.
	The Specific Plan designates 29.5 percent of the Specific Plan's Year 2100 land area to be retained as open space/open area.
	Areas designated Bayfront and Lagoon in the General Plan are to be retained as open space/open area.
	A General Plan amendment is proposed to place the entirety of the Specific Plan area within the General Plan Baylands Subarea and subject to its maximum building intensity standards.
	The relocated Fire Station No. 81 would be consistent with its Trade Commercial land use designation.
		No
		The 2025 Specific Plan project is consistent with this provision.

General Plan Policies and Programs	Specific Plan Consistency with General Plan Policy/Program	Would a Significant Physical Environmental Effect Result from an Inconsistency with this provision?
research and development, and similar uses. Public and semi-public uses are also permitted.		
Chapter V, Land Use		
Plan Policy LU.2: Development south of the Bayshore Basin drainage channel shall maintain a low profile, permitting low or mid-rise buildings, not to exceed six stories in height, in order to preserve the existing views of San Francisco and San Francisco Bay as seen from Central Brisbane, and to maximize the amount of landscape and open space or open area in this portion of the subarea.	The Specific Plan proposes sustainable infrastructure uses south of Visitacion Creek.	No The 2025 Specific Plan project is consistent with this provision.
Policy LU.11: In the context of respecting private property rights, make every effort to preserve and enhance public views of the Mountain and the Bay.	Draft EIR Section 4.5, *Aesthetic and Visual Resources*, evaluates the effects Baylands development would have on views of the Bay and San Bruno Mountain. Appropriate mitigation measures to protect scenic vistas are provided.	**Yes** **Impact AES-1** **Blockage of public views of the Bay and San Bruno Mountain.**
Program BL.3b: The following design approaches shall not be included in the required specific plan or any development proposal: i. Buildings or building groups that block view corridors to the Bay, or appear as "fortresses" or "walls" lining the Bayfront, the Lagoon or any arterial street.	General Plan prohibits buildings or building groups to be designed such that they would "block view corridors to the Bay or appear as 'fortresses' or 'walls' lining the Bayfront, the Lagoon or any arterial street." As demonstrated in Figure 4.5-2, closely spaced 3- to 4-story residential buildings along Bayshore Boulevard would "present a solid mass of development that would obscure most of the existing view" and would thus be inconsistent with the General Plan Program.	**Yes** **Impact AES-1** **Building groups appears as solid masses that block public views of the Bay and San Bruno Mountain.**
Policy LU.15: Encourage the maintenance and upgrading of structures and sites that have played important roles in the City's history.	Specific Plan implementation will include restoration and adaptive reuse of the historic Roundhouse within the Baylands.	No The 2025 Specific Plan project is consistent with this provision.
Policy LU.21: Preserve open areas with biological value and/or significant topographic characteristics at the perimeter of the City that maintain Brisbane as separate and distinct from nearby communities.	Brisbane Lagoon, Icehouse Hill, and Visitacion Creek will be retained in permanent open space. Restoration programs will be implemented to improve habitat quality.	No The 2025 Specific Plan project is consistent with this provision.
Policy LU.23: Retain sufficient distances between development and designated open space and natural areas to enhance and respect the amenity and value of the resource.	The Baylands Specific Plan provides for separation of sensitive habitat areas from development areas and recreational activities. As discussed in Section 4.6, *Biological Resources*, trails planned within and adjacent to habitat areas could adversely affect their biological functions. Mitigation measures for significant adverse effects are provided in Section 4.6.	No The 2025 Specific Plan project is consistent with this provision.

General Plan Policies and Programs	Specific Plan Consistency with General Plan Policy/Program	Would a Significant Physical Environmental Effect Result from an Inconsistency with this provision?
Chapter VI, Transportation and Circulation		
Policy C.1: Design the City's roadway system to emphasize mobility for Brisbane residents and businesses, accommodate bicycle and pedestrian in addition to vehicular movement, and provide for comfortable and safe travel within the community to shopping, employment, and recreation, as well as to transit and the Highway 101 freeway.	Specific Plan contains design standards for roadways to accommodate concurrent safe use by vehicles, pedestrians, and bicyclists, including green shared streets. The Specific Plan roadway system improves access to the Bayshore Caltrain Station and US 101 freeway for existing Brisbane residents, as well as for San Francisco residents in neighborhoods to the north.	No The 2025 Specific Plan project is consistent with this provision.
Program C.1.b: Develop design plans for Bayshore Boulevard, the Geneva Avenue extension, and interchanges along the 101 freeway that address the effects of regional through traffic within Brisbane and enhances mobility for Brisbane residents and businesses through a combination of roadway and intersection, transit, bicycle, and pedestrian facility improvements that would not cause a substantial increase in vehicle miles traveled (VMT) on Bayshore Boulevard or other routes through the City. As part of this design plan, evaluate (1) whether changes in design speeds along Bayshore Boulevard could improve mobility within the City; (2) the feasibility of shifting a portion of regional through traffic from Bayshore Boulevard onto other routes, such as Sierra Point Parkway by extending that roadway north to the 101 freeway interchange at Beatty Avenue, and (3) appropriate routing of trucks to and from the Crocker Park area.	As part of the planning review for the Baylands Specific Plan, a mobility plan for Bayshore Boulevard was developed to both facilitate mobility for Brisbane residents and businesses, as well as to accommodate regional through traffic.	No The 2025 Specific Plan project is consistent with this provision.
Program C.1.c Prepare, adopt, and implement a mobility improvement fee program to fund the multi-modal improvements called for in the design plan for Bayshore Boulevard and interchanges along the 101 freeway.	The Baylands Specific Plan and associated development agreement provide for full implementation of the Bayshore Boulevard mobility plan.	No The 2025 Specific Plan project is consistent with this provision.

General Plan Policies and Programs	Specific Plan Consistency with General Plan Policy/Program	Would a Significant Physical Environmental Effect Result from an Inconsistency with this provision?
Policy C.3: Design turning movements and traffic signal timing at intersections so as to avoid the queueing of vehicles at intersection from backing up and adversely affecting operations at another intersection. Design turning movements and traffic signal timing at freeway interchanges cause queueing of vehicles from the intersection onto the freeway mainline.	As discussed in Draft EIR Section 4.8, *Transportation*, Specific Plan development would contribute to queueing of vehicles from off-ramp intersections onto the freeway mainline at the existing Alana/Harney interchange and the US 101 southbound interchange at Sierra Point Parkway. Construction of Candlestick interchange improvements as envisioned in the Bi-County Transportation Study would resolve queueing issues at that interchange for which Baylands development would be required to make a fair share cost contribution. In addition, a roundabout would be constructed at the US 101 southbound on- and off-ramps, if approved by Caltrans, or a traffic signal with two off-ramp storage lanes if Caltrans does not approve a roundabout to ensure vehicle queues do not extend back to the mainline.	No The 2025 Specific Plan project is consistent with this provision.
Policy C.4 "Plan for an additional east–west corridor to redirect non-destination traffic away from Bayshore Boulevard and to provide more direct access to Highway 101." *Program C.4.a* "Pursue an extension of Geneva Avenue, connecting with the Candlestick Highway 101 Interchange that provides for bus rapid transit and connection to the Bayshore Caltrain station." **Policy C.36** "Seek opportunities to install and improve transit facilities, establish multi-modal connections, and increase the service network." *Program C.36.d* "Cooperate with San Mateo County Transit District (SamTrans), and other appropriate agencies, to establish bus rapid transit (BRT) systems where practicable." **Bi-County Transportation Study** proposes a 6-lane cross-section for Geneva Avenue with 4 vehicular travel lanes (2 in each direction) and 2 lanes for BRT (1 lane in each direction)	The Specific Plan proposes a 6-lane cross-section for the Geneva Avenue extension with 4 vehicular travel lanes (2 in each direction) and 2 lanes for BRT (1 lane in each direction), except for the Geneva Avenue bridge over the Caltrain where a 4-lane cross-section with no BRT lanes is proposed. Constructing the Geneva Avenue bridge without BRT lanes would inhibit the ability for regional agencies to provide BRT service as transit vehicles would be forced to merge with vehicular traffic and cross the bridge in mixed flow traffic in both directions, thus degrading the quality of transit service and conflicting with the local and regional plans for a BRT route. The proposed cross-section would also impair emergency vehicle response.	**Yes** **Impact TRA-2** **Inhibit pedestrian, bicycle, or transit use.** **Impact TRA-3** **Transportation safety hazards.**

General Plan Policies and Programs	Specific Plan Consistency with General Plan Policy/Program	Would a Significant Physical Environmental Effect Result from an Inconsistency with this provision?
Policy C.17: Maintain traffic flow and continue to improve arterial streets to accommodate vehicular, bicycle, and pedestrian movement.	Pursuant to CEQA Guidelines Section 15064.3 (a), "a project's effect on automobile delay shall not constitute a significant environmental impact." Consistency with the bicycle and pedestrian movement portion of this policy is discussed below. The Specific Plan provides for a comprehensive system of bicycle and pedestrian facilities providing connectivity within the Specific Plan area. The analysis provided in Section 4.8 identifies several gaps in pedestrian and bicycle connections between the Baylands and surrounding lands.	No The 2025 Specific Plan project is consistent with this provision.
Policy C.21: The City shall provide for the development of Complete Streets consistent with Government Code Sections 65040.2 and 65302 and subsequent applicable Complete Streets legislation) to meet the needs of all users of "streets, roads and highways". Such users include bicyclists, children, youth, families, persons with disabilities, motorists, movers of commercial goods, pedestrians, users of public transportation, seniors, and first responders.	The Specific Plan provides for a comprehensive system of bicycle and pedestrian facilities providing connectivity within the Specific Plan area. The analysis provided in Section 4.8, *Transportation*, identifies several gaps in pedestrian and bicycle connections between the Baylands and surrounding lands, however.	No The 2025 Specific Plan project is consistent with this provision.
Policy C.22: Integrate Complete Streets infrastructure and design features, such as sidewalks, bikeways and transit stops into street design and construction to create safe and inviting environments for people to walk, bicycle and use public transportation. *Program C.22.b.* Incorporate Complete Streets infrastructure elements into new streets, street retrofits and certain maintenance projects to encourage multiple modes of travel, as appropriate to the context and determined reasonable and practicable by the City.	The Specific Plan provides for a comprehensive system of bicycle and pedestrian facilities providing connectivity within the Specific Plan area. The analysis provided in Section 4.8, *Transportation*, identifies several gaps in pedestrian and bicycle connections between the Baylands and surrounding lands.	No The 2025 Specific Plan project is consistent with this provision.
Policy C.24: For new multifamily, mixed use or commercial development projects subject to discretionary review that would affect the public right-of-way, incorporate and implement Complete Streets elements at each stage of the development process as determined reasonable and practicable by the City.	The Specific Plan provides for a comprehensive system of bicycle and pedestrian facilities providing connectivity within the Specific Plan area. The analysis provided in Section 4.8, *Transportation*, identifies several gaps in pedestrian and bicycle connections between the Baylands and surrounding lands. EIR Mitigation Measure MM TRA-2 would ensure adequate off-site pedestrian and bicycle connectivity.	No The 2025 Specific Plan project is consistent with this provision.

General Plan Policies and Programs	Specific Plan Consistency with General Plan Policy/Program	Would a Significant Physical Environmental Effect Result from an Inconsistency with this provision?
Policy C.26: Continue to connect Brisbane's bikeway and pedestrian system to the County and regional networks.	The Specific Plan provides for a comprehensive bicycle system connected to local and regional facilities, including completion of the Bay Trail through the site.	No The 2025 Specific Plan project is consistent with this provision.
Policy C.29: Provide for the safety of bicyclists by dedicating bikeways where practicable, by installing appropriate signing and striping, and by maintaining the pavement. *Program C.29.a:* Install as many bikeways as can safely be accommodated and are economically feasible.	The Specific Plan provides for a comprehensive system of bicycle facilities. The design of this system will be subject to Public Works Director review and approval to ensure provision of appropriate signing and striping. Adequate ongoing maintenance of Baylands bicycle facilities will also be required. The Specific Plan provides for a comprehensive system of bicycle facilities providing access throughout the Baylands.	No The 2025 Specific Plan project is consistent with this provision.
Policy C.30: Require new development and redevelopment to plan for and construct bikeways and/or bicycle parking facilities, as determined reasonable and practicable by the City.	The Specific Plan provides for a comprehensive system of bicycle facilities, including requirements for bicycle parking.	No The 2025 Specific Plan project is consistent with this provision.
Policy C.31: All new arterial streets and any existing arterials that are improved should provide for bicycle transportation.	The Specific Plan provides for a comprehensive system of bicycle facilities, including facilities along Geneva Avenue and off-road trails providing bicycle access throughout the Baylands.	No The 2025 Specific Plan project is consistent with this provision.
Policy C.32: Provide or require bicycle parking facilities at major destination points. *Program C.32.a:* Include bicycle lockers in park-and-ride facilities. *Program C.32.b:* Encourage business and employment centers to provide bicycle-parking facilities for their employees. *Program C.32.c:* Design and install bicycle-parking facilities to meet best current engineering practices.	The Specific Plan provides for a comprehensive system of bicycle facilities, including requirements for bicycle parking facilities. The Specific Plan does not include park-and-ride facilities. An existing park-and-ride lot is located adjacent to the southern end of the Baylands along Bayshore Boulevard and Tunnel Avenue. Provision of both short-term and long-term bicycle parking is required for office and retail development within the Baylands. The Specific Plan's bicycle systems will be constructed to meet current best design practices.	No The 2025 Specific Plan project is consistent with this provision.
Policy C.34: Maximize safe pedestrian facilities and access to all areas of the City, as reasonable and feasible.	The Specific Plan provides for a comprehensive system of pedestrian facilities providing access throughout the Baylands. The design of this system will be subject to review and approval of the Public Works Director.	No The 2025 Specific Plan project is consistent with this provision.

General Plan Policies and Programs	Specific Plan Consistency with General Plan Policy/Program	Would a Significant Physical Environmental Effect Result from an Inconsistency with this provision?
Policy C.35: Require pedestrian amenities with new development and expansion of existing uses, as appropriate.	The Specific Plan provides for a comprehensive system of pedestrian facilities providing access throughout the Baylands.	No The 2025 Specific Plan project is consistent with this provision.
Policy C.36: Seek opportunities to install and improve transit facilities, establish multi-modal connections and increase the service network.	The Baylands Specific Plan proposes a plaza adjacent to the Bayshore Caltrain station's west platform to serve as a drop-off area and gathering place for the station. In addition, a shuttle system will be implemented connecting Baylands development to the Caltrain station and providing a connection from Central Brisbane to the station. The Specific Plan's bicycle and pedestrian systems also connect to the plaza and Bayshore station.	No The 2025 Specific Plan project is consistent with this provision.
Program C.36.b Request more frequent scheduling of Caltrain stops at the Bayshore station as warranted by demand.	The addition of up to 2,200 dwelling units, 6.5 million square feet of commercial office use, and 500,000 square feet of hotel development substantially increase the potential for increased use of the Bayshore station and the possibility that the Joint Powers Authority would increase the number of daily Caltrain stops at Bayshore.	No The 2025 Specific Plan project is consistent with this provision.
Program C.36.d Cooperate with San Mateo County Transit District (SamTrans), and other appropriate agencies, to establish bus rapid transit (BRT) systems where practicable.	The proposed extension of Geneva Avenue through the Baylands would substantially enhance the feasibility of providing BRT service from developments to the north in San Francisco through the Baylands to the Bayshore Caltrain station.	No The 2025 Specific Plan project is consistent with this provision.
Program C.36.i Require new developments that are subject to the City's transportation demand measures (TDM) ordinance to also incorporate measures that facilitate Complete Streets compliance measures, such as transit stops, shuttle stops, and bicycle facilities.	The Baylands Specific Plan provides for a shuttle system connecting Baylands development to the Bayshore Caltrain Station along with comprehensive pedestrian and bicycle systems.	No The 2025 Specific Plan project is consistent with this provision.
Policy C.37: Plan for park-and-ride facilities at the Caltrain Station and other major transit stops.	The Baylands Specific Plan provides the opportunity for a park-and-ride facility at the Bayshore Caltrain station but is not specifically proposed.	No The 2025 Specific Plan project is consistent with this provision.

General Plan Policies and Programs	Specific Plan Consistency with General Plan Policy/Program	Would a Significant Physical Environmental Effect Result from an Inconsistency with this provision?
Policy C.41: Maintain an appropriate amount of off-street parking in commercial areas. *Program C.41.a:* Review the parking regulations for office, commercial and industrial uses and consider setting minimum and maximum parking standards where transit alternatives are readily available.	The Specific Plan sets an overall maximum of 11,000 parking spaces within the Baylands and establishes maximum per unit and per 1,000 square foot maximum parking ratios. However, the Specific Plan permits Multi-Family Low, Townhome, and duplex/single family housing types to provide 1.25 spaces per unit, exceeding the maximum in MTC Resolution 4530. No minimum parking standards are set in the Specific Plan. The intent of setting maximum but not minimum parking standards for commercial and other development in the Baylands is to encourage non-vehicular travel, particularly for internal travel within the Baylands.	**Yes** **Impact GHG-1** **Inconsistency with this policy exacerbates the 2025 Specific Plan project's significant and unavoidable GHG emission impact.**
Policy C.44: Consider potential effects on mobility and emergency evacuation in making land use decisions.	Draft EIR Section 4.8, *Transportation*, evaluates the effects Baylands development would have on mobility and emergency response/evacuation and concluded that the Specific Plan's proposed four-lane roadway cross-section on the Geneva Avenue bridge over the Caltrain right-of-way and the two-lane roadway cross-section along Tunnel Avenue would have adverse effects on emergency response during peak travel hours. Mitigation Measure MM TRA-2 provides for a roadway cross-section on the Geneva Avenue bridge that includes four lanes for automobile traffic (tow in each direction) with one bus rapid transit lane that would provide for adequate emergency response during all travel hours and a continuous two-way left-turn lane along Tunnel Avenue, which would also provide for adequate emergency response during all travel hours.	No The 2025 Specific Plan project is consistent with this provision.
Policy C.46: Consider transit use and facilities as well as Transportation Demand Management Programs in making land use decisions.	The analyses undertaken for Draft EIR Section 4.8, *Transportation*, estimated project-related transit use, including implementation of transportation demand management programs consistent with City ordinance.	No The 2025 Specific Plan project is consistent with this provision.
Policy C.48: In conjunction with new development and expansion of existing uses, require that new streets and any existing private streets serving the property be improved to City standards and offered for dedication as public streets.	Any private roadways proposed within the Baylands will be required to be developed to City standards, would be subject to review and approval by the Public Works Director, and offered for dedication to the City.	No The 2025 Specific Plan project is consistent with this provision.
Policy C.51: Incorporate Green Streets best practices, as appropriate to the context, for new streets and street retrofits, to enhance the pedestrian and bicyclist experience, to promote low impact development (LID) consistent with state water board initiatives to reduce the impacts of development on stormwater resources and to enhance the natural environment.	The Baylands Specific Plan includes comprehensive bicycle and pedestrian facilities plans to encourage bicycling and walking within the Baylands. Impacts of urban runoff from Baylands roadways is analyzed in Draft EIR Section 4.14, *Hydrology and Water Quality*, which concludes impacts would be less than significant.	No The 2025 Specific Plan project is consistent with this provision.

General Plan Policies and Programs	Specific Plan Consistency with General Plan Policy/Program	Would a Significant Physical Environmental Effect Result from an Inconsistency with this provision?
Chapter VII, Open Space		

Combined Standard for Mini/Neighborhood/Linear Parks: 10.5 acres per 1,000 residential population, which represents the 1994 level of service.
Community Parks: 8.0 acres per 1,000 residential population, which represents the top of the range of the National Recreation and Parks Association standard.
	The Baylands Specific Plan retains 157 acres in open space/open area, representing 29.5 percent of the site's Year 2100 land area (532.3 acres).
	The Baylands projected resident population of 4,905 would thus require 51.5 acres of Mini/Neighborhood/ Linear parks to meet the General Plan standard. In addition, 39.2 acres of community parks would be needed to meet the General Plan standard.
	Included in the Specific Plan's open space plan are lands for outdoor recreation and lands for preservation of resources. Of these 157 acres of open space, 64.4 acres are dedicated to outdoor recreation, including:
	• Active Recreation Areas
	  ○ Bay Trail (20.0 acres)
	  ○ Community Fields (7.4 acres)
	• Community Greens
	  ○ Baylands Park (5.8 acres)
	  ○ Sunnydale Park (0.8 acres)
	  ○ Roundhouse Park (3.9 acres)
	• Recreational facilities within Ecological Greenspaces
	  ○ Lagoon Park (5.3 net acres of outdoor recreation and trails)
	  ○ The Ecological Park (7.3 acres)
	  ○ Visitacion Creek (3.1 net acres of trails)
	  ○ Icehouse Hill Park (2.1 net acres of outdoor recreation and trails)
	  ○ Baylands Preserve (7.7 acres net of trails)
	• Bayshore Station Plaza (1.4 acres)
	The 64.4 acres of parks and recreational facilities that would be developed within the Specific Plan area represents 13.13 acres per 1,000 population, which is less than the General Plan's 18.5 acres per 1,000 population aspirational goal for local and community parks. However, the Specific Plan provides 29.3 percent of the site's Year 2100 land area in open space, exceeding the General Plan 25 percent requirement. In addition, Baylands Specific Plan parks and recreational areas exceed the 10.16 acres per 1,000 population currently being provided to Brisbane residents and was therefore determined not to result in significant impacts on the City's existing park system.
		No
		The 2025 Specific Plan project is consistent with this provision.

General Plan Policies and Programs	Specific Plan Consistency with General Plan Policy/Program	Would a Significant Physical Environmental Effect Result from an Inconsistency with this provision?
Policy 81.1: Work to preserve open space lands to protect the natural environment and to provide outdoor educational and recreational opportunities consistent with the sensitivity of the resource.	The Specific Plan's 157-acre open space/area system includes lands for preservation of resources and lands for outdoor recreation. The Specific Plan also includes a signage program that will provide environmental education.	No The 2025 Specific Plan project is consistent with this provision.
Policy 82: Encourage the preservation, conservation, and restoration of open space to retain existing biotic communities, including rare and endangered species habitat, wetlands, watercourses and woodlands.	Site remediation and landfill closure require removal of most existing biological habitat outside of Icehouse Hill. The Specific Plan therefore proposes extensive habitat creation and enhancement, including Visitacion Creek, Lagoon Park, the Ecological Park, and other areas. Icehouse Hill butterfly habitat will also be enhanced.	No The 2025 Specific Plan project is consistent with this provision.
Policy 85: Encourage the preservation and conservation of aquatic resources in Brisbane: the Lagoon, the Bayfront and the Marsh.	Draft EIR Section 4.6, *Biological Resources*, evaluated the impacts of Baylands development on aquatic resources and concluded that impacts would be less than significant.	No The 2025 Specific Plan project is consistent with this provision.
Program 85a: Seek opportunities to utilize aquatic areas for recreational and educational activities consistent with the sensitivity of the resource.	The Specific Plan proposes trails within Lagoon Park and along the periphery of Visitacion Creek. In addition, recreational facilities are proposed within Lagoon Park. As discussed in Draft EIR Section 4.6, *Biological Resources*, these facilities would have a less than significant impact.	No The 2025 Specific Plan project is consistent with this provision.
Policy 88: Develop parks to maximize passive recreational opportunities. *Program 88c:* Require impact fees or exactions as contributions to the acquisition, development and maintenance of passive open space, park and recreation facilities in conjunction with the mitigation requirements for development projects	The majority of the Baylands proposed 157-acre open space system consists of passive recreation and habitat conservation areas. Baylands open space areas will be improved as part of site development. The Specific Plan makes provision for the ownership and maintenance of on-site open space and recreational facilities.	No The 2025 Specific Plan project is consistent with this provision.
Policy 90: On an ongoing basis, aggressively seek opportunities to preserve open space.	The Baylands Specific Plan proposes a 157-acre open space system, which represents 29.2 percent of the site's Year 2100 land area. The Baylands' most sensitive areas, including the lagoon, Icehouse Hill, and Visitacion Creek will be preserved in open space with enhanced habitat.	No The 2025 Specific Plan project is consistent with this provision.
Chapter IX, Conservation		
Policy 118: Preserve areas containing rare and endangered species habitat to the extent allowed by law and available resources.	The Baylands' most sensitive areas—the lagoon, Icehouse Hill, and Visitacion Creek—will be preserved in open space with enhanced habitat as confirmed by the evaluations and mitigation measures set forth in this EIR (see Section 4.6, *Biological Resources*).	No The 2025 Specific Plan project is consistent with this provision.

General Plan Policies and Programs	Specific Plan Consistency with General Plan Policy/Program	Would a Significant Physical Environmental Effect Result from an Inconsistency with this provision?
Policy 123: Conserve important biological communities through sensitive project design. *Program 123a:* In land use development applications, consider the siting of structures and utilities so as to conserve identified biological communities.	The Baylands' most sensitive areas, including the lagoon, Icehouse Hill, and Visitacion Creek will be preserved in open space with enhanced habitat as confirmed by the evaluations and mitigation measures set forth in this EIR (see Section 4.6, *Biological Resources*).	No The 2025 Specific Plan project is consistent with this provision.
Policy 127: Encourage the use of plants that are compatible with the natural flora in landscape programs.	The plant palette proposed as part of the Specific Plan is consistent with planned protection of natural vegetation within the Baylands, as confirmed by the evaluations undertaken for this EIR (see Section 4.6, *Biological Resources*).	No The 2025 Specific Plan project is consistent with this provision.
Policy 128: Encourage the use of native plants in landscape programs that provide food and shelter to indigenous wildlife.	The plant palette proposed as part of the Specific Plan is consistent with planned protection of natural vegetation within the Baylands, as confirmed by the evaluations undertaken for this EIR (see Section 4.6, *Biological Resources*).	No The 2025 Specific Plan project is consistent with this provision.
Policy 129: Require erosion controls to mitigate soil disturbance.	Grading and site-specific development within the Baylands will be required to implement best management practices for erosion control.	No The 2025 Specific Plan project is consistent with this provision.
Policy 130: Conserve water resources in the natural environment.	Baylands development includes an on-site recycled water facility that will treat sewage generated within the Baylands and the service areas of the City of Brisbane and Bayshore Sanitary District to provide recycled water for non-potable uses within the Baylands and City of South San Francisco. As discussed in Section 4.16, *Utilities, Service Systems, and Water Supply*, implementation of a series of water conservation measures, including provision and use of recycled water supplies, would provide an adequate water supply for Baylands development.	No The 2025 Specific Plan project is consistent with this provision.
Program 130a: As an ongoing part of land use planning and CEQA analysis, determine whether proposals could affect water resources.	Draft EIR Section 4.16 addresses water resources and concludes the impacts of Baylands development on water resources would be less than significant.	No The 2025 Specific Plan project is consistent with this provision.
Program 130b: Require, as appropriate, project analysis of drainage, siltation, and impacts on vegetation and on water quality.	This Draft EIR provides analyses of drainage and water quality (Section 4.14, *Hydrology and Water Quality*), as well as impacts related to siltation (Section 4.15, *Geology, Soils, and Seismicity*)	No The 2025 Specific Plan project is consistent with this provision.

General Plan Policies and Programs	Specific Plan Consistency with General Plan Policy/Program	Would a Significant Physical Environmental Effect Result from an Inconsistency with this provision?
Policy 130.1: The City requires restoration of wetland losses. The determination of which land areas are wetlands will be done by those Federal and State agencies having jurisdiction. The City, however, is especially concerned with those wetlands surrounding the perimeter of the Brisbane Lagoon, the Bay shoreline, the Levinson Marsh and the Quarry sediment ponds. The ratios of restoration may exceed the regulatory agencies' mitigation minimums.	Analysis of impacts on wetlands is provided in Section 4.6, *Biological Resources*, which concludes that impacts would be less than significant.	No The 2025 Specific Plan project is consistent with this provision.
Policy 130.4: Wetland and mitigation areas that are mitigations for project impacts must be protected by recorded deed restrictions.	Adequate protections will be implemented to ensure that habitat areas created and enhanced pursuant to the provisions of the Specific Plan will be protected in perpetuity.	No The 2025 Specific Plan project is consistent with this provision.
Policy 130.5: It is Brisbane's desire that mitigation for Brisbane's wetland losses occur somewhere within the jurisdictional boundaries or sphere of influence of the City of Brisbane, if feasible.	The Baylands Specific Plan proposes that all habitat areas to be created and enhanced pursuant to the provisions of the Specific Plan will be within the Specific Plan area.	No The 2025 Specific Plan project is consistent with this provision.
Policy 131: Emphasize the conservation of water quality and of riparian and other water-related vegetation, especially that which provides habitat for native species, in planning and maintenance efforts.	To ensure that development within the Baylands is protective of water quality and water-related vegetation, evaluations have been undertaken in this EIR, including appropriate mitigation measures (see Section 4.6, *Biological Resources*, and Section 4.14, *Hydrology and Water Quality*).	No The 2025 Specific Plan project is consistent with this provision.
Policy 132: Recognize the importance of the Brisbane Lagoon and the Levison Marsh as wildlife habitats, valuable community resources and drainage basins, and cooperate with responsible agencies in their conservation.	The Baylands Specific Plan provides for protection of the lagoon and drainage areas, as confirmed by the evaluations undertaken for this EIR (see Section 4.6, *Biological Resources*, and Section 4.14, *Hydrology and Water Quality*). To implement this policy, the City has sought input from responsible agencies regarding the evaluations contained in this EIR as part of its public review.	No The 2025 Specific Plan project is consistent with this provision.
Policy 133: Reduce the amount of sediment entering waterways. *Program 133a:* Participate in programs to improve water quality in the Lagoon and the Bay. *Program 133b:* Require all development, especially that involving grading, to exercise strict controls over sediment.	The evaluations contained in this EIR along with applicable mitigation measures (see Section 4.15, *Geology, Soils, and Seismicity*, and Section 4.14, *Hydrology and Water Quality*) confirm that Baylands development would minimize the amount of sediment entering waterways.	No The 2025 Specific Plan project is consistent with this provision.

General Plan Policies and Programs	Specific Plan Consistency with General Plan Policy/Program	Would a Significant Physical Environmental Effect Result from an Inconsistency with this provision?
Policy 134: Reduce the amount of pollutants entering waterways. *Program 134a:* Cooperate with the Water Quality Control Board and County Department of Environmental Health and participate in the NPDES Program to monitor and regulate point and non-point discharges. *Program 134c:* Encourage wetlands restoration projects to remove or fix toxicants and reduce siltation. *Program 134d:* Utilize wetlands restoration projects to remove or fix toxicants and reduce siltation where appropriate.	The evaluations contained in this EIR along with applicable mitigation measures (see Section 4.14, *Hydrology and Water Quality*) confirm that Baylands development would minimize the volume of pollutants entering waterways.	No The 2025 Specific Plan project is consistent with this provision.
Policy 136: Encourage the maintenance and rehabilitation of structures important to the history of Brisbane.	The Baylands Specific Plan provides for restoration and adaptive use of the historic Roundhouse, as well as preservation of the Machinery & Equipment building.	No The 2025 Specific Plan project is consistent with this provision.
Policy 137: Conserve prehistoric resources in accordance with State and Federal requirements.	While Baylands development could have an impact on as-yet undiscovered archaeological or Tribal cultural resources, Mitigation Measures MM CUL-2a through MM CUL-2c would reduce impacts and conserve prehistoric resources in accordance with State and federal requirements.	No The 2025 Specific Plan project is consistent with this provision.
Policy 138: Encourage conservation of domestic water. *Program 138a.* Require the use of water conserving fixtures in new construction and remodeling projects. *Program 138b:* Encourage the use of water conserving landscape and irrigation systems. *Program 138c:* Utilize, if safe and appropriate, recycled water for landscape irrigation and dust control. *Program 138e:* As a part of the land use planning process, consider how water conserving features are incorporated into project design.	The Water Supply Assessment prepared for the Baylands development identifies an array of water conservation measures that would be undertaken, including an on-site recycled water facility treating sewage generated within the Baylands, City of Brisbane, and Bayshore Sanitary District to supply recycled water for non-potable use.	No The 2025 Specific Plan project is consistent with this provision.

General Plan Policies and Programs	Specific Plan Consistency with General Plan Policy/Program	Would a Significant Physical Environmental Effect Result from an Inconsistency with this provision?
Policy 139: Promote the conservation of non-renewable energy resources.	The Baylands Specific Plan provides for 92,445 MWh of on-site renewable generation in addition to meeting CALGreen Tier 1 energy conservation standards.	No The 2025 Specific Plan project is consistent with this provision.
Policy 140: Encourage energy-efficient building design and site planning. Program 140b: As a part of the review of land use applications for subdivisions, specific plans and new non-residential and multi-family projects, encourage the design and siting of structures and the use of landscape materials in terms of utilizing natural resources for heating and cooling.	The Specific Plan includes explicit building energy conservation standards in addition to required compliance with CALGreen Tier 1 energy efficiency standards.	No The 2025 Specific Plan project is consistent with this provision.
Policy 142: Continue to support vehicle trip-reduction programs to conserve nonrenewable fuels.	Baylands development will be consistent with CCAG and City of Brisbane transportation demand management plan requirements.	No The 2025 Specific Plan project is consistent with this provision.
Policy 143: Maximize opportunities to recycle solid waste.	Baylands development will implement zero waste programs undertaken by Recology.	No The 2025 Specific Plan project is consistent with this provision.
Chapter X, Community Health and Safety		
Policy 149: Construct new buildings and retrofit existing ones to withstand seismic forces. *Program 149a:* Require that all new construction meet current codes for seismic stability. *Program 149e:* Require soils reports and engineering recommendations for structural stability in conjunction with building permit applications in areas which have been identified as prone to seismically induced landslides or subsidence in seismic events.	Geotechnical reports prepared for the western and eastern portions of the site identify specific seismic criteria to be implemented. All new construction within the Baylands will be required to comply with the seismic design standards in place at the time buildings permits are issued.	No The 2025 Specific Plan project is consistent with this provision.

General Plan Policies and Programs	Specific Plan Consistency with General Plan Policy/Program	Would a Significant Physical Environmental Effect Result from an Inconsistency with this provision?
Policy 152: Consider issues of slope stability in conjunction with development applications. *Program 152a:* Require soil and geologic investigations in areas identified as prone to slope instability. Consider both on-site and off-site impacts. *Program 152b:* Unless adequate mitigating measures are undertaken, prohibit land alteration, including any grading and structural development, in identified areas of slope instability. *Program 152c:* Require topographical and soils information for all projects on slopes identified over 20%. (See Figure X-G.) *Program 152d:* Certificates of compliance shall be conditioned upon a comprehensive and detailed slope analysis. *Program 152e:* Encourage placement of structures away from areas identified as prone to slope failure or erosion unless effective mitigation measures are proposed as a part of the project design. *Program 152f:* Require erosion control programs and revegetation on all disturbed slopes.	Geotechnical reports prepared for the western and eastern portions of the site identify design criteria for ensuring safety of manufactured slopes within the Baylands. All site grading will be required to comply with applicable building code requirements as well as the recommendations of site-specific geotechnical analyses.	No The 2025 Specific Plan project is consistent with this provision.
Policy 153: Require the construction of new improvements and the upgrade of existing stormwater infrastructure to mitigate flood hazard. *Program 153b:* Work with Daly City and affected property owners to design improvements to alleviate flooding on the section of Bayshore Boulevard between Geneva Avenue and Main Streets.	The Baylands Specific Plan includes a comprehensive plan to upgrade and install new stormwater drainage facilities to comply with the flood protection criteria adopted as part of General Plan Amendment GP-1-18/Measure JJ.	No The 2025 Specific Plan project is consistent with this provision.

General Plan Policies and Programs	Specific Plan Consistency with General Plan Policy/Program	Would a Significant Physical Environmental Effect Result from an Inconsistency with this provision?
Policy 158: Provide a level of fire protection proportional to the size, risks and service demands of the community within budgetary constraints. *Program 158a:* 1n conjunction with development applications, evaluate fire service requirements, response times and levels of risk. Require impact fees and exactions to maintain the level of service and to provide for any special equipment needs.	Baylands development requires a new fire station to house a new ladder company within the City. With implementation of the mitigation measures contained in this EIR, appropriate levels of fire protection relative to the size, risks, and service demands of Baylands development would be provided.	No The 2025 Specific Plan project is consistent with this provision.
Policy 160: Provide a level of police protection of persons and property proportional to the size and law enforcement needs of the community within budgetary constraints. *Program 160a:* In conjunction with land use development applications, evaluate police service requirements and response times. Require impact fees and exactions to maintain the level of service.	The level of police protection and facilities needed to support Baylands development was determined by the Brisbane Police Department and was evaluated in Draft EIR Section 4.17, *Public Services and Facilities*. As noted above, a fiscal impact analysis undertaken for the Baylands Specific Plan demonstrated that Baylands development would generate sufficient municipal income to offset the costs of providing municipal services, including police services to the Baylands.	No The 2025 Specific Plan project is consistent with this provision.
Policy 163: Continue to ensure a three-minute emergency response average and a ten-minute average response to other calls for service.	To maintain current service levels, Baylands development requires expansion of the Brisbane Police Department to provide additional 24/7 shifts and move from its current single beat to a two-beat system. Thus, additional sworn officers and civilian employees will be required. In addition, Baylands development will provide an on-site police facility that would allow officers to fill out reports and hold prisoners until they are booked into the county jail.	No The 2025 Specific Plan project is consistent with this provision.
Policy 166: Protect the community's health, safety, welfare, natural resources and property through regulation of the handling and storage of hazardous materials, with specific focus on prevention of accidents.	This EIR evaluated impacts related to the handling and storage of hazardous materials and concluded that compliance with federal, state, and local regulations would ensure less than significant impacts, along with adequate protection of the community's health, safety, welfare, natural resources, and property.	No The 2025 Specific Plan project is consistent with this provision.
Policy 172: Establish that it is of the highest priority that contaminated lands in Brisbane be remediated. *Program 172c:* Require private property owners to remediate contaminated lands consistent with State and Federal requirements.	Approval of remedial action plans by regulatory agencies along with approval of the Title 27 landfill closure plan was obtained by the applicant prior to public release of the EIR. Completion of site remediation and landfill closure under regulatory agency oversight is required prior to development within OU-SM, OU-2, and the former Brisbane landfill, respectively.	No The 2025 Specific Plan project is consistent with this provision.

General Plan Policies and Programs	Specific Plan Consistency with General Plan Policy/Program	Would a Significant Physical Environmental Effect Result from an Inconsistency with this provision?
Policy 173: The City shall not grant approval of a development project on a contaminated site unless a plan for remediation of the site has first been approved and adopted by all federal, state, and local agencies having jurisdiction over the remediation plan.	Approval of plans by regulatory agencies and completion of site remediation and Title 27 landfill closure was obtained by the applicant prior to public release of the EIR. Completion of site remediation and landfill closure under regulatory agency oversight is required to be completed prior to development within OU-SM, OU-2, and the former Brisbane landfill, respectively.	No The 2025 Specific Plan project is consistent with this provision.
Policy 175: Assure that any development otherwise permitted on lands filled with municipal waste is safe by implementing the following programs. *Program 175a:* Exchange information with the California Integrated Waste Management Board, San Mateo County Health System Environmental Health Division and other responsible agencies regarding the requirements for safe and successful landfill development, utilizing the experience of Sierra Point. *Program 175b:* Require evidence that scientific testing and verification has taken place to the satisfaction of regulatory agencies. *Program 175c:* Encourage property owners of filled lands to complete all testing and related requirements of the Federal, State and local agencies well in advance of requesting land use permits from the City.	The Regional Water Quality Control Board and the San Mateo County Health System have approved a final closure plan consistent with the requirements of Title 27. Construction of a required landfill cap and other action required by the approved final landfill closure plan must be completed prior to approval of development overlying the required landfill cap. Final landfill closure is proposed to be undertaken on a phased basis.	No The 2025 Specific Plan project is consistent with this provision.

General Plan Policies and Programs	Specific Plan Consistency with General Plan Policy/Program	Would a Significant Physical Environmental Effect Result from an Inconsistency with this provision?
Policy 176: Minimize the intrusion of unwarranted and intrusive noise on community life.	Baylands geotechnical conditions are such that as many as 70 percent of Baylands buildings 5 stories in height or more to be constructed with pier foundations. While alternatives to traditional impact pile driving are available, such alternatives may not be suitable for use in all buildings requiring pier foundations. Thus, development of mid- and high-density residential and commercial development within the Baylands will involve some degree of impact pile driving, including the potential for impact pile driving to occur simultaneously as multiple sites. Noise impacts that would result from Baylands development have been evaluated in Draft EIR Section 4.12, *Noise and Vibration*, which concluded that construction activities, including impact pile driving, could be designed to comply with City noise ordinance requirements. However, the cumulative effects of construction activities and multiple buildings undergoing pile driving at the same time would be intrusive.	**Yes** **Impact NOI-1** **Installation of pile foundations.** **Impact NOI-2** **Increased Traffic Noise.**
Policy 179: Require the incorporation, when feasible, of new road or landscaping features that buffer noise impacts on adjacent areas.	The Baylands Specific Plan provides design requirements for Specific Plan roadways that include roadway landscaping. In addition, the Specific Plan establishes building setbacks that will aid in noise reduction. Noise impacts that would result from Baylands development have been evaluated in Section 4.12, *Noise and Vibration*, of this EIR, which concluded that, with the implementation of the mitigation requirements (including measures aimed at establishing noise buffering features), Project-related noise impacts would be less than significant.	No The 2025 Specific Plan project is consistent with this provision.
Policy 182: Support efforts to reduce vehicle trips and keep smooth traffic flow to the extent that the number of trips and stop-and-start traffic contribute to traffic noise.	The Specific Plan's improved access to and a mix of residential and commercial uses near transit supports efforts to reduce vehicle trips. In addition, providing improved access to US Highway 101, along with proposed off-site roadway improvements, would assist in reducing congestion that contributes to traffic noise. Baylands development will implement a transportation demand management program to reduce trip generation consistent with City ordinance requirements.	No The 2025 Specific Plan project is consistent with this provision.

General Plan Policies and Programs	Specific Plan Consistency with General Plan Policy/Program	Would a Significant Physical Environmental Effect Result from an Inconsistency with this provision?
Policy 183: Coordinate land uses and construction conditions to minimize noise impacts of the Caltrain corridor and major highway arterials on adjacent land uses.	The Specific Plan proposes multi-family residential uses as close as 50 feet from the Caltrain tracks, which is considered "normally unacceptable" for such uses. To minimize noise impacts, Draft EIR Section 4.12, *Noise and Vibration*, includes mitigation for residential uses in proximity to the Caltrain rail line, including: • Use of acoustically rated building materials (insulation and windows); • Construction of architectural noise barriers between sources and receptors; and • Implementation of landscaping or other non-noise sensitive buffer zones between sources and receptors.	No The 2025 Specific Plan project is consistent with this provision.
Policy 184: In conjunction with development applications and other land use decisions, consider the potential for noise generation from, as well as noise impacts on, the project or area. *Program 184a:* Use the State Guidelines for land use compatibility to determine noise impacted uses. *Program 184b:* Require acoustical studies for development applications in areas identified as noise impacted and potential noise generators. *Program 184c:* For such projects, require a noise attenuation or a mitigation program to be submitted as a part of the project design.	Draft EIR Section 4.12, *Noise and Vibration*, identifies noise-related impacts that could result from Baylands development and provide mitigation measures needed to reduce impacts to less than significant levels based on State Guidelines for land use compatibility.	No The 2025 Specific Plan project is consistent with this provision.

General Plan Policies and Programs	Specific Plan Consistency with General Plan Policy/Program	Would a Significant Physical Environmental Effect Result from an Inconsistency with this provision?
Policy 193: As a part of land use development analysis, consider the impacts on air resources that will be generated by a project through mobile sources. *Program 193a:* Consider the design of roadways, transit facilities, bikeways and pedestrian access in all subdivisions, specific plans and other land use proposals to evaluate whether and to what extent the design addresses air quality issues. *Program 193b:* In conjunction with land use development applications and CEQA review, evaluate whether a proposal may have a significant effect on air quality because of mobile emissions. Require environmental impact analysis and mitigation plans and monitoring, as appropriate. *Program 193c:* Discourage drive-up service windows and similar uses that generally result in vehicle idling.	The evaluations contained in Draft EIR Section 4.9, *Air Quality*, identify mobile source air quality impacts that would result from Baylands development and provide mitigation measures to reduce impacts to less than significant.	No The 2025 Specific Plan project is consistent with this provision.
Policy 194: Attempt to minimize dependence on automobile travel by encouraging transit, bicycle and pedestrian alternatives and incorporating alternatives to the automobile in land use planning and project design. *Program 194b:* Provide bicycle and pedestrian access to all areas of the City to provide alternatives to automobile use. *Program 194c:* Require all new development to include design principles that are transit oriented and otherwise reduce dependence on the automobile.	By providing a mix of residential and commercial office uses in proximity to transit, along with improved access to transit and improved bicycle and pedestrian connections throughout the Baylands, the Specific Plan aims to minimize dependence on automobile travel. A detailed evaluation of automobile vehicle miles traveled associated with proposed Baylands development was undertaken and is presented in Draft EIR Section 4.8, *Transportation*, which determined that impacts would be less than significant.	No The 2025 Specific Plan project is consistent with this provision.
Policy 197: Continue to improve existing roadways to reduce congestion in order to reduce emissions generated by "stop-and-go" driving. *Program 197a:* Use traffic management systems, such as signage and timed signals, to facilitate traffic flow and reduce congestion.	As part of the planning review for proposed Baylands development, specific measures to be required of Baylands development were formulated to reduce congestion and emissions of air pollutants and GHG. Included in these measures is a mobility plan for Bayshore Boulevard to address the combined impacts of (1) Baylands and other development in Brisbane and (2) through traffic along that roadway.	No The 2025 Specific Plan project is consistent with this provision.

General Plan Policies and Programs	Specific Plan Consistency with General Plan Policy/Program	Would a Significant Physical Environmental Effect Result from an Inconsistency with this provision?
Policy 198: Actively participate in and support the development and implementation of transportation system management plans (TSMs) and transportation demand management measures (TDMs).	The City of Brisbane adopted a Transportation Demand Management (TDM) ordinance (Municipal Code Chapter 10.52) in 2023 that aligns its policies with county and state requirements. The Specific Plan would be subject to the highest tier of compliance (Tier 3) and required to implement all TDM measures presented in **Table 4.8-10**.	No The 2025 Specific Plan project is consistent with this provision.
Policy 203: Consider issues of stationary emissions in land use planning and project review. *Program 203a:* As part of land use planning, establish buffer zones between sensitive receptors and significant emissions sources, including uses that cause offensive odors or dust.	The evaluations undertaken for this EIR include consideration of stationary source emissions from future Baylands development.	No The 2025 Specific Plan project is consistent with this provision.
Policy 209: Require, as feasible, all trunk water lines to be installed in dedicated public streets.	The Baylands Specific Plan includes a water facilities master plan that provides for the installation of new trunk water lines within dedicated public streets.	No The 2025 Specific Plan project is consistent with this provision.
Policy 214: Require, as feasible, that all sanitary sewer lines be installed within dedicated public streets.	The Baylands Specific Plan includes a sewer facilities master plan that provides for the installation of new sanitary sewer lines within dedicated public streets.	No The 2025 Specific Plan project is consistent with this provision.
Policy 221: If new development occurs, require storm drain systems to be installed to City standards. *Program 221a:* In conjunction with land use development applications for vacant lands, require studies to determine design requirements to collect and remove stormwater from the property or reuse stormwater to benefit the public. Require facilities to be designed and installed to City standards, at developer's expense.	The Baylands Specific Plan includes a storm drain master plan consistent with City standards. Infrastructure improvements required for Baylands development will be paid for by the project. No city funds would be expended for construction of Baylands infrastructure.	No The 2025 Specific Plan project is consistent with this provision.
Policy 222: Require that all storm drain lines be installed within dedicated public streets.	The Baylands Specific Plan includes a storm drain master plan that provides for the installation of new sanitary sewer lines within dedicated public streets.	No The 2025 Specific Plan project is consistent with this provision.

General Plan Policies and Programs	Specific Plan Consistency with General Plan Policy/Program	Would a Significant Physical Environmental Effect Result from an Inconsistency with this provision?
Policy 224: In conjunction with development applications that place substantial increased demands upon the existing system, require that the system be upgraded or replaced to the satisfaction of the City. Contributions from responsible parties should be proportional to the impact of their projects.	The Baylands Specific Plan includes a storm drain master plan that provides for the installation of new sanitary sewer lines within dedicated public streets. Infrastructure improvements required for Baylands development will be paid for the project or through federal or state grant funding. No city funds would be expended for construction of Baylands infrastructure.	No The 2025 Specific Plan project is consistent with this provision.
Chapter XI, Housing 2023–2031		
The Brisbane Housing Element sets a quantified objective of 225 very low-income, 287 moderate income, and 1,288 above moderate-income units being developed within the Baylands before the end of 2031.	As discussed in Draft EIR Section 4.4, *Socioeconomic Effects*, the Brisbane Specific Plan supports achievement of objectives for the provision of housing for all economic segments of the community.	No The 2025 Specific Plan project is consistent with this provision.
2.A.1: Maintain existing residential and mixed-use zoning to provide adequate sites to accommodate the 2022-2031 Regional Housing Needs Allocation.	As discussed in Draft EIR Section 4.4, the Specific Plan provides sufficient land at appropriate densities to facilitate meeting Brisbane's 2022–2031 Regional Housing Needs Allocation.	
2.A.2: Adopt the Baylands Specific Plan/Zoning to allow for 1,800 to 2,200 housing units, at site densities of at least 20 units per acre, on sites accommodating at least 16 units, to meet the 2023-2031 RHNA, consistent with Government Code Section 65583.2(h).	The Specific Plan as currently proposed and analyzed in this EIR provides for development of 1,800 to 2,200 housing units with a minimum density exceeding 20 units per acre on sites that would each accommodate a minimum of 16 units.	No The 2025 Specific Plan project is consistent with this provision.
2.B.1: Through development of the Baylands Specific Plan and implementing development agreements, identify suitable sites for housing for seniors, persons with disabilities or other special needs, and lower-income households in the Baylands subarea.	The Specific Plan provides for development of 2,200 housing units with a variety of densities and building types but does not make any specific commitment to providing housing for seniors, persons with disabilities or other special needs, and lower-income households.	No The 2025 Specific Plan project is consistent with this provision.
6.A.4: Consistent with the City's Green Infrastructure Plan and Section C.3 of the Municipal Regional Stormwater Permit (MRP), require new residential development to retain and treat stormwater from the site and adjacent rights-of-way.	The Specific Plan provides for new development within the Baylands to retain and treat stormwater from the site and adjacent rights-of-way.	No The 2025 Specific Plan project is consistent with this provision.

General Plan Policies and Programs	Specific Plan Consistency with General Plan Policy/Program	Would a Significant Physical Environmental Effect Result from an Inconsistency with this provision?
Chapter XII, Policies and Programs by Subarea		
(ii) a specific schedule establishing the time frames by which (i) the landfill must be closed in full compliance with Title 27 and (ii) the remediation of OU-1 and OU-2 must be completed; and	The Specific Plan provides for phased closure of the former landfill in compliance with Title 27 over a 10-year period. The Specific Plan also requires that remediation of OU-SM (formerly OU-1) and OU-2 be completed concurrent with site grading. The applicant estimates site remediation and grading will occur over a 2-year period.	No The 2025 Specific Plan project is consistent with this provision.
(iii) specific means by which the City may enforce the applicant's adherence to the schedule for closure and remediation and specific consequences, e.g., monetary penalties, suspension of building permits, etc., that the City may impose on the applicant for failing to adhere to the schedule.	The Specific Plan's phasing program requires completion of remediation and site grading prior to development. No site plans or building permits would be approved for lands within OU-SM or OU-2 for which site remediation has not been completed. No site plans or building permits would be approved for lands within the former landfill within areas for which Title 27 landfill closure has not been completed.	
B. A reliable water supply approved by the City of Brisbane to support proposed uses within the Baylands shall be secured prior to site development.	An evaluation of the proposed water supply from the Baylands is provided in Draft EIR Section 4.16, *Utilities, Service Systems, and Water Supply*, which concluded that a reliable water supply for the Baylands would be available. Impacts associated with construction and operation of potable and recycled water supplies are provided in Draft EIR Section 4.16.	No The 2025 Specific Plan project is consistent with this provision.
C. All residential development shall be designed and remediated to accommodate ground level residential uses and ground level residential-supportive uses such as daycare, parks, schools, playgrounds, and medical facilities.	The remedial action plans approved for OU-SM and OU-2 require residential areas within the Baylands to be remediated to accommodate ground level residential uses and ground level residential-supportive uses such as daycare, parks, schools, playgrounds, and medical facilities.	No The 2025 Specific Plan project is consistent with this provision.
D. Each increment of development shall be provided with appropriate transportation related and other infrastructure, facilities, and site amenities as determined by the City. Such transportation related and other infrastructure, facilities, and site amenities (e.g., parks, open space preservation, habitat enhancement) shall be provided at the developer's cost.	The phasing program provided in the Baylands Specific Plan provides for each increment of development to be provided with appropriate transportation related and other infrastructure, facilities, and site amenities as determined by the city. Infrastructure, site amenities, and other improvements required for Baylands development will be paid for the project or through federal or state grant funding. No city funds would be expended for construction of Baylands infrastructure.	No The 2025 Specific Plan project is consistent with this provision.

General Plan Policies and Programs	Specific Plan Consistency with General Plan Policy/Program	Would a Significant Physical Environmental Effect Result from an Inconsistency with this provision?
G. The required specific plan for the Baylands shall include a sustainability program for new development consistent with the principles of the Sustainability Framework for the Brisbane Baylands, Final Report accepted by the City Council on November 5, 2015. Baylands development shall be designed so as to be energy neutral on an ongoing basis.	The Specific Plan proposes substantial on-site electricity generation, including solar-powered infrastructure systems totaling 59.8 MW of capacity and 92,445 MWh of annual generation. Although the Specific Plan would not achieve energy neutrality and generate sufficient on-site renewable energy to offset electrical usage on an annualized basis, renewable energy generation within the Specific Plan area would meet slightly more than half (53.3 percent) of the development's demand for electricity. The remainder of the site's energy would be provided by Peninsula Clean Energy. Peninsula Clean Energy provides 100 percent renewable energy available. While approximately 2.5 percent of individuals under Peninsula Clean Energy opt out of this program (EQ Research 2019), that remaining electrical demand will ultimately become 100 percent renewable (Pub. Utilities Code Sections 399.11, 399.30 and 454.33). Furthermore, the Specific Plan proposes 30 MW of battery-based stationary energy storage systems installed as part of site-specific development projects along with a 250 MW front-of-the-meter, utility-scale battery storage facility. Because the Specific Plan would generate substantial renewable energy on-site along with substantial battery storage, denial of the project and development of 2,200 dwelling units, 6.5 million s.f. of commercial, and 500,000 s.f. of hotel use at alternative locations would increase regional energy consumption (Government Code Section 65589.5(a). Despite the inconsistency with this particular policy, the 2025 Specific Plan project would therefore remain consistent with the overall General Plan.	No Although the 2025 Specific Plan project is inconsistent with this provision, energy would not be used in a wasteful manner, use of renewable energy sources for on-site use would be maximized, and the project would be consistent with the overall General Plan.
The ten Sustainability Framework principles for Baylands development include:		
• **Zero Carbon Buildings**. Making buildings more energy efficient and delivering all energy with renewable technologies.	The Specific Plan contains a program to ensure energy efficiency and requires that all electrical energy used within the Baylands be from renewable sources, whether that energy is generated and stored on-site or purchased from a utility company.	No The 2025 Specific Plan project is consistent with this principle.
• **Zero Waste.** Reducing waste, reusing where possible, and ultimately sending zero waste to landfills.	Recology provides solid waste collection, recycling, and disposal services for residential and commercial customers in San Francisco and the Baylands through a three-cart collection program that requires, under San Francisco's Mandatory Recycling and Composting Ordinance, customers to sort solid waste into recyclables; compostable items, such as food scraps and yard trimmings; and garbage. Baylands development would exceed the requirements of state law and provide more extensive diversion programs than is currently available throughout the rest of Brisbane. The project would therefore not obstruct attainment of a zero waste goal.	No The 2025 Specific Plan project is consistent with this principle.

General Plan Policies and Programs	Specific Plan Consistency with General Plan Policy/Program	Would a Significant Physical Environmental Effect Result from an Inconsistency with this provision?
• **Sustainable Transportation.** Using low carbon modes of transport to reduce emissions and reducing the need to travel with good planning.	The Specific Plan provides for development of comprehensive bicycle and pedestrian systems within the Baylands along with establishment of a Baylands shuttle system and provision of EV charging stations. Draft EIR Section 4.8, *Transportation*, evaluates the vehicle miles traveled impacts of proposed Baylands development. In addition, Draft EIR Section 4.11, *Energy Resources*, analyzes the extent to which Baylands development would encourage electric vehicle use.	No The 2025 Specific Plan project is consistent with this principle.
• **Local and Sustainable Materials.** Using sustainable healthy products, with low embodied energy, sourced locally, made from renewable or waste resources.	The Local and Sustainable Materials principle is not reflected in any of the thresholds and impacts analyzed in this EIR. Consistency with this principle is therefore a planning issue rather than a physical environmental effect analyzed pursuant to CEQA.	No The 2025 Specific Plan project is consistent with this principle.
• **Local and Sustainable Food.** Choosing low impact, local, seasonal and organic diets and reducing food waste.	The Local and Sustainable Food principle is not reflected in any of the thresholds and impacts analyzed in this EIR. Consistency with this principle is therefore a planning issue rather than a physical environmental effect analyzed pursuant to CEQA.	No The 2025 Specific Plan project is consistent with this principle.
• **Sustainable Water.** Using water more efficiently in buildings and in the products people buy, and addressing local flooding, wetland and stormwater pollution.	Baylands development provides for extensive water recycling. In addition to CALGreen Tier 1 water conservation standards, the Specific Plan prohibits potable water from being used for irrigation throughout the site or for domestic flush features within non-residential buildings. Standards for low water use landscaping are also included in the Specific Plan.	No The 2025 Specific Plan project is consistent with this principle.
• **Open Space and Habitat.** Protecting and restoring biodiversity and natural habitats through appropriate land use and integration into the built environment.	The Specific Plan proposes a 157-acre open space system, which provides for habitat restoration, enhancement, and protection on Icehouse Hill, within Visitacion Creek, and along the north shore of the Brisbane lagoon, as well as within adjacent areas. The proposed Baylands Park and the Ecological Park integrate habitat restoration and enhancement into the community's built environment.	No The 2025 Specific Plan project is consistent with this principle.
• **Culture and Heritage.** Reviving local identity and wisdom; supporting and participating in the arts.	The Specific Plan includes restoration and reuse of the historic Roundhouse. The Specific Plan also proposes contributing to the provision of public art within the Baylands at a rate half of that currently required of development outside of the Baylands. In addition to use of public art fees for traditional public art installations, the Specific Plan permits public art fees to be used for project wayfinding and signage, as well as for rehabilitation of the historic Roundhouse. While the proposed reduced contribution to art in public places would be inconsistent with this sustainability principle, it would not constitute a physical environmental impact for CEQA purposes as to restoration of the Roundhouse.	No The 2025 Specific Plan project is consistent with this principle.

General Plan Policies and Programs	Specific Plan Consistency with General Plan Policy/Program	Would a Significant Physical Environmental Effect Result from an Inconsistency with this provision?
• **Economic Vitality with Equity and Ecology.** Creating ecologically based economies that support equity and inclusive communities.	The Specific Plan calls for a "mix of housing types to serve diverse income levels and family types, including multifamily high, multifamily mid, multifamily low, townhomes, and duplex/single family homes." Analysis of the extent to which proposed Baylands residential development would address identified housing needs for all economic segments of the community as well as identified special needs groups is provided in Draft EIR Section 4.4, *Socioeconomic Effects*, which concludes that the Specific Plan provides a sufficient range of residential development intensities and building types to provide housing for all economic segments of the community. The Specific Plan does not, however, make a specific commitment to the amount of housing affordable to lower-income households or to providing housing for seniors, persons with disabilities, or other special needs. Site-specific development projects would be subject to Municipal Code inclusionary housing requirements.	No The 2025 Specific Plan project is consistent with this principle.
• **Health, Safety and Happiness.** Encouraging active, safe, meaningful lives to promote good health and well-being.	While the Specific Plan proposes a 157-acre open space system, large portions of that system are designed for habitat restoration and enhancement as well as for resource conservation. Draft EIR Section 4.18, *Parks, Open Space/Open Areas, and Recreational Resources*, evaluates the extent to which the Specific Plan achieves the General Plan's aspirational goals for provision of recreational lands. This evaluation concludes that the 64.8 acres of parkland proposed by the Specific Plan (13.2 acres per 1,000 Baylands residents) exceeds the 5.05 acres per 1,000 population of parkland currently available to Brisbane residents but falls short of the 18.5 acres to 1,000 population aspirational goal set in the General Plan for local and community parks. Because the Specific Plan would provide more than twice the park land per 1,000 population currently available to Brisbane residents, Draft EIR Section 4.18 determined the Specific Plan would not result in significant impacts to the City's existing park system.	No The 2025 Specific Plan project is consistent with this principle.
H. Key habitat areas, including Icehouse Hill and Brisbane Lagoon and adjacent habitat as identified in the 2001 City Open Space Master Plan shall be preserved, enhanced, and protected.	Key habitat areas, including Icehouse Hill, Brisbane Lagoon, and adjacent habitat, and Visitacion Creek are proposed to be enhanced and preserved in open space. The Specific Plan includes programs for habitat creation and enhancement. See Draft EIR Section 4.6, *Biological Resources*, for evaluation of biological resources impacts.	No The 2025 Specific Plan project is consistent with this provision.

General Plan Policies and Programs	Specific Plan Consistency with General Plan Policy/Program	Would a Significant Physical Environmental Effect Result from an Inconsistency with this provision?
I. The historic Roundhouse shall be protected and preserved. The required specific plan shall ensure rehabilitation of the Roundhouse for adaptive reuse at the developer's cost.	The Specific Plan includes provisions for restoration of the Roundhouse consistent with Secretary of the Interior standards, along with adaptive reuse of the structure. The Specific Plan also notes that Roundhouse restoration may be at least partially paid for with public art fees that the Specific Plan proposes at half the rate charged to other developments within the city for provision of art in public places. Thus, while a less than significant physical environmental impact would result, the Specific Plan would be inconsistent with the sustainability principle in relation to financing of improvements.	No The 2025 Specific Plan project is consistent with this provision.
J. Development shall be designed to protect uses from the 100-year flood, including 100 years of projected sea level rise as determined based on regulatory standards or guidelines in effect at the time of project construction, with the reference to guidelines and sea level rise projections approved by the Director of Public Works/City Engineer based on context-specific considerations of risk tolerance and adaptive capacity.	The Baylands Specific Plan establishes flood protection criteria consistent with the City's current standards established for the Baylands in the Brisbane Baylands Program EIR. Future site-specific development will be required to meet the standards and guidelines in effect at the time of project construction, with the reference to guidelines and sea level rise projections approved by the Director of Public Works/City Engineer.	No The 2025 Specific Plan project is consistent with this provision.
K. Prior to the issuance of a grading permit to export soil or move soil from the existing landfill area for incorporation in a remediation or grading plan, the soil shall be tested in a manner approved by the City.	As discussed in Draft EIR Section 4.13, *Hazards and Hazardous Materials*, all soil to be moved within and from the landfill site will be tested in a manner approved by the city. Grading permits will be issued only for the movement of soils deemed safe.	No The 2025 Specific Plan project is consistent with this provision.
Policy BL.3: Address visual impacts of any future specific plan development in the following manner:		
Program BL.3.a: Environmental review for the required Specific Plan shall include a visual impact analysis which shall include an evaluation of the impacts of building heights, including the impact of the proposal on view corridors.	A visual impact analysis is provided in Draft EIR Section 4.5, *Aesthetics and Visual Resources*, which concludes views of San Bruno Mountain, and the San Francisco Bay would be partially obscured from public vantage points.	No The 2025 Specific Plan project is consistent with this provision.
Program BL.3.b: The required Specific Plan shall address the heights of buildings and building groups to achieve the following: i. diversity of height within the subarea; ii. creative excellence in architectural and site design;	The Baylands Specific Plan includes building height standards and design guidelines that provide for a diversity of building types, heights, and architectural design. The Specific Plan also sets standards for building separation and preserves substantial portions of the site in open space.	No The 2025 Specific Plan project is consistent with this provision.

General Plan Policies and Programs	Specific Plan Consistency with General Plan Policy/Program	Would a Significant Physical Environmental Effect Result from an Inconsistency with this provision?
iii. visual acceptability when seen from above; iv. a complementary relationship to the overall topography, especially the Lagoon, San Bruno Mountain and the Bay, and the entrance to Central Brisbane; v. open space and open areas. Development south of the Bayshore Basin drainage channel shall maintain a low profile permitting low or mid-rise buildings, not to exceed 6 stories in height, in order to preserve the existing views of San Francisco and San Francisco Bay as seen from Central Brisbane, and to maximize the amount of landscape and open space or open area in this portion of the subarea. The following design approaches shall not be included in the required specific plan or any development proposal: i. Buildings or building groups that block view corridors to the Bay or appear as “fortresses" or "walls" lining the Bayfront, the Lagoon or any arterial street.		
Policy BL.4: Maximize opportunities for open space and recreational uses in any land use planning for this subarea.	The Specific Plan proposed up to 157 acres of open space within the Baylands, encompassing 29.3 percent of the Baylands Year 2100 land area. A total of 64.4 acres of parks and recreational uses will also be provided within the Baylands.	No The 2025 Specific Plan project is consistent with this provision.
Policy BL.6: Establish a safety buffer around and provide for visual screening of the Tank Farm.	The Baylands Specific Plan provides for separation of new development from the tank farm.	No The 2025 Specific Plan project is consistent with this provision.
Policy BL.7: Give aesthetic consideration to views of San Bruno Mountain, the Bay and the Baylands development itself from Central Brisbane as well as views from the Baylands in the design of any development.	Visual simulations of Baylands development were prepared and are presented in Draft EIR Section 4.5, *Aesthetics and Visual Resources*, which concludes that views of the San Bruno Mountain and the San Francisco Bay would be partially obscured from public vantage points.	No The 2025 Specific Plan project is consistent with this provision.

General Plan Policies and Programs	Specific Plan Consistency with General Plan Policy/Program	Would a Significant Physical Environmental Effect Result from an Inconsistency with this provision?
Policy BL.10: Develop design guidelines as a part of the Specific Plan for the Baylands. In the design guidelines, incorporate standards for roofs, emphasizing color, materials and screening, so as to consider views from above.	The Baylands Specific Plan includes design guidelines addressing roof design, use of color, materials, and screening, which together provide consideration of views of the Baylands from higher elevations in the Brisbane community above.	No The 2025 Specific Plan project is consistent with this provision.
Policy BL.12: Develop a pedestrian and bicycle system to reach all areas of the City from the Baylands.	The Specific Plan provides comprehensive bicycle and pedestrian systems for mobility within the Baylands, including connectivity with bicycle and pedestrian facilities within Brisbane west of Bayshore Boulevard. Analysis of the Specific Plan's pedestrian and bicycle system identified several gaps in connectivity between the Baylands and adjacent lands. Section 4.8, *Transportation*, includes mitigation measures to ensure connectivity.	No The 2025 Specific Plan project is consistent with this provision.
Policy BL.13: Connect all development within the Baylands with bicycle and pedestrian networks.	The Specific Plan provides comprehensive bicycle and pedestrian systems for mobility within the Baylands, including connectivity with bicycle and pedestrian facilities within Brisbane west of Bayshore Boulevard. Analysis of the Specific Plan's pedestrian and bicycle system identified several gaps in connectivity between the Baylands and adjacent lands. Section 4.8, *Transportation*, includes mitigation measures to ensure connectivity.	No The 2025 Specific Plan project is consistent with this provision.
Policy BL.14: Work with other agencies to promote interconnection with regional bicycle systems.	The Specific Plan provides comprehensive bicycle and pedestrian systems for mobility within the Baylands, including connectivity with bicycle and pedestrian facilities within Brisbane west of Bayshore Boulevard. Analysis of the Specific Plan's pedestrian and bicycle system identified several gaps in connectivity between the Baylands and adjacent lands. Section 4.8, *Transportation*, includes mitigation measures to ensure connectivity.	No The 2025 Specific Plan project is consistent with this provision.
Policy BL.15: Cooperate with other agencies to develop the Bay Trail between Sierra Point and the Candlestick Recreation Area.	The Specific Plan includes extension of the Bay Trail through the Baylands.	No The 2025 Specific Plan project is consistent with this provision.
Policy BL.16: Enhance the natural landform and biotic values of Icehouse Hill and preserve its ability to visually screen the Tank Farm.	The Specific Plan includes preservation of Icehouse Hill as open space with limited recreational use in appropriate locations.	No The 2025 Specific Plan project is consistent with this provision.
Policy BL.18: Develop a public pathway and access facilities immediately adjacent to the Lagoon.	Lagoon Park, which is proposed along the north shore of the lagoon includes publicly accessible trails for bicycle and pedestrian use.	No The 2025 Specific Plan project is consistent with this provision.

General Plan Policies and Programs	Specific Plan Consistency with General Plan Policy/Program	Would a Significant Physical Environmental Effect Result from an Inconsistency with this provision?
Policy BL.19: Establish a buffer zone between the Lagoon and adjacent uses.	The Specific Plan provides for separation of the lagoon and adjacent habitat from commercial office and other incompatible uses.	No The 2025 Specific Plan project is consistent with this provision.
Policy BL.20: Dedicate land area for open space, recreational uses and wetlands restoration, especially around the Lagoon.	The Specific Plan would establish Lagoon Park along the north shore of the lagoon for habitat restoration and compatible recreation use.	No The 2025 Specific Plan project is consistent with this provision.
Policy BL.24: Seek opportunities to enhance and restore wetlands in consultation with responsible agencies.	The Specific Plan provides for creation, restoration, and enhancement of habitat areas on Icehouse Hill, within Visitacion Creek, and along the north shore of the lagoon. Coordination with the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife will occur as part of Draft EIR review, comment, and response process.	No The 2025 Specific Plan project is consistent with this provision.
Policy BL.25: Require water-conserving landscape plans, including suitable plant materials and irrigation systems, and provide for the use of non-potable water.	The Specific Plan's sustainability framework includes water conservation programs, including provision of a recycled water plant and drought tolerant landscaping.	No The 2025 Specific Plan project is consistent with this provision.
Policy BL.27: Improve water circulation and water quality in the Lagoon by control of sedimentation and by careful monitoring and maintenance of underground pipelines by responsible agencies.	Draft EIR Section 4.14, *Hydrology and Water Quality*, examines impacts of Baylands development on water quality within the lagoon and establishes specific methods for the protection of the lagoon's water quality.	No The 2025 Specific Plan project is consistent with this provision.
Policy BL.28: Meet applicable seismic requirements in all construction, with special attention to non-engineered fill.	Site grading and building construction within the Baylands will be required to meet applicable requirements in place at the time of grading permit and building permit issuance, respectively.	No The 2025 Specific Plan project is consistent with this provision.
Policy BL.29: Disclose, in a risk analysis, all hazardous materials to be utilized in research and development and biotechnical research, the assumptions that were used, and methods of safe handling and disposal.	This requirement will be placed on permits for specific research and development and biotechnical uses within the Baylands as they are proposed over time.	No The 2025 Specific Plan project is consistent with this provision.
Policy BL.30: Utilize landscape and construction techniques to reduce noise impacts.	Draft EIR Section 4.12, *Noise and Vibration*, describes methods proposed to reduce noise impacts within the Baylands.	No The 2025 Specific Plan project is consistent with this provision.
Policy BL.31: Require improvement of drainage and correction of hillside erosion and flooding on Bayshore Boulevard.	Grading and site-specific development within the Baylands will be required to implement best management practices for erosion control.	No The 2025 Specific Plan project is consistent with this provision.

Table 4.3-2: Consistency of the Baylands Specific Plan with Applicable Regional Plans and Policies

Existing Plan and Policies	Consistency of the Baylands Specific Plan
Plan Bay Area 2050	
Address climate change by reducing carbon dioxide emissions pursuant to targets established in consultation with the California Air Resources Board; specifically, meet or exceed a 19 percent reduction in per-capita emissions from cars and light-duty trucks by 2035 relative to 2005 levels.	**Consistent**. Baylands development will be subject to a series of transportation demand measures that will reduce trip generation. As documented in Section 4.8, *Transportation*, the length of home to work trips for Baylands residents and workers will be less than the regional average. In addition, as the result of the Specific Plan's transit orientation, Baylands development would reduce regional vehicle miles traveled within the nine-county San Francisco Bay region.
House 100 percent of the region's projected growth by income level, and with no increase in in-commuters over the baseline conditions.	**Consistent**. The Specific Plan designates an adequate land area at appropriate densities for the development of housing to meet Brisbane's quantified objectives for housing as outlined in the city's 2023-2031 Housing Element.
Support an expanded, well-functioning, safe and multimodal transportation system that connects the Bay Area by improving access to destinations and by ensuring residents and workers have a reliable transportation system.	**Consistent.** A substantial portion of Baylands development will be located within walking distance of the Bayshore Caltrain Station. In addition, the Specific Plan provides for a shuttle system connecting Baylands development and portions of the existing Brisbane community to the Caltrain station. In addition, the Specific Plan includes development of a comprehensive system of bicycle and pedestrian paths.
Spur Housing Production at all Income Levels. Allow a Greater Mix of Housing Densities and Types in Growth Geographies | Allow a variety of housing types at a range of densities to be built in Priority Development Areas. Build Adequate Affordable Housing to Ensure Homes for All | Construction of sufficient deed-restricted affordable homes to meet the needs of low-income households. Integrate Affordable Housing into All Major Housing Projects | Require a baseline of 10–20 percent of new market-rate housing developments of five units or more to be affordable to low-income households.	**Consistent.** The Baylands Specific Plan provides for a range of housing densities and types that would achieve Brisbane's quantified objectives for housing for all economic segments of the population from 2023 through 2031.
Conserve the region's natural resources, open space, clean water, and clean air with the intent of improving health of Bay Area residents and workers and improving the health of the environment locally and globally.	**Consistent**. The evaluations contained in this EIR along with applicable mitigation measures (see Section 4.14, *Hydrology and Water Quality*) confirm that Baylands development would minimize the volume of pollutants entering waterways. Air quality and health risk studies were undertaken for Baylands development and concluded that proposed mitigation measures would avoid significant health. Given the transit-oriented location of the Baylands and the Specific Plan's sustainability programs, the Specific Plan minimizes air pollutant emissions for a project of its size and is consistent with regional air quality planning programs.
Shift the Location of Jobs. Allow Greater Commercial Densities in Growth Geographies | Allow greater densities for new commercial development in select PDAs to encourage more jobs to locate near public transit.	**Consistent.** The Baylands Specific Plan area is designated in *Plan Bay Area 2050* as a Priority Development Area. The Specific Plan provides sufficient housing and employment-generating opportunities to approximately double Brisbane's population and its employment base.

Existing Plan and Policies	Consistency of the Baylands Specific Plan
Create Healthy and Safe Streets. Build a Complete Streets Network Adopt roadway standards consistent with MTC complete streets policy.	**Consistent.** The Baylands Specific Plan provides a comprehensive system of bicycle and pedestrian paths, as well as a shuttle system.
Reduce Risks from Hazards. Adapt to sea level rise	**Consistent.** The Specific Plan provides adaptation to project Year 2100 sea level rise.
Spur Housing Production at All Income Levels. Allow a Greater Mix of Housing Densities and Types in Growth Geographies | Allow a variety of housing types at a range of densities to be built in Priority Development Areas. Build Adequate Affordable Housing to Ensure Homes for All | Construction of sufficient deed-restricted affordable homes to meet the needs of low-income households. Integrate Affordable Housing into All Major Housing Projects | Require a baseline of 10–20 percent of new market-rate housing developments of five units or more to be affordable to low-income households.	**Consistent.** The Baylands Specific Plan provides for a range of housing densities and types that would achieve Brisbane's quantified objectives for housing for all economic segments of the population from 2023 through 2031.
Parking Parking maximums of 1 space per dwelling unit Parking maximums of 2.5 spaces per 1,000 square feet Secure bicycle parking of 1 space per dwelling unit and 1 space per 5,000 square feet Unbundled parking Shared parking between land uses	**Inconsistent.** Multi-Family High and Multi-Family Mid residential categories have maximum parking ratios of 1.0 and 0.75, respectively. Multi-Family Low, Townhome, and Duplex/Single-Family have parking ratios greater than 1.00 (1.25). Although Specific Plan parking maximums per district could limit overall parking to less than 1 space per unit, MTC TOC policy notes the 1.0 space per unit maximum "may be met through creation of a parking district that provides shared vehicle parking for multiple land uses within an area."
Station Access Provide access for pedestrians and bicyclists to transit stations	**Consistent.** Included in the Specific Plan through a network of sidewalks, bicycle facilities, and connections to off-site pathways in adjacent neighborhoods.
Mobility Hubs Implement mobility hubs in locations identified by MTC	**Consistent.** Included in the Specific Plan.

Existing Plan and Policies	Consistency of the Baylands Specific Plan
Metropolitan Transportation Commission Transit-Oriented Communities Policy (Resolution No. 4530)	
Average residential development density for new development within one-half mile of a Caltrain stop. • Minimum density of 25-35 per net acre or more as measured on a block-by block basis. Average commercial office development intensity for new development within one-half mile of a Caltrain stop. • Minimum floor area ratio (FAR) of 2.0-4.0 or more as measured on a block-by block basis. Affordable housing production. • 15 percent of units in new residential development projects to be deed-restricted affordable to low-income households. Ministerial Approval • Grant ministerial approval of residential developments that include 15 percent affordable units for projects. Stabilizing businesses to prevent displacement. • Give priority and a right of first offer to local small businesses and/or community-serving non-profits when selecting tenants for new market-rate commercial space. Parking management. • Residential Development: No minimum parking requirement to be applied with no more than 1.0 space per unit to be permitted as measured on a block-by-block basis. • Commercial Development: No minimum parking requirement to be applied with no more than 2.5 spaces per 1,000 square feet to be permitted as measured on a block-by-block basis. Bicycle parking. • Minimum of one secure bicycle parking space per dwelling unit • Minimum of one secure bicycle parking space per 5,000 occupied square feet of office space. Transit Station Access. • Adopt policies and design guidelines that comply with MTC's Complete Streets Policy (Resolution 4493). • Provide improvements to allow station access via a 10-mintue walk (including for people who use wheelchairs or other mobility aids) and 15-minute bicycle or bus/shuttle trip for uses within one-half mile of the transit station.	**Inconsistent.** The Specific Plan does not contain explicit floor area ratio standards for commercial office uses but establishes a maximum allowable building square footage for each commercial block. Because the Specific Plan does not set a minimum development intensity, it is possible that the average FAR for commercial office use within one-half mile of the Bayshore Caltrain stop would fall below 2.0. Currently, Brisbane requires a minimum of 15 percent of units in new residential developments be deed-restricted affordable to low-income households. Depending on how applicants for site-specific development projects distribute affordable units, less than 15 percent of the units within one-half mile of the Caltrain Bayshore Station might be deed-restricted affordable to low-income households. The Specific Plan sets an overall maximum of 11,000 parking spaces within the Baylands and establishes maximum per unit and per 1,000 square foot ratios. The maximum prescribed parking spaces per district are, on average, in compliance with the Transit Oriented Communities policy; however, the Specific Plan permits Multi-Family Low, Townhome, and duplex/single family housing types to provide 1.25 spaces per unit, exceeding the maximum in MTC Resolution 4530. The Specific Plan does not address business displacement. The Specific Plan establishes a maximum permitted number of dwelling units for each residential block that, on average, exceeds an allowable 35 dwelling units per acre maximum, but does not establish a required minimum density of 25 dwelling units per acre that would be consistent with the Transit Oriented Communities policy for residential density within one-half mile of the Caltrain Bayshore Station. The Specific Plan incorporates design guidelines that comply with MTC's Complete Streets Policy (Resolution 4493). While the Specific Plan provides requirements for bicycle parking, secured parking space requirements (identified in the Specific Plan as "long-term" bicycle parking) fall short of the provisions or Resolution No. 4530 by requiring one secure bicycle parking space per two dwelling units rather than one per unit.
San Francisco Bay Plan	
Fish, Other Aquatic Organisms, and Wildlife Policies	
To assure the benefits of fish, other aquatic organisms and wildlife for future generations, to the greatest extent feasible, the Bay's tidal marshes, tidal flats, and subtidal habitat should be conserved, restored, and increased.	**Consistent.** Baylands development includes restoration of habitat within Visitacion Creek and along the north shore of Brisbane Lagoon.

Existing Plan and Policies	Consistency of the Baylands Specific Plan
Native species, including candidate, threatened, and endangered species; species that the California Department of Fish and Wildlife, the National Marine Fisheries Service, and/or the U.S. Fish and Wildlife Service have listed under the California or Federal Endangered Species Act; and any species that provides substantial public benefits, as well as specific habitats that are needed to conserve, increase, or prevent the extinction of these species, should be protected, whether in the Bay or behind dikes. Protection of fish, other aquatic organisms, and wildlife and their habitats may entail placement of fill to enhance the Bay's ecological function in the near-term and to ensure that they persist into the future with sea level rise.	**Consistent.** Baylands development includes restoration of habitat within Visitacion Creek and along the north shore of Brisbane Lagoon. In addition, habitats on Icehouse Hill would be protected, enhanced, and expanded to increase the amount and quality of host plants for sensitive butterfly species.
The Commission should: • Not authorize projects that would result in the "taking" of any plant, fish, other aquatic organism or wildlife species listed as endangered or threatened pursuant to the state or federal Endangered Species Acts, or the federal Marine Mammal Protection Act, or species that are candidates for listing under these acts, unless the project applicant has obtained the appropriate "take" authorization from the U.S. Fish and Wildlife Service, National Marine Fisheries Service, or the California Department of Fish and Wildlife; and • Give appropriate consideration to the recommendations of the California Department of Fish and Wildlife, the National Marine Fisheries Service, or the U.S. Fish and Wildlife Service in order to avoid possible adverse effects of a proposed project on fish, other aquatic organisms, and wildlife habitat.	**Consistent.** Baylands development includes restoration of habitat within Visitacion Creek and along the north shore of Brisbane Lagoon.
Sediment placement for habitat adaptation should be prioritized in (1) subsided diked baylands, tidal marshes, and tidal flats, as these areas are particularly vulnerable to loss and degradation due to sea level rise and lack of necessary sediment supply, and/or in (2) intertidal and shallow subtidal areas to support tidal marsh, tidal flat, and eelgrass bed adaptation. In some cases, sediment placement for a habitat project in deep subtidal areas may be authorized if substantial ecological benefits will be provided and the project aligns with current regional sediment availability and needs.	**Consistent.** Proposed restoration of habitat within Visitacion Creek and along the north shore of Brisbane Lagoon has been designed to adapt to projected sea level rise.
Water Quality	
Bay water pollution should be prevented to the greatest extent feasible. The Bay's tidal marshes, tidal flats, and water surface area and volume should be conserved and, whenever possible, restored and increased to protect and improve water quality. Fresh water inflow into the Bay should be maintained at a level adequate to protect Bay resources and beneficial uses.	**Consistent.** Implementation of best management practices for site grading, development, and habitat restoration will be required to prevent sedimentation and transportation of pollution to the Bay and Lagoon.

Existing Plan and Policies	Consistency of the Baylands Specific Plan
Water quality in all parts of the Bay should be maintained at a level that will support and promote the beneficial uses of the Bay as identified in the San Francisco Bay Regional Water Quality Control Board's Water Quality Control Plan, San Francisco Bay Basin and should be protected from all harmful or potentially harmful pollutants. The policies, recommendations, decisions, advice and authority of the State Water Resources Control Board and the Regional Board should be the basis for carrying out the Commission's water quality responsibilities.	**Consistent.** Implementation of best management practices for site grading, development, and habitat restoration will be required to prevent sedimentation and transportation of pollution to the Bay and Lagoon.
New projects should be sited, designed, constructed and maintained to prevent or, if prevention is infeasible, to minimize the discharge of pollutants into the Bay by: (a) controlling pollutant sources at the project site; (b) using construction materials that contain nonpolluting materials; and (c) applying appropriate, accepted, and effective best management practices, especially where water dispersion is poor and near shellfish beds and other significant biotic resources.	**Consistent.** Implementation of best management practices for site grading, development, and habitat restoration will be required to prevent sedimentation and transportation of pollution to the Bay and Lagoon.
To protect the Bay and its tributaries from the water quality impacts of nonpoint source pollution, new development should be sited and designed consistent with standards in municipal stormwater permits and state and regional stormwater management guidelines, where applicable, and with the protection of Bay resources. To offset impacts from increased impervious areas and land disturbances, vegetated swales, permeable pavement materials, preservation of existing trees and vegetation, planting native vegetation, and other appropriate measures should be evaluated and implemented where appropriate.	**Consistent.** Implementation of best management practices for site grading, development, and habitat restoration will be required to prevent sedimentation and transportation of pollution to the Bay and Lagoon.
Whenever practicable, native vegetation buffer areas should be provided as part of a project to control pollutants from entering the Bay, and vegetation should be substituted for rock riprap, concrete, or other hard surface shoreline and bank erosion control methods where appropriate and practicable.	**Consistent.** The Specific Plan provides for naturalized drainage courses and wetland habitat areas to prevent pollutants from entering the Bay or Lagoon. In addition, the Specific Plan provides for establishing vegetative habitat along the north shore of the lagoon where rip rap is now present.
Water Surface Area and Volume	
The surface area of the Bay and the total volume of water should be kept as large as possible in order to maximize active oxygen interchange, vigorous circulation, and effective tidal action. Filling and diking that reduce surface area and water volume should therefore be allowed only for purposes providing substantial public benefits and only if there is no reasonable alternative.	**Consistent.** The Specific Plan maximizes the surface water area of the Lagoon by providing for its expansion as the result of sea level rise. The Specific Plan also provides for tidal action within Visitacion Creek to cover a larger area from sea level rise.
Water circulation in the Bay should be maintained and improved as much as possible. Any proposed fills, dikes, or piers should be thoroughly evaluated to determine their effects upon water circulation and then modified as necessary to improve circulation or at least to minimize any harmful effects.	**Consistent.** No fills, dikes, or piers are proposed within the Bay or Lagoon other than establishing vegetative habitat along the north shore of the lagoon where rip rap is now present.

Existing Plan and Policies	Consistency of the Baylands Specific Plan
Tidal Marshes and Tidal Flats	
Tidal marshes and tidal flats should be conserved to the fullest possible extent. Filling, diking, and dredging projects that would substantially harm tidal marshes or tidal flats should be allowed only for purposes that provide substantial public benefits and only if there is no feasible alternative.	**Consistent.** Baylands development includes restoration of habitat within Visitacion Creek and along the north shore of Brisbane Lagoon.
Any proposed fill, diking, or dredging project should be thoroughly evaluated to determine the effect of the project on tidal marshes and tidal flats, and designed to minimize, and if feasible, avoid any harmful effects.	**Consistent.** Impacts associated with restoration of habitat within Visitacion Creek and along the north shore of Brisbane Lagoon provided in Section 4.6, *Biological Resources*, concludes that the Specific Plan, including the mitigation measures outlined in that section, would have a positive effect on tidally influenced areas within Visitacion Creek and the Lagoon.
Projects should be sited and designed to avoid, or if avoidance is infeasible, minimize adverse impacts on any transition zone present between tidal and upland habitats. Where a transition zone does not exist and it is feasible and ecologically appropriate, shoreline projects should be designed to provide a transition zone between tidal and upland habitats.	**Consistent.** Impacts associated with restoration of habitat within Visitacion Creek and along the north shore of Brisbane Lagoon include the establishment of transition areas to adapt to sea level rise over time. The analysis provided in Section 4.6, *Biological Resources*, concludes that the Specific Plan, including the mitigation measures outlined in that section, would have a positive effect on tidally influenced areas within Visitacion Creek and the Lagoon.
Any habitat project should include clear and specific long-term and short-term biological and physical goals, success criteria, a monitoring program, and as appropriate, an adaptive management plan. Design and evaluation of the project should include an analysis of (a) how the project's adaptive capacity can be enhanced so that it is resilient to sea level rise and climate change; (b) the impact of the project on the Bay's and local embayment's sediment transport and budget; (c) localized sediment erosion and accretion; (d) the role of tidal flows; (e) potential invasive species introduction, spread, and their control; (f) rates of colonization by vegetation; (g) the expected use of the site by fish, other aquatic organisms, and wildlife; (h) an appropriate buffer, where feasible, between shoreline development and habitats to protect wildlife and provide space for marsh migration as sea level rises; (i) site characterization; (j) how the project adheres to regional restoration goals; (k) whether the project would be sustained by natural processes; and (l) how the project restores, enhances, or creates connectivity across Bay habitats at a local, sub-regional, and/or regional scale.	**Consistent.** EIR mitigation measures require habitat restoration improvements proposed for Visitacion Creek and the north shore of the Lagoon to adhere to specific long-term and short-term biological and physical objectives and success criteria, adaptive management requirements, and maintain a monitoring program.
If a habitat project's success criteria have not been met, benefits and impacts should be analyzed to determine whether appropriate adaptive measures should be implemented. If substantial adverse impacts to the Bay and/or native or commercially important species have occurred, the project should be further modified to reduce its impacts.	**Consistent.** The monitoring program for habitat restoration within Visitacion Creek and along the north shore of the Lagoon will require implementation of appropriate measures should monitoring determine that restoration success criteria are not being met.

Existing Plan and Policies	Consistency of the Baylands Specific Plan
The level of design; amount, duration, and extent of monitoring; and complexity of the adaptive management plan required for a habitat project should be consistent with the purpose, size, impact, level of uncertainty, and/or expected lifespan of the project. Habitat projects should have a funding strategy for monitoring and adaptive management of the project, commensurate with the level of monitoring and adaptive management that is required for the project, to demonstrate that the applicant has considered costs and identified potential funding sources for any necessary monitoring and management.	**Consistent.** Initial restoration of habitat within Visitacion Creek and along the north shore of the Lagoon will be financed by the project developer. The monitoring program for habitat restoration will be consistent with the purpose, size, impact, level of uncertainty, and/or expected lifespan of the restoration effort. The monitoring plan will be required to identify fundings source(s) for monitoring and any remedial measures that may be required.
Based on scientific ecological analysis, project need, and consultation with the relevant federal and state resource agencies, fill may be authorized for habitat enhancement, restoration, or sea level rise adaptation of habitat.	**Consistent.** No fills, dikes, or piers are proposed within the Bay or Lagoon other than establishing vegetative habitat along the north shore of the lagoon where rip rap is now present.
Climate Change	
When planning shoreline areas or designing larger shoreline projects, a risk assessment should be prepared by a qualified engineer and should be based on the estimated 100-year flood elevation that takes into account the best estimates of future sea level rise and current flood protection and planned flood protection that will be funded and constructed when needed to provide protection for the proposed project or shoreline area. A range of sea level rise projections for mid-century and end of century based on the best scientific data available should be used in the risk assessment. Inundation maps used for the risk assessment should be prepared under the direction of a qualified engineer. The risk assessment should identify all types of potential flooding, degrees of uncertainty, consequences of defense failure, and risks to existing habitat from proposed flood protection devices.	**Consistent.** As part of the analyses undertaken for this EIR, a "Sea-Level Rise Technical Report" (EIR Appendix L) has been prepared. The SLR Technical Report considers existing flood hazards from coastal, stormwater, and groundwater sources and how these hazards will change with sea level rise through the Year 2100. The Sea Level Rise Technical Report also provides mapping of future habitats and open space as sea levels rise. The report found the Specific Plan to be generally consistent with sea level rise planning guidance and, because the Specific Plan raises much of the ground surface, to be resilient to even the upper range of sea level rise projected for 2100. Certain areas of the site were, however, determined to be vulnerable to sea levels as documented in Appendix L and Draft EIR Section 4.14, *Hydrology and Water Quality*, which includes mitigation measures addressing these areas of vulnerability.
To protect public safety and ecosystem services, within areas that a risk assessment determines are vulnerable to future shoreline flooding that threatens public safety, all projects—other than repairs of existing facilities, small projects that do not increase risks to public safety, interim projects and infill projects within existing urbanized areas—should be designed to be resilient to a mid-century sea level rise projection. If it is likely the project will remain in place longer than mid-century, an adaptive management plan should be developed to address the long-term impacts that will arise based on a risk assessment using the best available science-based projection for sea level rise at the end of the century.	**Consistent.** Baylands habitat conservation, recreational, and development areas have been designed in accordance with the most recent State guidance using the best available science-based projection for sea level rise at the end of the century. Thus, residential, commercial, and other Baylands buildings are located so as not to be subject to sea level rise of 83 inches through the Year 2100. Recreational and other open space/open areas were designed so as not to be subject to 41 inches of sea level rise through the Year 2100. Biological resources analysis was also conducted to ensure that lands required for mitigation of impacts to wetlands and non-wetland waters would be resilient such that the required acreage of mitigation land would be available within the Baylands following anticipated sea level rise through the end of the century.
To address the regional adverse impacts of climate change, undeveloped areas that are both vulnerable to future flooding and currently sustain significant habitats or species, or possess conditions that make the areas especially suitable for ecosystem enhancement, should be given special consideration for preservation and habitat enhancement and should be encouraged to be used for those purposes.	**Consistent.** Baylands habitat conservation, recreational, and development areas have been designed in accordance with the most recent State guidance using the best available science-based projection for sea level rise at the end of the century.

Existing Plan and Policies	Consistency of the Baylands Specific Plan
Wherever feasible and appropriate, effective, innovative sea level rise adaptation approaches should be encouraged.	**Consistent.** Biological resources analysis was also conducted to ensure that lands required for mitigation of impacts to wetlands and non-wetland waters would be resilient such that the required acreage of mitigation land would be available within the Baylands following anticipated sea level rise through the end of the century.
Until a regional sea level rise adaptation strategy can be completed, the Commission should evaluate each project proposed in vulnerable areas on a case-by-case basis to determine the project's public benefits, resilience to flooding, and capacity to adapt to climate change impacts. The following specific types of projects have regional benefits, advance regional goals, and should be encouraged, if their regional benefits and their advancement of regional goals outweigh the risk from flooding: a. remediation of existing environmental degradation or contamination, particularly on a closed military base; b. a transportation facility, public utility, or other critical infrastructure that is necessary for existing development or to serve planned development; c. a project that will concentrate employment or housing near existing or committed transit service (whether by public or private funds or as part of a project), particularly within those Priority Development Areas that are established by the Association of Bay Area Governments and endorsed by the Commission, and that includes a financial strategy for flood protection that will minimize the burdens on the public and a sea level rise adaptation strategy that will adequately provide for the resilience and sustainability of the project over its designed lifespan; and d. a natural resource restoration or environmental enhancement project. The following specific types of projects should be encouraged if they do not negatively impact the Bay and do not increase risks to public safety: e. repairs of an existing facility; f. a small project; g. a use that is interim in nature and either can be easily removed or relocated to higher ground or can be amortized within a period before removal or relocation of the proposed use would be necessary; and h. a public park.	**Consistent.** As documented in **Table 4.3-1** and **Table 4.3-2**, the Baylands Specific Plan is consistent with the Brisbane General Plan and the regional sustainable communities strategy, *Plan Bay Area 2050*, which designates the site for transit-oriented urban development as part of a Bi-County Priority Development Area. Development of housing within the Baylands is also critical to the City's ability to provide its share of regional housing needed through 2031. As discussed in Section 4.4, *Socioeconomic Effects*, the Baylands Specific Plan is anticipated to provide approximately 80 percent (1,288) of the City's 2023–2031 citywide need for housing through 2031 (1,588 dwelling units). Baylands habitat conservation, recreational, and development areas have been designed in accordance with the most recent State guidance using the best available science-based projection for sea level rise at the end of the century. The Baylands Specific Plan, as mitigated, includes a sea level rise adaptation strategy that places residential, commercial, and other Baylands buildings so as not to be subject to sea level rise of 83 inches through the Year 2100. Recreational and other open space/open areas were designed so as not to be subject to 41 inches of sea level rise through the Year 2100. Habitat restoration and enhancement along Visitacion Creek and the north shore of the Brisbane Lagoon (Lagoon Park) provides for natural progression of habitat types in response to sea level rise to ensure that lands required for mitigation of impacts to wetlands and non-wetland waters would: • Provide the required acreage of mitigation land following anticipated sea level rise through the end of the century; and • Adequately provide for the resilience and sustainability of the project over its designed lifespan without placing a financial burden on the City or any other public agency.
Safety of Fills	
Even if the Bay Plan indicates that a fill may be permissible, no fill or building should be constructed if hazards cannot be overcome adequately for the intended use in accordance with the criteria prescribed by the Engineering Criteria Review Board.	**Consistent.** No fills are proposed within the Bay or Lagoon other than establishing vegetative habitat along the north shore of the lagoon where rip rap is now present.

Existing Plan and Policies	Consistency of the Baylands Specific Plan
To provide vitally needed information on the effects of earthquakes on all kinds of soils, installation of strong-motion seismographs should be required on all future major landfills. In addition, the Commission encourages installation of strong-motion seismographs in other developments on problem soils, and in other areas recommended by the U.S. Geological Survey, for purposes of data comparison and evaluation.	**Consistent.** Although no fills are proposed within the Bay or Lagoon other than establishing vegetative habitat along the north shore of the lagoon where rip rap is now present, a strong-motion seismograph would be provided within the Baylands if so required by BCDC.
Adequate measures should be provided to prevent damage from sea level rise and storm activity that may occur on fill or near the shoreline over the expected life of a project. The Commission may approve fill that is needed to provide flood protection for existing projects and uses. New projects on fill or near the shoreline should either be set back from the edge of the shore so that the project will not be subject to dynamic wave energy, be built so the bottom floor level of structures will be above a 100-year flood elevation that takes future sea level rise into account for the expected life of the project, be specifically designed to tolerate periodic flooding, or employ other effective means of addressing the impacts of future sea level rise and storm activity. Rights-of-way for levees or other structures protecting inland areas from tidal flooding should be sufficiently wide on the upland side to allow for future levee widening to support additional levee height so that no fill for levee widening is placed in the Bay.	**Consistent.** Long-term maintenance of authorized protective measures will be required.
Shoreline Protection	
New shoreline protection projects and the maintenance or reconstruction of existing projects and uses should be authorized if (a) the project is necessary to provide flood or erosion protection for (i) existing development, use or infrastructure, or (ii) proposed development, use or infrastructure that is consistent with other Bay Plan policies; (b) the type of the protective structure is appropriate for the project site, the uses to be protected, and the causes and conditions of erosion and flooding at the site; (c) the project is properly engineered to provide erosion control and flood protection for the expected life of the project based on a 100-year flood event that takes future sea level rise into account; (d) the project is properly designed and constructed to prevent significant impediments to physical and visual public access; (e) the protection is integrated with current or planned adjacent shoreline protection measures; and (f) adverse impacts to adjacent or nearby areas, such as increased flooding or accelerated erosion, are avoided or minimized. If such impacts cannot be avoided or minimized, measures to compensate should be required. Professionals knowledgeable of the Commission's concerns, such as civil engineers experienced in coastal processes, should participate in the design.	**Consistent.** As part of the analyses undertaken for this EIR, a "Sea-Level Rise Technical Report" (EIR Appendix L) considers existing flood hazards from coastal, stormwater, and groundwater sources and how these hazards will change with sea level rise through the Year 2100. The SLR Technical Report also provides mapping of future habitats and open space as sea levels rise. The report found the Specific Plan to be generally consistent with sea level rise planning guidance and, because the Specific Plan raises much of the ground surface, to be resilient to even the upper range of sea level rise projected for 2100. Certain areas of the site were, however, determined to be vulnerable to sea levels as documented in Appendix L and Draft EIR Section 4.14, *Hydrology and Water Quality*, which includes mitigation measures addressing these areas of vulnerability.

Existing Plan and Policies	Consistency of the Baylands Specific Plan
Riprap revetments, the most common shoreline protective structure, should be constructed of properly sized and placed material that meet sound engineering criteria for durability, density, and porosity. Armor materials used in the revetment should be placed according to accepted engineering practice, and be free of extraneous material, such as debris and reinforcing steel. Generally, only engineered quarry stone or concrete pieces that have either been specially cast, are free of extraneous materials from demolition debris, and are carefully selected for size, density, and durability will meet these requirements.	**Consistent.** No new rip rap is proposed within the Baylands. Vegetative habitat is, however, proposed along the north shore of the lagoon where rip rap is now present.
Authorized protective projects should be regularly maintained according to a long-term maintenance program to assure that the shoreline will be protected from tidal erosion and flooding and that the effects of the shoreline protection project on natural resources during the life of the project will be the minimum necessary.	**Consistent.** Long-term maintenance of authorized protective measures will be required.
All shoreline protection projects should evaluate the use of natural and nature-based features such as marsh vegetation, levees with transitional ecotone habitat, mudflats, beaches, and oyster reefs, and should incorporate these features to the greatest extent practicable. Ecosystem benefits, including habitat and water quality improvement, should be considered in determining the amount of fill necessary for the project purpose. Suitability and sustainability of proposed shoreline protection and restoration strategies at the project site should be determined using the best available science on shoreline adaptation and restoration. Airports may be exempt from incorporating natural and nature-based features that could endanger public safety by attracting potentially hazardous wildlife.	**Consistent.** The Specific Plan provides for naturalized drainage courses and wetland habitat areas to prevent pollutants from entering the Bay or Lagoon. In addition, the Specific Plan provides for establishing vegetative habitat along the north shore of the lagoon where rip rap is now present.
Adverse impacts to natural resources and public access from new shoreline protection should be avoided. When feasible, shoreline protection projects should include components to retain safe and convenient water access, for activities such as fishing, swimming, and boating, especially in communities lacking such access. Where significant impacts cannot be avoided, mitigation or alternative public access should be provided. Shoreline protection projects that include natural and nature-based features may be self-mitigating or require less mitigation than projects that do not include any natural or nature-based features.	**Consistent.** The Specific Plan provides for naturalized drainage courses and wetland habitat areas to prevent pollutants from entering the Bay or Lagoon. In addition, the Specific Plan provides for establishing vegetative habitat along the north shore of the lagoon where rip rap is now present. Analysis of impacts associated with proposed shoreline protection are provided in Section 4.6, *Biological Resources*, and Section 4.14, *Hydrology and Water Quality*.
Recreation	
Because of the need to increase the recreational opportunities available to Bay Area residents, small amounts of Bay fill may be allowed for waterfront parks and recreational areas that provide substantial public benefits and that cannot be developed without some filling.	**Consistent.** No fills are proposed within the Bay or Lagoon other than establishing vegetative habitat along the north shore of the lagoon where rip rap is now present.

Existing Plan and Policies	Consistency of the Baylands Specific Plan
Public Access	
A proposed fill project should increase public access to the Bay to the maximum extent feasible, in accordance with the policies for Public Access to the Bay.	**Consistent.** No fills are proposed within the Bay or Lagoon other than establishing vegetative habitat along the north shore of the lagoon where rip rap is now present within Lagoon Park. Public access will be permitted within a waterfront park (Lagoon Park) to be developed along the north shore of the lagoon.
In addition to the public access to the Bay provided by waterfront parks, beaches, marinas, and fishing piers, maximum feasible access to and along the waterfront and on any permitted fills should be provided in and through every new development in the Bay or on the shoreline, whether it be for housing, industry, port, airport, public facility, wildlife area, or other use, except in cases where public access would be clearly inconsistent with the project because of public safety considerations or significant use conflicts, including unavoidable, significant adverse effects on Bay natural resources. In these cases, in lieu public access at another location, preferably near the project, should be provided. If in lieu public access is required and cannot be provided near the project site, the required access should be located preferably near identified vulnerable or disadvantaged communities lacking well-maintained and convenient public access in order to foster more equitable public access around the Bay Area.	**Consistent.** The Specific Plan provides for the completion of the Bay Trail through the Baylands site, as well as for a waterfront park along the north shore of the Brisbane Lagoon and trails within Visitacion Creek.
Public access to some natural areas should be provided to permit study and enjoyment of these areas. However, some wildlife species are sensitive to human intrusion. For this reason, projects in such areas should be carefully evaluated in consultation with appropriate agencies to determine the appropriate location and type of access to be provided.	**Consistent.** The Specific Plan provides for the completion of the Bay Trail through the Baylands site, as well as for a waterfront park along the north shore of the Brisbane Lagoon and trails within Visitacion Creek. Analysis of the potential impacts of such trails and recreational features is provided in Section 4.6, *Biological Resources*.
Public access should be sited, designed, and managed to prevent significant adverse effects on wildlife. To the extent necessary to understand the potential effects of public access on wildlife, information on the species and habitats of a proposed project site should be provided, and the likely human use of the access area analyzed. In determining the potential for significant adverse effects (such as impacts on endangered species, impacts on breeding and foraging areas, or fragmentation of wildlife corridors), site specific information provided by the project applicant, the best available scientific evidence, and expert advice should be used. In addition, the determination of significant adverse effects may also be considered within a regional context. Siting, design, and management strategies should be employed to avoid or minimize adverse effects on wildlife, informed by the advisory principles in the Public Access Design Guidelines. If significant adverse effects cannot be avoided or reduced to a level below significance through siting, design, and management strategies, then in lieu public access should be provided, consistent with the project and providing public access benefits equivalent to those that would have been achieved from on-site access. Where appropriate, effects of public access on wildlife should be monitored over time to determine whether revisions of management strategies are needed.	**Consistent.** Analysis of the impacts of such trails and recreational features is provided in Section 4.6, *Biological Resources*.

Existing Plan and Policies	Consistency of the Baylands Specific Plan
Public access should be sited, designed, managed, and maintained to avoid significant adverse impacts from sea level rise and shoreline flooding.	**Consistent.** The Sea Level Rise Technical Report and Section 4.14, *Hydrology and Water Quality*, analyzed impacts associated with public access along the Bay Trail and Visitacion Creek as well as within Lagoon Park.
In some areas, a small amount of fill may be allowed if the fill is necessary and is the minimum absolutely required to develop the project in accordance with the Commission's public access requirements.	**Consistent.** No fills are proposed within the Bay or Lagoon other than that which is necessary to establish vegetative habitat along the north shore of the lagoon where rip rap is now present within Lagoon Park.
Roads near the edge of the water should be designed as scenic parkways for slow-moving, principally recreational traffic. The roadway and right-of-way design should maintain and enhance visual access for the traveler, discourage through traffic, and provide for safe, separated, and improved physical access to and along the shore. Public transit use and connections to the shoreline should be encouraged where appropriate.	**Consistent.** The only roadways adjacent to the water's edge are Sierra Point Parkway and Lagoon Road. Sierra Point Parkway, which runs along the east side of the Lagoon adjacent to the US 101 freeway will remain in its current location. Lagoon Road is proposed to be realigned to the north to provide for sea level rise through the end of the century and align with existing southbound on- and off-ramps along the US 101 freeway.
Appearance, Design, and Scenic Views	
To enhance the visual quality of development around the Bay and to take maximum advantage of the attractive setting it provides, the shores of the Bay should be developed in accordance with the Public Access Design Guidelines.	**Consistent.** The Bay Trail, Visitacion Creek, and Lagoon Park will be designed in accordance with the Public Access Design Guidelines.
In some areas, a small amount of fill may be allowed if the fill is necessary—and is the minimum absolutely required—to develop the project in accordance with the Commission's design recommendations.	**Consistent.** No fills are proposed within the Bay or Lagoon other than establishing vegetative habitat along the north shore of the lagoon where rip rap is now present within Lagoon Park.
Shoreline developments should be built in clusters, leaving an open area around them to permit more frequent views of the Bay. Developments along the shores of tributary waterways should be Bay-related and should be designed to preserve and enhance views along the waterway, so as to provide maximum visual contact with the Bay.	**Consistent.** No buildings are proposed along the waterfront. The Bay Trail, Visitacion Creek, and Lagoon Park will be designed in accordance with the Public Access Design Guidelines.
Views of the Bay from vista points and from roads should be maintained by appropriate arrangements and heights of all developments and landscaping between the view areas and the water. In this regard, particular attention should be given to all waterfront locations, areas below vista points, and areas along roads that provide good views of the Bay for travelers, particularly areas below roads coming over ridges and providing a "first view" of the Bay (shown in Bay Plan Maps, Natural Resources of the Bay).	**Consistent.** Specific Plan development would not block views of the Bay from the US 101 freeway. While views of the Bay are not currently available from roadways within or adjacent to the Specific Plan area, proposed development would partially obscure blue water views of the Bay from public viewpoints in Brisbane (see Impact AES-1).
Mitigation	
Projects should be designed to avoid adverse environmental impacts to Bay natural resources such as to water surface area, volume, or circulation and to plants, fish, other aquatic organisms and wildlife habitat, subtidal areas, or tidal marshes or tidal flats. Whenever adverse impacts cannot be avoided, they should be minimized to the greatest extent practicable. Finally, measures to compensate for unavoidable adverse impacts to the natural resources of the Bay should be required. Mitigation is not a substitute for meeting the other requirements of the McAteer-Petris Act.	**Consistent.** Analysis of the Specific Plan's impacts to biological resources is provided in Section 4.6, *Biological Resources*, which indicates that the Specific Plan, in combination with EIR mitigation measures, would have a beneficial impact on wetlands and non-wetland waters.

Existing Plan and Policies	Consistency of the Baylands Specific Plan
The amount and type of compensatory mitigation should be determined for each mitigation project based on a clearly identified rationale that includes an analysis of the probability of success of the mitigation project; the expected time delay between the impact and the functioning of the mitigation site; and the type and quality of the ecological functions of the proposed mitigation site as compared to the impacted site.	**Consistent.** Analysis of the Specific Plan's impacts to biological resources is provided in Section 4.6, *Biological Resources*, which indicates that the Specific Plan, in combination with EIR mitigation measures, would have a beneficial impact on wetlands and non-wetland waters.
To increase the potential for the ecological success and long-term sustainability of compensatory mitigation projects, resource restoration should be selected over creation where practicable, and transition zones and buffers should be included in mitigation projects where feasible and appropriate. In addition, mitigation site selection should consider site specific factors that will increase the likelihood of long-term ecological success, such as existing hydrological conditions, soil type, adjacent land uses, and connections to other habitats.	**Consistent.** The Specific Plan provides for extensive restoration of wetlands and non-wetland waters.
Mitigation should, to the extent practicable, be provided prior to, or concurrently with those parts of the project causing adverse impacts.	**Consistent.** Because impacts to wetlands and non-wetland waters would be caused by the large-scale grading operation required for site remediation, landfill closure, and flood/sea level rise protection of future building pads within the Baylands, mitigation of impacts cannot occur until grading activities are completed. The Specific Plan does, however, include a phasing program that requires restoration of wetlands and non-wetland waters concurrent with site development.
San Francisco International Airport Land Use Compatibility Plan	
IP-1. AIRPORT INFLUENCE AREA A – REAL ESTATE DISCLOSURE AREA. Within Area A, the real estate disclosure requirements of state law apply Section 11010 of the Business and Professions Code, which requires people offering subdivided property for sale or lease to disclose the presence of all existing and planned airports within 2 miles of the property. The law requires that, if the property is within an "airport influence area" designated by the airport land use commission, the following statement must be included in the notice of intention to offer the property for sale: NOTICE OF AIRPORT IN VICINITY. This property is presently located in the vicinity of an airport, within what is known as an airport influence area. For that reason, the property may be subject to some of the annoyances or inconveniences associated with proximity to airport operations (for example: noise, vibration, or odors). Individual sensitivities to those annoyances can vary from person to person. You may wish to consider what airport annoyances, if any, are associated with the property before you complete your purchase and determine whether they are acceptable to you.	**Consistent.** By law, property owners are required to provide real estate disclosure regarding airport impacts.

Program EIR Mitigation Measures

No mitigation measures are carried forward from the Program EIR.

Additional Mitigation Measures

MM LUP-2: Consistency with General Plan Policy C.41 and the Metropolitan Transportation Commission's Transit-Oriented Communities Policy (Resolution No. 4530). The Specific Plan shall be revised to include the following requirements:

- **Residential Development Intensity.** Residential development within one-half mile of the Caltrain Bayshore Station shall average a minimum of 25 dwelling units per acre ~~as measured on a block-by-block basis~~.
- **Housing Affordability.** A minimum of 15 percent of dwelling units within one-half mile of the Caltrain Bayshore Station shall be deed-restricted affordable to low-income households.
- **Maximum Parking Ratios.** The maximum per unit parking ratio for Multi-Family Low, Townhome, and Duplex/Single Family housing types shall be reduced from 1.25 to 1.0 spaces per unit.
- **Commercial Office Development Intensity.** Commercial office development within one-half mile of the Caltrain Bayshore Station shall have an average minimum FAR of 2.0 ~~as measured on a block-by-block basis~~.
- **Bicycle Parking.** A minimum of one secure bicycle parking space per multi-family dwelling unit.

The Specific Plan shall also be revised to include a system to track the density and intensity of site-specific residential and commercial development projects along with mechanisms to ensure consistency with:

- General Plan policies setting the permitted amount of residential, commercial, and hotel developments; and
- MTC's Transit-Oriented Communities Policy (Resolution No. 4530).

Significance Conclusion for Impact LUP-2 with Implementation of All Mitigation Measures

Inconsistencies with General Plan Policies and Programs would be resolved as follows:

- **General Plan Policy LU.11** and **Program BL.3b** in relation to views of San Francisco Bay. Mitigation Measures MM AES-1a and MM AES-1b would reduce the impact to less than significant and therefore achieve consistency with this policy and program.
- **Policy 176** in relation to noise from pile driving operations required for constructing buildings within the Baylands. Mitigation Measures MM NOI-1a through MM NOI-1e would minimize impacts associated with pile driving by requiring alternative methods for construction of pile foundations where geologic conditions permit.

  As determined in geotechnical reports prepared for the Baylands as part of the Program EIR and Specific Plan EIR, soils and geologic conditions underlying the Specific Plan area are such that pile foundations are required throughout most of the site for buildings in excess of 4 stories.

  Because (1) pile driving is a necessary component of developing the Baylands and implementing the land uses approved for the site in GP-1-18 and Measure JJ and (2) pile driving activities and resulting impacts will be minimized by Mitigation Measures MM NOI-1b, limiting hours when pile driving could occur and MM NOI-1e, which prohibits pile driving for any building where geologic or other unique conditions exist at the site-specific construction location that preclude the use of quieter, alternative pile installation techniques. Thus, impacts associated with pile driving would not constitute an inconsistency with the General Plan as a whole.

Revisions to the Specific Plan required by Mitigation Measure MM LUP-2 would ensure consistency with MTC's Resolution 4530 by requiring:

- Residential development within one-half mile of the Caltrain Bayshore Station to average a minimum of 25 du/ac as measured on a block-by-block basis;
- A minimum of 15 percent of dwelling units within one-half mile of the Caltrain Bayshore Station to be deed-restricted affordable to low-income households;
- The maximum per unit parking ratio for Multi-Family Low, Townhome, and Duplex/Single Family housing types to be reduced from 1.25 to 1.0 spaces per unit; and
- Commercial office development within one-half mile of the Caltrain Bayshore Station to have an average minimum FAR of 2.0 as measured on a block-by-block basis.

Consistency of the Specific Plan with the Brisbane General Plan and Regional Plans

Brisbane General Plan

The Specific Plan is consistent with the General Plan as a whole. Inconsistencies with General Plan policies identified in **Table 4.3-1** would not obstruct achievement of the General Plan's goals and objectives for the following reasons.

- **General Plan Policy LU.11:** As demonstrated in **Table 4.5-2a** through **Table 4.5-r**, the placement of taller Baylands buildings would substantially diminish scenic vistas from some public viewpoints and would therefore not "preserve and enhance public views of the Mountain and the Bay" as called for by this policy. Mitigation Measures MM AES-1a and AES-1b would reduce the impact to less than significant and therefore achieve consistency with this policy.
- **General Plan Policy C.2:** Intersections along certain arterial roadways outside of the Baylands would exceed the General Plan level of service standard of LOS "D" due to regional and local background traffic. Delay metrics, such as level of service are, by law, not considered to be indicative of significant impacts. Because the Specific Plan would (1) provide transit-oriented development, (2) implement a transportation demand management program, (3) reduce regional vehicle miles traveled, (4) provide extensive pedestrian and bicycle trails, and (5) establish a local shuttle system, its contribution to exceedances of the General Plan LOS standard would not constitute an inconsistency with the General Plan as a whole.
- **General Plan Policy 176:** Because the soils that underlie Baylands development areas generally consist of unconsolidated fill materials that were placed to create the former rail yard and former landfill, pile foundations will be required for as much as 70 percent of the buildings within the Baylands. While quieter alternatives than impact pile driving may be feasible for some Baylands buildings and it may be possible to meet City noise standards when driving piles on a site-specific building project, the EIR's noise analysis determined that a significant impact would result due to the likelihood that pile driving would be undertaken for multiple buildings simultaneously and the length of time for building construction would be ongoing. EIR mitigation measures will be implemented to minimize noise and vibration impacts of Baylands pile driving activities. Because (1) pile driving is a necessary component of developing the Baylands and implementing the land uses approved for the site in GP-1-18 and Measure JJ and (2) pile driving activities and resulting impacts will be minimized, impacts associated with pile driving would not constitute an inconsistency with the General Plan as a whole.
- **Policy BL.1 G:** At buildout, renewable energy generation within the Specific Plan area would be less than the development's demand for electricity. While construction of the utility-scale battery storage facility would achieve energy neutrality for Baylands

development, construction of the utility-scale battery facility is dependent on economic conditions and securing a facility developer to enter into necessary agreements with PG&E for storage of renewable energy. Baylands development would produce approximately double the amount renewable energy on-site, add 30 MW of distributed battery storage, reduce overall energy demand compared to the project analyzed in the Program EIR, not extend natural gas service to new uses within the Baylands, and provide renewable electrical energy to meet demands not met by on-site renewable energy generation.

- In addition, the Specific Plan does not establish a post-construction performance standard for solid waste diversion and therefore does not present a zero-waste program. Baylands development would, at a minimum, participate in the same waste diversion programs provided by Recology operations to residential and commercial customers within the City and County of San Francisco, which exceed the requirements of state law and are more extensive than those currently available within Brisbane.[99]

Consistency with Regional Plans and Programs

As documented in **Table 4.3-2**, the Specific Plan would be inconsistent with the Metropolitan Transportation Commission's Transit-Oriented Communities Policy (Resolution No. 4530) for development within one-half mile of a transit stop. However, Mitigation Measure MM LUP-2a requires Specific Plan revisions to comply with this regional policy. Thus, the Specific Plan would be consistent with the Brisbane General Plan, *Plan Bay Area 2050*, the Metropolitan Transportation Commission's Transit-Oriented Communities Policy, the San Francisco Bay Plan, and the Airport Land Use Compatibility Plan for the Environs of San Francisco International Airport

4.3.7 REFERENCES – LAND USE AND PLANNING POLICIES

Auto Racing Records. No Date. Champion Speedway. Accessed September 30, 2019. http://www.autoracingrecords.com/tracks.php?lid=01829.

Baylands Development, Incorporated. 2023. *The Baylands Specific Plan*. January 2023.

Brown, Allen E. 1994. *History of America's Speedways Past and Present.*" pg. 109. Champion Speedway, San Francisco (Brisbane/Daly City) 1/- & 1/2-mile dirt oval 9/29/63 thru 1966 (actually was 0.436 mile). 1/4-mile paved dragstrip (c. 1970). Located across US 101 from Candlestick Park.

[99] CalRecycle, *Disposal Rate Calculator*, access on June 21, 2024, Disposal Rate Calculator. For 2023, San Francisco reported a disposal rate of 3.4 pounds per resident and 3.9 pounds per employee, which are below the target rates of 6.6 pounds per resident and 10.6 pounds per employee set for San Francisco by Cal Recycle. By comparison, South San Francisco Scavenger achieved a disposal rate of 12.6 pounds per resident and 6.9 pounds per employee, which are also below the target rates of 16.9 pounds per resident and 7.9 pounds per employee set for Brisbane by Cal Recycle.

C/CAG (City/County Association of Governments of San Mateo County). 2012. *Comprehensive Airport Land Use Compatibility Plan for the Environs of San Francisco International Airport*. November 2012.

City of Brisbane. 1994. *The General Plan, City of Brisbane*. Adopted June 21, 1994, as amended through GP-1-19.

City of Brisbane. 2015. *Sustainability Framework for the Baylands*. November 2015.

MTC (Metropolitan Transportation Commission). 2023. *Consistency with Plan Bay Area 2050*. Accessed February 2, 2023. https://mtc.ca.gov/planning/long-range-planning/plan-bay-area-2050/consistency-plan-bay-area-2050.

MTC. 2022. *Resolution No. 4530*. Accessed August 5, 2024. https://mtc.ca.gov/sites/default/files/documents/2022-10/MTC_Resolution_4530.pdf.

MTC. 2023. *Transit-Oriented Communities (TOC) Policy*. Accessed August 5, 2024. https://mtc.ca.gov/planning/land-use/transit-oriented-communities-toc-policy.

MTC/ABAG (Metropolitan Transportation Commission/Association of Bay Area Governments). 2021. *Plan Bay Area 2050*. October 21, 2021. Accessed August 2, 2024. https://planbayarea.org/sites/default/files/documents/Plan_Bay_Area_2050_October_2021.pdf.

Intentionally Blank

4.4 POPULATION AND HOUSING

4.4.1 INTRODUCTION

a. Overview

This section evaluates the direct and indirect effects of the Baylands Specific Plan in relation to population, housing, employment, and urban decay. The inclusion of population and housing questions in Appendix G of the California Environmental Quality Act (CEQA) Guidelines checklist recognizes that economic and social effects—substantial unplanned growth, displacing substantial numbers of people or housing—could lead to physical environmental effects, even if socioeconomic effects would not, in and of themselves, be considered physical environmental impacts. Thus, analysis of population, housing, and employment growth from the Baylands Specific Plan addresses such growth as potential precursors to physical environmental impacts.

Increases in population and employment that would result from Baylands development would be physically manifested in the form of new housing, commercial, office, and other types of development, resulting in the construction and long-term post-construction impacts that are addressed throughout this Environmental Impact Report (EIR). In addition, the relative balance between the number of jobs and amount of housing in a given area affects vehicle miles traveled and associated emissions of air pollutants and greenhouse gases (GHGs), as well as energy consumption related to vehicular travel.

CEQA Guidelines Sections 15131(a) and 15064(e):
Population and Housing

CEQA Guidelines Section 15131(a)

(a) Economic or social effects of a project shall not be treated as significant effects on the environment. An EIR may trace a chain of cause and effect from a proposed decision on a project through anticipated economic or social changes resulting from the project to physical changes caused in turn by the economic or social changes. The intermediate economic or social changes need not be analyzed in any detail greater than necessary to trace the chain of cause and effect. The focus of the analysis shall be on the physical changes.

CEQA Guidelines Section 15064(e)

(e) Economic and social changes resulting from a project shall not be treated as significant effects on the environment. Economic or social changes may be used, however, to determine that a physical change shall be regarded as a significant effect on the environment. Where a physical change is caused by economic or social effects of a project, the physical change may be regarded as a significant effect in the same manner as any other physical change resulting from the project. Alternatively, economic and social effects of a physical change may be used to determine that the physical change is a significant effect on the environment. If the physical change causes adverse economic or social effects on people, those adverse effects may be used as a factor in determining whether the physical change is significant. For example, if a project would cause overcrowding of a public facility and the overcrowding causes an adverse effect on people, the overcrowding would be regarded as a significant effect."

This section therefore describes existing and projected population, housing, and employment characteristics of the Baylands, City of Brisbane, and the surrounding region and evaluates the

population, housing, and employment that would result from the Baylands Specific Plan as precursors to physical environmental effects, many of which are addressed in other sections of this EIR.[100]

This section examines associated physical environmental effects that would result should proposed Baylands development (1) induce substantial unplanned population growth either directly or indirectly, or (2) displace existing housing or people. In addition, this section of the EIR examines the extent to which the economic effects of commercial retail uses proposed for the Baylands could result in physical environmental changes within the Baylands' market area, such as physical deterioration of existing retail centers or facilities.

b. Definitions

Affordable housing, under state statutes, refers to housing that costs no more than 30 percent of gross household income and is most often used in relation to housing for lower and moderate-income households. Housing costs include rent or mortgage payments, utilities, taxes, insurance, homeowner association fees, and other related costs. As used in this document, "affordable housing" refers to housing that would cost no more than 30 percent of gross household income for lower income and moderate-income households whose income is no greater than 80 percent or 120 percent of the countywide median income for San Mateo County ($186,600 for a family of four), respectively (SMCDOH 2024).

All economic segments of the community includes very low-, low-, moderate-, and above moderate-income households within a city or unincorporated portions of a particular county.

California Department of Housing and Community Development (HCD) is the state agency responsible for administering state-sponsored housing programs and for reviewing city and county General Plan Housing Elements to determine their compliance with state housing law.

Dwelling unit, housing unit, or residential unit is a room or group of rooms designed to be occupied by one or more individuals living separately from other individuals. A dwelling unit contains access to a private toilet and kitchen facilities and has direct access to the outside or to a common interior hallway.

Household refers to an occupied dwelling unit, including all persons living in the dwelling unit, whether or not they are related. Thus, a single person living in an apartment and a family or a group of unrelated people living in a house are each considered to be a household.

Jobs to housing ratio is a general measure of the "balance" between the number of jobs and number of housing units within a geographic area, without regard to economic constraints or

[100] The population, housing, and employment growth that would result from Baylands development forms the basis for quantified analyses of transportation, air quality greenhouse gas, noise, energy, and other physical environmental effects analyzed in Draft EIR Chapter 4.

individual preferences. The ratio expresses quantitatively the relationship between the number of people working and number of dwelling units housing the people living in a given area.

Lower Income is a generic term referring to very low and low-income households.

Regional Housing Needs Allocation (RHNA) is a state-mandated process for determining how many housing units, including affordable units, each community must plan for housing to accommodate all economic segments of the community. The Association of Bay Area Governments (ABAG) is responsible for working with HCD to determine the amount of housing needed within the nine-county San Francisco Bay Area region. ABAG allocates regional total housing needs among city and county jurisdictions within the region. Allocations are based on factors that consider existing employment, employment growth, household growth, and the availability of transit; need is determined for households in all income categories from very low to above moderate. Specific allocations are defined for very low-, low-, moderate-, and above moderate-income groups, which are defined as follows:

- **Extremely Low Income:** Household income less than 30 percent of the San Mateo County median income.[101] This equates to a four-person household annual income below $58,750.
- **Very Low Income:** Household income less than 50 percent of the San Mateo County median income. This equates to a four-person household annual income below $97,900.
- **Low Income:** Household income between 50.1 and 80 percent of the San Mateo County median income. This equates to a four-person household annual income below $156,650.
- **Moderate Income:** Household income between 80.1 and 120 percent of the San Mateo County median income. This equates to a four-person household annual income below $223,920.
- **Above Moderate Income:** Household income greater than 120 percent of the San Mateo County median income. This equates to a four-person household annual income greater than $223,900 (SMCDOH 2024).

Urban decay refers to the extensive and widespread physical deterioration of properties or structures in an area caused by a downward spiral of business closures and multiple long-term vacancies. This physical deterioration to properties or structures is so prevalent, substantial, and lasting for a significant period of time that it impairs the proper utilization of the properties or structures, along with the health, safety, and welfare of the surrounding community. The manifestations of urban decay include such visible conditions as plywood-boarded doors and windows, uncontrolled truck parking, long-term unauthorized use of the properties and parking lots, graffiti, dumping of refuse on-site, overturned dumpsters, broken parking barriers,

[101] For purposes of Housing Element preparation, "extremely low income" (less than 30 percent of County median income) is often included as part of "very low income" (less than 50 percent of County median income).

broken glass, dead trees and shrubbery together with weeds, lack of building maintenance, abandonment of multiple buildings, and unsightly and dilapidated fencing.

4.4.2 PHYSICAL ENVIRONMENTAL SETTING

a. Baseline

The baseline for analysis of population and housing effects consists of conditions that existed at the release of the second Notice of Preparation during Spring 2023. When existing conditions and analyses address a full year of data, the most recent year for which data is available is used and specific citations are provided indicating the year used to describe existing conditions and for analysis purposes.

b. Regional Population, Housing, and Employment Trends

Housing Production and Affordability

Given a limited supply of both market-rate and affordable housing, combined with strong demand driven by exceptional regional economic performance, Bay Area rents and home prices have risen rapidly. Plan Bay Area 2050 reports, the Bay Area "may have the most severe housing crisis of any of the nation's large metro areas." In particular, there has been a mismatch between employment growth relative to the housing supply. Overall, the Bay Area has added nearly two jobs for every housing unit built since 1990.

The deficit in housing production has been particularly severe in terms of housing affordable to lower- and middle-wage workers, especially in many of the jobs-rich, high-income communities along the Peninsula and in Silicon Valley, states Plan Bay Area 2050. The booming regional economy combined with increased household formation among the millennial generation has further contributed to an ever more acute housing crunch.

Housing affordability has significantly worsened over time. According to Plan Bay Area 2050, home prices are at record levels in some Bay Area counties and near record levels in others. Rent payments have almost doubled in real dollars since the 1970s. While median wages are close to the top nationally, the Bay Area has by far the highest median home sale prices of any major metro region in the country. The region is now also home to three of the five most expensive rental markets in the nation.

Given insufficient production of affordable housing, Plan Bay Area reports, "many individuals who perform important but lower paying jobs face either substandard or overcrowded and unhealthy housing; costly, long-distance work commutes; or sometimes even homelessness — the most severe expression of the region's housing shortage. Rising prices in the region's core have driven many lower-income households to outlying jurisdictions farther away from jobs,

transit and amenities, even as low- and middle-wage job growth has been concentrated in three counties: San Francisco, San Mateo, and Santa Clara. This shift contributes to increased development pressures on open space and agricultural lands, more pollution from passenger vehicles, adverse health impacts, higher transportation costs, and greater levels of highway and transit congestion."

Regional Growth Forecasts

The regional forecast prepared as part of Plan Bay Area 2050 shows that the Bay Area is projected to grow by nearly 1.4 million households between 2015 and 2050, 25 percent of which will occur within San Francisco and San Mateo counties. At the same time, regional employment is projected to grow by 1.4 million jobs, 25 percent of which will occur within San Francisco and San Mateo counties.

Plan Bay Area 2050's core strategy is to accommodate as much of this forecasted growth as feasible by intensifying development within existing urban areas in proximity to transit. Plan Bay Area 2050 thus guides approximately 69 percent of the region's planned land use growth footprint to existing urban and built-up lands, including directing 46 percent of the region's land use growth footprint to 200 Priority Development Areas.[102] Priority Development Areas encompass existing neighborhoods served by public transit that have been determined by local and regional agencies to be appropriate for additional, compact development.

c. City of Brisbane Population, Housing, and Employment Trends

Current Population and Housing

The California Department of Finance estimates Brisbane's population to be 4,661, with 2,076 dwelling units as of January 1, 2024, as indicated in **Table 4.4-1**. Brisbane's estimated housing vacancy rate was 4.7 percent and its population per household was 2.35.

[102] Priority Development Areas typically consist of existing low- to moderate-intensity development in proximity to transit and designated as such due to their capability of supporting substantially higher intensity development.

Table 4.4-1: Existing City of Brisbane Population and Housing, January 1, 2024

	Number	Percent
Total Population	**4,661**	
In Households	4,645	
Group Quarters	16	
Total Housing Units	**2,076**	
Single Family Detached Units	1,199	57.8
Single Family Attached Units	256	12.3
Multi-Family (2-4 units) Units	228	11.0
Multi-Family (5+ units) Units	329	15.8
Mobile Homes	64	3.1

SOURCE: California Department of Finance, 2024.

Current Employment

The top three industries by number of jobs in the City of Brisbane include manufacturing and wholesale, professional and managerial services, and transportation and utilities. The City has a much higher job to household ratio than San Mateo County (3.55 and 1.59, respectively), which means there are substantially more employment opportunities per household within Brisbane than the average throughout San Mateo County. According to the California Employment Development Department, as of April 2024, the city had a higher unemployment rate of 7.4 percent than San Mateo County's 3.3 percent (California EDD 2024).

The Brisbane Housing Element reported that Brisbane's "economic opportunity score," which evaluates prevalence of poverty, adult educational attainment, employment, job proximity, and median home value, indicates that the City has the highest economic opportunity score in northern San Mateo County. The City of Brisbane has a score of more than 0.75 for economic opportunity, which means it experiences more positive economic outcomes compared with neighboring jurisdictions. The Housing Element also reported that Brisbane is within average proximity to jobs and is in closer proximity to jobs than the cities of Colma and Daly City to the west.

d. Existing Economic Base; Signs of Urban Decay

From 1990 through 2021, San Mateo County employment increased from 280,660 to 373,595, which reflects an average growth of 0.93 percent. Notably, employment reached 350,425 in 2000, the height of the dot.com boom, but fell to 276,037 during the economic trough of the Great Recession in 2010.

San Mateo County's top employment sectors, in order of number of jobs, are:

- Professional and business services
- Trade, transportation, and utilities
- Information
- Education and health services
- Leisure and hospitality

Of these five sectors, three (professional and business services; information; and education and health services) experienced compounded annual average growth rates in excess of the overall County rate. The trade, transportation, and utilities sector experienced declining employment, shrinking by 30 percent since 1990. An important subsector within professional and business services is scientific research and development services, which represents 30 percent of all jobs in this sector. This subsector is a key occupant of life sciences space.

San Mateo County has a substantial number of jobs associated with the life science industry. Of the 146,130 life science jobs within the nine-county region, 40,349 life science jobs (28 percent) are within San Mateo County. The next highest number of jobs are in Santa Clara County at 38,506 jobs, followed by Alameda County at 36,525 jobs.

Table 4.4-2 presents San Mateo County's growth in sectors typically associated with office space.

Table 4.4-2: San Mateo County Employment Trends for Sectors Typically Associated with Office Space

	1990	2000	2010	2021	Compound Annual Growth Rate	
					1990–2021	2010–2021
Total Private Industry Employment	280,000	350,425	287,037	373,595	0.9%	2.4%
Office-Using Sectors						
Information	8,188	24,311	17,517	54,954	6.3%	11.0%
Financial Services	24,180	24,793	186,617	22,619	-0.2%	1.8%
Professional and Business Services	40,291	80,894	59,856	89,929	2.6%	3.8%
TOTAL	**72,659**	**129,998**	**95,990**	**167,501**	**2.7%**	**5.2%**
Share of All Industry Employment	29.9%	37.1%	33.4%	44.8%	NA	NA

SOURCE: ALH Urban & Regional Economics, *The Baylands Urban Decay Analysis*, July 2023.

Life Science/Office Space

The primary market area for the Specific Plan's office and life science space encompasses the cities of Brisbane and South San Francisco. Existing office and life science development in

Brisbane is primarily located in the Sierra Point portion of Brisbane, adjacent to South San Francisco's office and life science projects within Oyster Point. Genentech, which is now part of Roche, has a substantial presence in South San Francisco. Its November 2020 Master Plan identifies the Genentech campus as encompassing 207 acres of land and 4.7 million square feet of building space in five distinct campuses (City of South San Francisco 2020). Genentech is a significant draw for life science companies, with this locational synergy resulting in a strong life sciences hub in the eastern area of South San Francisco, which is east of US Highway 101 and generally bounded on three sides by San Francisco Bay. Not only does South San Francisco have the largest concentration of life science space in the Bay Area at 11.65 million square feet, its inventory is larger than all competitive Bay Area submarkets (see **Table 4.4-3**).

Table 4.4-3: San Francisco Bay Area Life Science Market Inventory, Year–End 2022

Market Area	Inventory (s.f.)	Market Share
Brisbane	1,143,458	
South San Francisco	11,647,412	
Subtotal Market Area	*13,050,870*	*36.5%*
Remainder of San Mateo County	6,902,220	19.3%
Santa Clara County (Palo Alto, Mountain View)	2,876,508	8.0%
San Francisco	1,390,490	3.9%
East Bay	11,548,871	32.3%
TOTAL BAY AREA MARKET AREA	**35,758,959**	**100.0%**

SOURCE: ALH Urban & Regional Economics, *The Baylands Urban Decay Analysis*, July 2023.

The combined Brisbane and South San Francisco markets have had an average availability rate between 6.7 percent and 8.4 percent. The availability rate for general office space is much higher than for life science space, but due to its relatively small size, its overall impact is moderated. The most extreme example is at the end of 2021, when the life science availability rate was 4.5 percent while the office space availability rate was more than triple at 15.1 percent. The vacancy rate for office space in San Mateo County has historically exceeded 10 percent.

Employment and space demand forecasts for office-using space and life science space between 2023 and 2050 is summarized in **Table 4.4-4**, which indicates an annual average demand of 645,700 square feet of office and life science space. San Mateo County has an existing inventory of approximately 41.1 million square feet of office space and 19.95 million square feet of life science space, for a total of 61.05 million square feet. Thus, if the projected level of demand is realized, the newly absorbed space would comprise a near 28.5 percent increase over San Mateo County's existing inventory.

Table 4.4-4: Projected San Mateo County Office and Life Science Growth, 2023–2050

	2023–2025	2026–2030	2031–2035	2036–2040	2041–2045	2046–2050	TOTAL
Vacancy-Adjusted Incremental Space Demand							
Office Average	2,118,496	2,354,081	2,229,877	2,433,134	2,502,439	2,613,704	**14,251,731**
Life Science	215,831	552,835	572,307	592,464	613,332	637,934	**3,181,703**
TOTAL	**2,334,327**	**2,906,916**	**2,802,184**	**3,025,598**	**3,115,770**	**3,248,638**	**17,433,433**
Average Annual Demand							
Office Average	1,059,248	470,816	445,975	486,627	500.488	522,741	**527,842**
Life Science	107,196	110,567	114,461	118,493	122,666	126,987	**117,841**
TOTAL	**1,167,164**	**581,383**	**560,437**	**605,120**	**623,154**	**649,728**	**645,683**

SOURCE: ALH Urban & Regional Economics, *The Baylands Urban Decay Analysis*, July 2023.

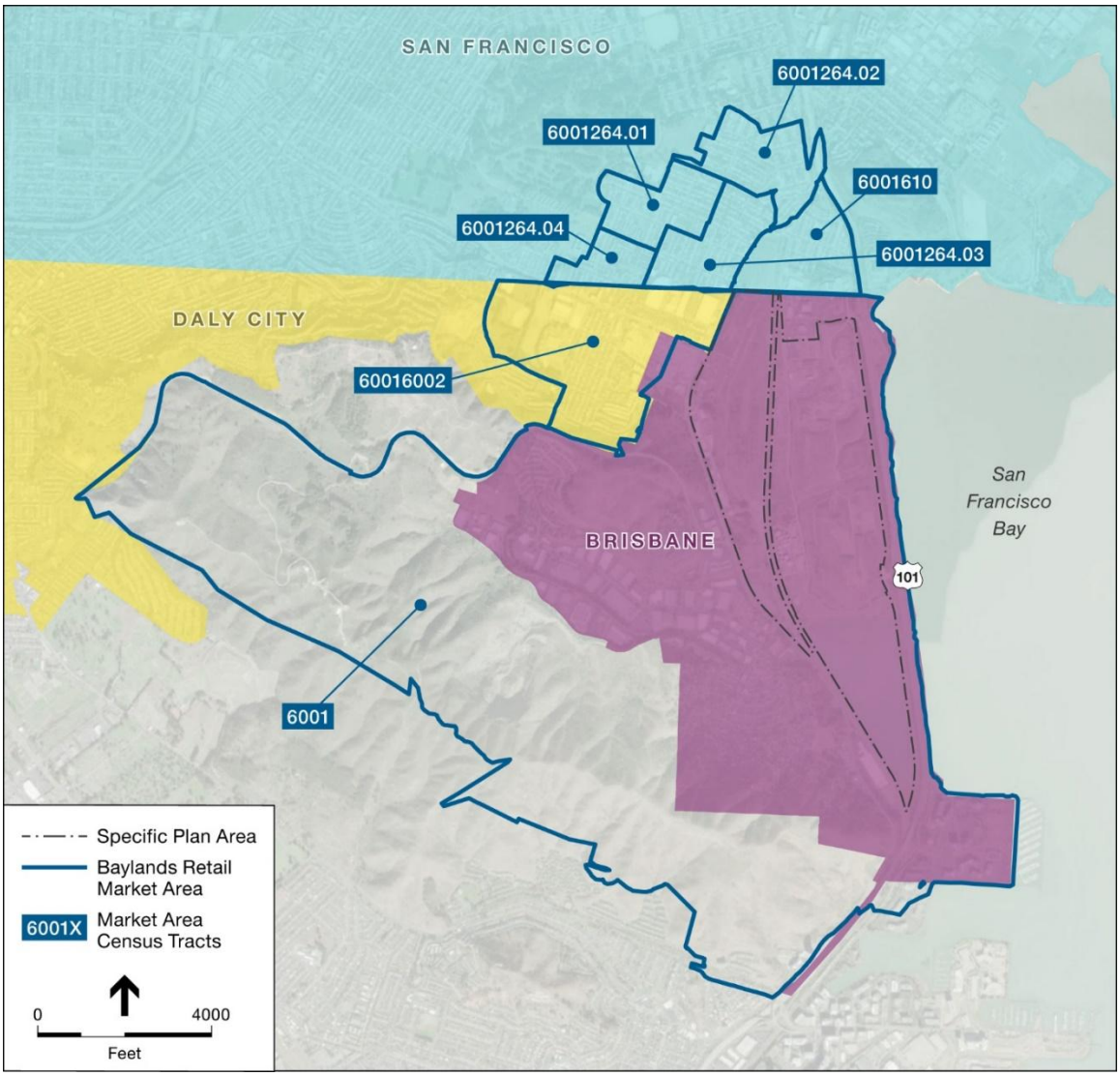
Retail Space

The Baylands retail market area encompasses the area from which the majority of shoppers would originate and includes all of Brisbane, San Francisco's Visitacion Valley neighborhood, other San Francisco areas, and small portions of Daly City along Geneva Avenue (see **Figure 4.4-1**). This retail market area is overwhelmingly characterized by neighborhood-serving retail, oriented toward local residents and some daytime employee commercial needs. The existing retail is located in downtown Brisbane on Old County Road and Visitacion Avenue, and along some of the retail market area arterials, such as Geneva Avenue in Daly City, and Bayshore Boulevard, Sunnydale Avenue, and Leland Avenue in San Francisco, to the north of Brisbane. There is only one shopping center in the retail market area, Brisbane Village Shopping Center on Old County Road, with all other retail offerings generally comprising stand-alone stores or shop space along older commercial corridors.

There are scattered pockets of retail vacancies in the retail market area. In Brisbane, the retail vacancy is largely located at the Brisbane Village Shopping Center. Among the approximately 13 ground floor spaces, three were vacant at the time field reconnaissance was conducted in April and May 2023. One of the spaces has been vacant for a number of years (at least 5), while two of the spaces became vacant during the COVID-19 pandemic. These two spaces were former restaurants. As of February 2025, there were four ground floor vacancies. The adjacent former Bank of America building has remained vacant for several years.

The Brisbane Village Shopping Center, which was built in 1979/1980, is currently in fair physical condition. One of the vacant restaurant spaces has ripped butcher block paper inside the exterior windows, but other than this, there are no indicators suggestive of urban decay. Thus, the center's existing vacancies, including the more long-term vacancies, have not resulted in physical decline of the property.

Figure 4.4-1: Census Tracts Comprising the Baylands Retail Market Area



During field reconnaissance in April 2023, only one obvious small vacancy was identified in a building that has not been well-maintained. The recent sale of a downtown commercial building comprises a positive real estate market indicator, suggestive of demand for downtown Brisbane commercial spaces.

In the Daly City portion of the retail market area, along Geneva Avenue, most of the commercial properties are older, and in generally fair to good condition. At the edge of the retail market area, the new Pacific Place apartment project has ground floor retail space still in the lease up phase, so some spaces are vacant. As these spaces are in a newly constructed project, they are in very good physical condition.

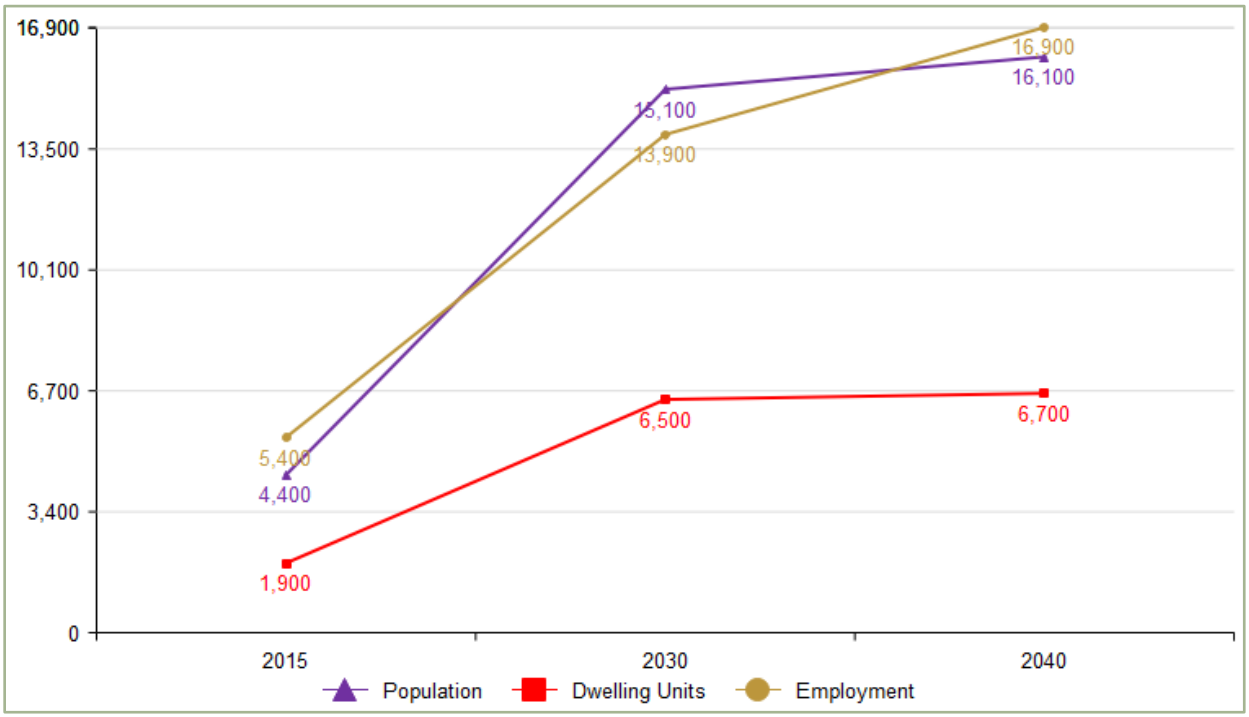
In the portion of the retail market area in San Francisco's Visitacion Valley neighborhood, the commercial retail properties are in generally fair to moderate condition. While sometimes identified as one of San Francisco's most overlooked neighborhoods, Visitacion Valley's core neighborhood shopping district has a good mix of retailers with very little vacancy. While one major vacancy has butcher block paper covering all the windows, many of the existing vacancies show signs of renovation and/or pending occupancy, demonstrating market interest in serving this neighborhood.

In summary, vacancies within the Baylands' retail market area appear to be primarily related to the retail market impacts of the COVID-19 pandemic. While some existing retail market area commercial retail vacancies are in older buildings, they are generally in reasonable condition with no signs of urban decay.

e. Brisbane Projected Growth

Plan Bay Area 2040[103] projects that population, housing, and employment within the City of Brisbane will grow substantially within the next 20 years (see **Figure 4.4-2**).

Figure 4.4-2: Brisbane Population, Housing, and Employment Projections



SOURCE: Plan Bay Area 2040[104]

[103] Because Plan Bay Area 2050 does not provide growth projections for individual cities, Plan Bay Area 2040 provides the most recent growth projections that are available for the City of Brisbane.

[104] *Plan Bay Area 2050* does not provide projections for individual cities.

4.4.3 REGULATORY CONTEXT FOR BAYLANDS DEVELOPMENT

a. Federal Laws Plans. Programs, and Regulations

There are no federal laws, plans, programs, or regulations relevant to Baylands population and housing issues.

b. State Laws, Plans, Programs, and Regulations

Housing Element Requirements

California Housing Element Law (Government Code Section 65580, et seq.) requires cities and counties to include, as part of their General Plans, a Housing Element to address housing conditions and needs in the community. The housing element is required to consist of an identification and analysis of existing and projected housing needs and a statement of goals, policies, quantified objectives, financial resources, and scheduled programs for the preservation, improvement, and development of housing. The Housing Element is required to identify adequate sites for housing, including rental housing, factory-built housing, mobile homes, and emergency shelters, and to make adequate provision for the existing and projected needs of all economic segments of the community. Housing Elements are the only General Plan element that must be reviewed and "certified" by a state agency (HCD) as meeting applicable statutory requirements.

c. Regional Plans, Programs, and Regulations

Regional Housing Needs Allocation

State law requires that jurisdictions provide opportunities for production of their fair share of regional housing needs for all economic segments. California Housing Element Law requires the Department of Housing and Community Development (HCD), in consultation with each regional council of governments,[105] to determine each region's existing and projected housing need as a share of the state-wide housing. Each regional council of governments is then required to develop a regional housing allocation (RHNA) plan that quantifies projected housing needs by income group[106] for each city and county in the region. Each city and county must ensure that their current zoning regulations and inventory of land available for the

[105] For purposes of Regional Housing Needs Allocations and General Plan Housing Elements, ABAG is the council of governments for the nine-county Bay Area region.

[106] "Income groups" are defined based on household income in relation to the county's median income and include very low income (less than 50 percent of county median income), low income (50.1 to 80 percent of county median income), moderate income (80.1 to 120 percent of county median income), and above moderate income (more than 120 percent of county median income).

development of housing allow for housing to be built to meet those needs. The RHNA does not stipulate that the units be built, only that the land be available and the appropriate zoning regulations be in place. Housing elements are required to be updated in eight-year "cycles" following timetables adopted by the state. The current, "sixth cycle" RHNA addresses the 2023 to 2031 planning period.

d. City of Brisbane Plans, Ordinances, and Regulations

General Plan

General Plan goals, policies, and other provisions relevant to population, employment, and housing issues raised by the Baylands development are identified below.

Chapter IV: Local Economic Development

This General Plan chapter contains the following relevant policy:

> ***Policy 9:*** Seek fuller employment of Brisbane residents.

Chapter V: Land Use

This General Plan chapter contains the following information:

> ***Table 1*** in this General Plan chapter indicates that the Baylands would house a population of 4,032 to 4,928 residents (1,800 to 2,200 dwelling units). The anticipated employment density for individual commercial and hotel development sites would be 1.23 to 3.22 employees per 1,000 square feet of building area (up to 6.5 million square feet of commercial use and 500,000 square feet of hotel area).

2023–2031 Brisbane General Plan Housing Element

Brisbane's 2023–2031 Housing Element sets forth the City's housing plan to Brisbane's housing needs for all economic segments of the community from 2023 through 2031. The inventory of land for the production of housing in Brisbane for the 6th Cycle (2023–2031) is identified in **Table 4.4-5**.

Table 4.4-5: 2023–2031 City of Brisbane Quantified Objectives by Site

Area	Total Dwelling Units	Income Group			
		Extremely Low, Very Low	Low	Moderate	Above Moderate
Baylands	*1,800*	*145*	*82*	*287*	*1,286*
Parkside	246	159	87	0	0
Central Brisbane	134	1	2	4	131
Accessory DUs	40	12	12	12	4
TOTALS	**2,220**	**317**	**183**	**303**	**1,419**
Regional Housing Needs Allocation (RHNA)	**1,588**	**317**	**183**	**303**	**785**

SOURCE: City of Brisbane, *2023–2031 Housing Element* Table B.7.1, May 18, 2023.

Housing Element programs relevant to the Baylands Specific Plan are as follows.

2.A.1: Maintain existing residential and mixed-use zoning to provide adequate sites to accommodate the 2022–2031 Regional Housing Needs Allocation.

2.A.2: Adopt the Baylands Specific Plan/Zoning to allow for 1,800 to 2,200 housing units, at site densities of at least 20 units per acre, on sites accommodating at least 16 units, to meet the 2023–2031 RHNA, consistent with Government Code Section 65583.2(h).

2.B.1: Through development of the Baylands Specific Plan and implementing development agreements, identify suitable sites for housing for seniors, persons with disabilities or other special needs, and lower-income households in the Baylands subarea. This Program establishes a goal of 514 affordable housing units within the Baylands.

6.A.4: Consistent with the City's Green Infrastructure Plan and Section C.3 of the Municipal Regional Stormwater Permit (MRP), require new residential development to retain and treat stormwater from the site and adjacent rights-of-way.

Municipal Code Title 17, Chapter 17.31, Inclusionary Housing and Density Bonuses

Chapter 17.31 of Brisbane's Zoning Ordinance (Municipal Code Title 17) requires residential development projects with six or more dwelling units to include units that are affordable to lower-income households. The ordinance applies to ownership and rental units and includes a table showing the number of required for-sale units affordable to moderate- and low-income households and the number of required rental units affordable to low- and very-low-income households, based on the total number of units of the Baylands development. The ordinance provides for density bonuses for residential development projects that set aside specified percentages of affordable housing units.

Table 4.4-6 shows the inclusionary housing requirements for residential development.

Table 4.4-6: City of Brisbane Inclusionary Housing Requirements for Residential Development

Total Number of Units in Project	For-Sale Project Units Required to Be Affordable to:		Rental Project Units Required to Be Affordable to	
	Low-Income Households	Moderate-Income Households	Very Low–Income Households	Low-Income Households
0–5	0	0	0	0
6–10	0	1	0	1
11–15	1	1	1	1
16–20	1	2	1	2
21–25	1	3	1	3
26–30	2	3	2	3
31–40	2	4	2	4
41–50	2	5	2	5
51–60	3	6	3	6
61–70	3	7	3	7
71–80	4	8	4	8
81–90	4	9	4	9
91–100	5	10	5	10
101–110	5	11	5	11
111–120	6	12	6	12
121–130	6	13	6	13
131–140	7	14	7	14
141–150	7	15	7	15
151–160	8	16	8	16
161–170	8	17	8	17
171–180	9	18	9	18
181–190	9	19	9	19
191–200	10	20	10	20

SOURCE: City of Brisbane Municipal Code: Chapter 17.31: Inclusionary Housing and Density Bonuses.

4.4.4 SIGNIFICANCE CRITERIA

The following criteria were used to determine the significance of socioeconomic impacts.

Threshold POP-1: The Baylands Specific Plan would cause a significant impact if any of the significant physical environmental impacts identified in this EIR would result from unplanned growth, including:

- **Development in excess of applicable Brisbane General Plan housing or employment projections; or**

- **Provision of infrastructure improvements substantially in excess of those needed to serve regional and Brisbane General Plan housing and employment growth projections.**

Threshold POP-2: **The Baylands Specific Plan would cause a significant impact if it would directly or indirectly displace existing housing or businesses, necessitating construction of replacement housing or commercial/ industrial development outside of the Specific Plan area that would cause one or more significant environmental effects.**

Threshold POP-3: **The Baylands Specific Plan would cause a significant impact if it would directly or indirectly inhibit the City's ability to provide housing for all economic segments of the community as outlined in the City's certified 2023–2031 Housing Element, thereby necessitating provision of additional housing opportunities outside of the Specific Plan area that would cause one or more significant environmental effects.**

Threshold POP-4: **The Baylands Specific Plan would cause a significant impact if it would directly or indirectly result in visible symptoms of physical deterioration of properties or structures caused by a downward spiral of business closures and long-term vacancies that are so prevalent, substantial, and lasting for a significant period of time that they impair the proper utilization of the properties and structures, and the health, safety, and welfare of the surrounding community.**

4.4.5 PROJECT IMPACTS AND MITIGATION MEASURES

a. Impact POP-1: Induce Substantial Unplanned Growth

Methodology for Determining Significance

Analysis of Impact POP-1 uses the following approach to determine the extent to which the Specific Plan could result in substantial unplanned population growth that would cause one or more significant physical changes in the environment.

- Estimate the population, housing, and employment increases that would occur based on the number of residents and employees anticipated within the Baylands at Specific Plan buildout.
- The scale of population and employment that would result from the Specific Plan is then compared with the anticipated population and employment growth projected by the Brisbane General Plan for the Baylands. Any population or employment growth exceeding General Plan projections for the Baylands would be considered to be

unplanned growth and, should such unplanned growth create or exacerbate a significant physical effect, a significant impact in relation to Threshold POP-1 would result.

- The potential for the Specific Plan to generate indirect population or employment growth by removing an existing obstacle to growth or stimulating economic activity such that additional housing, businesses, or services would be needed to support the new economic activity is examined. Any such indirect population or employment growth would be considered to be *unplanned* growth if it would exceed applicable General Plan housing or employment projections. Unplanned growth includes:
    - **Removal of Obstacles to Growth.** Provision of infrastructure in an area where inadequate access or inadequate water, sewer, drainage, or other facilities limit the area's development potential and would remove a physical obstacle to population and employment growth. In areas with limited or no available water supply, providing new or expanded water supply could also remove a physical obstacle to growth.

      Because the applicable threshold focuses on the project's effects on inducing substantial *unplanned* growth, removal of physical obstacles to development of the Baylands in the manner contemplated by applicable General Plan housing or employment projections would be considered to provide for *planned* growth. However, should Baylands development remove physical obstacles that would encourage development in excess of applicable General Plan housing or employment projections, whether within or outside of the Baylands, such additional growth would be considered to be *unplanned*.
    - **Stimulating Economic Activity.** An increase in economic activity in the form of investment and spending by project residents, employees, and businesses can induce growth outside of a project site as the result of:
        - Demand created by Baylands residents, employees, and businesses for new retail and service commercial uses in addition to those offered within the Specific Plan area; or
        - Demand created by Baylands employees and businesses for housing in addition to that offered within the Specific Plan area.
    - Should Baylands development stimulate economic growth that would encourage development in excess of applicable General Plan housing or employment projections, whether within or outside of the Baylands or the City of Brisbane, such additional growth would be considered to be *unplanned*.
- If any of the significant unavoidable impacts identified in Section 4.19, *Significant Unavoidable Effects*, of this EIR would be caused by *unplanned* growth resulting from implementation of the Baylands Specific Plan, a significant impact in relation to Threshold POP-1 would be identified.

Impact Assessment

Direct Impacts

The Specific Plan's residential and commercial development program is consistent with the Brisbane General Plan (1,800 to 2,200 dwelling units, up to 6.5 million square feet of commercial use, and an additional 500,000 square feet of hotel). Thus, the estimated residential population of up to 4,905 and the approximately 19,480 jobs[107] within the Baylands identified in **Table 4.4-7** that would result from Specific Plan development would also be consistent with the General Plan. The 2,200 dwelling units proposed by the Baylands Specific Plan represents 3.2 percent of the household growth and 34.1 percent of the employment growth projected by Plan Bay Area 2050 for North San Mateo County.[108]

Table 4.4-7: Estimated Baylands Resident Population and On-Site Employment

Proposed Use	Generation Factor (Residents per d.u.; Non-Residential s.f. per employee)	Estimated Population/Jobs
Residential	2.23	**4,905 residents**
Non-Residential		**19,480 jobs**
Retail	580	176 jobs
Office	310	1,964 jobs
Biotech Campus	350	9,365 jobs
Low Intensity Commercial	350	7,145 jobs
Hotel	—	800 jobs
Renewable Energy Generation/Storage	—	30 jobs

SOURCE: Economic & Planning Systems, Inc, *Fiscal Impact Analysis of The Baylands Specific Plan*, January 2022; Fehr & Peers, 2024.

Indirect Impacts

Removal of Obstacles to Growth Outside of the Baylands

Currently, Brisbane's Individual Supply Guarantee (ISG) from the San Francisco Public Utilities Commission (SFPUC) would not be sufficient to provide water is normal, dry, and multiple dry years for existing and future customers in the City. As documented in Chapter 6, *Growth Inducing Effects*, **Table 6-3** through **Table 6-5** indicate that the proposed Cal Water service area expansion would eliminate projected future water supply shortfalls in normal years and substantially reduce water shortfalls during single dry and multiple dry year conditions for buildout of the Brisbane General Plan for areas outside of the Baylands, Beatty, and Sierra Point

[107] Relocation of existing Fire Station No. 81 and conversion of the existing Bayshore School to an elementary school would not increase employment. Projected employment at the Baylands middle school and new fire station is included in the projected 19,480 jobs that would be created within the Baylands.

[108] "North San Mateo County" is defined as the cities of Brisbane, Colma, Daly City, Pacifica, South San Francisco, Millbrae, San Bruno, and a portion of Burlingame, along with adjacent unincorporated areas.

areas. In addition, the proposed Cal Water service area expansion would provide adequate water supply for the Baylands Specific Plan, as well as for new development within Sierra Point (EKI 2025). By providing adequate water supply, the Specific Plan project would remove a major obstacle to growth within Brisbane.

As discussed in Chapter 3, *Project Description*, water facilities proposed as part of the Specific Plan would provide recycled water for non-potable purposes not only for the Baylands but also for uses within the City of South San Francisco. Because recycled water is not currently available within South San Francisco, provision of recycled water from the Baylands would allow the existing potable water supply available to the City of South San Francisco to serve a greater amount of development than could be served in the absence of a recycled water supply.[109]

Baylands sewer, drainage, and utilities infrastructure would be sized to serve Baylands development such that the project's infrastructure improvements would not be substantially in excess of those needed to serve regional and Brisbane General Plan housing and employment growth projections. Baylands roadways would also be sized to serve Baylands development and address the effects of increased vehicular travel that would result. Major transportation improvements that are part of bi-county transportation planning efforts, such as the Geneva Avenue extension and freeway interchange improvements, are being sized in accordance with regional growth projections.

Stimulation of Economic Activity

The estimated 19,480 jobs that would be created within the Baylands as the result of Specific Plan buildout and associated project components would be associated with approximately 14,537 households, based on the projected average number of workers per household (1.34) for the nine-county San Francisco Bay Area in 2050 (MTC/ABAG 2021).

As indicated in the 2020 Census, 59.8 percent of Brisbane residents were employed within San Mateo County. Although the 2020 Census (United States Census Bureau 2021) does not report the number of Brisbane residents employed within Brisbane, past demographics reports indicate that about 15 percent of employed Brisbane residents held jobs in the City, Brisbane residents working in the City held about five percent of the jobs in Brisbane, and residents of other San Mateo County cities and San Francisco held most of Brisbane's jobs (City of Brisbane 2018). Thus, it is reasonable to project that the work force for increased Baylands employment would primarily be drawn from the residents of San Francisco and San Mateo counties.

The degree to which Baylands housing would meet the needs of Baylands employees depends on a variety of factors, including types of employment, price of housing, and where specifically

[109] See Section 4.16, *Utilities, Service Systems, and Water Supply*, and Chapter 6, *Growth Inducing Effects*, for additional discussion of the Baylands water supply in relation to planned development in Brisbane and South San Francisco.

new employees at Baylands would be drawn from, for which little information is available at this point in the planning process. However, as discussed in the analysis of Threshold POP-3, compliance with Brisbane inclusionary housing requirements provide an array of dwelling units in the Baylands that would be affordable to households of different income levels, thereby increasing the opportunity for on-site workers to also live on-site.

The urban decay study prepared for the Baylands by ALH Urban and Regional Economics analyzed retail spending by Baylands households at brick-and-mortar stores as well as retail spending by on-site Baylands employees (ALH 2023). The study indicates that Baylands residents would generate enough spending to support up to approximately 215,000 square feet of retail space.[110] The Baylands Urban Decay Study also analyzed daytime retail spending by Baylands employees and concluded that Baylands employees would generate enough spending to support up to approximately 509,000 square feet of restaurant, grocery, and other retail space. Based on an estimated 92,000 square feet of retail space to be provided within the Baylands, the Specific Plan's 4,905 residents and 19,480 on-site employees would generate retail sales capable of supporting 801,175 square feet of retail floor space as indicated in **Table 6-1**. As indicated in the Baylands Urban Decay Study, there are currently 22 development projects providing retail space that are either under construction (147,050 s.f.), approved (793,000 s.f.), or undergoing review (3,700 s.f.) in the Baylands retail market area, which consists of the City of Brisbane, the southern portion of San Francisco near the Brisbane city limits, the eastern portion of Daly City, and the northern portion of South San Francisco. As a result of these projects and future development of other lands zoned for retail development, Baylands development would not likely result in unplanned growth of retail development.

Significance Conclusion for Impact POP-1

The growth in employment and households resulting from Baylands development is consistent with the Brisbane General Plan (1,800 to 2,200 dwelling units, 6.5 million square feet of commercial use, and an additional 500,000 square feet of hotel use). Thus, direct population and employment growth associated with the Baylands Specific Plan would constitute *planned* rather than *unplanned* growth and would not represent an impact in relation to Threshold POP-1.

Although the Baylands Specific Plan would remove water supply as an obstacle to growth within the City of Brisbane, the additional water supply available to the City would be used to accommodate General Plan buildout. In addition, recycled water would be delivered to existing uses within South San Francisco and the resulting expanded potable water supply would be

[110] The Baylands urban decay study projects retail spending by Baylands households for home furnishings and appliances, building materials and garden equipment, food and beverage sales, clothing and accessories, general merchandise stores, food services and drinking places, and "other" retail. By applying industry standard sales per square foot figures, the report estimates the total amount of supportable square footage based on an assumed 15 percent vacancy rate. See Exhibit 18 of the urban decay study in EIR Appendix C for details.

used to reduce projected dry year deficits for projected future development. Thus, the resulting growth would be considered to be *planned* rather than *unplanned* growth.

Thus, the impact is less than significant.

b. Impact POP-2: Need for Replacement Housing or Commercial/Industrial Buildings

Methodology for Determining Significance

Impact POP-2 addresses the physical environmental effects of displacing existing housing or businesses within the Baylands, necessitating construction of replacement housing or commercial/industrial development outside of the Baylands. Consistent with CEQA Guidelines Section 15131(a), this analysis considers whether housing or businesses that might be displaced would require construction of new structures elsewhere; however, the significance of Impact POP-2 is based on whether the displacement of people or housing would lead to one or more significant physical environmental effects due to the construction of replacement housing or commercial/industrial structures outside of the Baylands.

The methodology used to make this determination is to determine:

- The extent to which existing housing or businesses would be displaced by Baylands development and infrastructure.
- Whether housing or businesses displaced by Baylands development and infrastructure would require development of replacement housing or business properties.
- Whether any needed replacement housing and/or business structures would result in significant environmental effects.

Impact Assessment

Displacement of Housing

There is no existing housing within the Specific Plan area. In addition, Baylands infrastructure to be constructed off-site would occur within existing roadway rights-of-way, not on parcels containing existing housing. Thus, the Specific Plan would not displace any existing housing.

Displacement of Businesses within the Baylands Specific Plan Area

The applicant has stated that existing leases for all businesses on lands it owns will lapse or be terminated prior to site grading, including approximately 231,400 square feet of industrial building area along Industrial Way along with interim and temporary commercial and storage

uses along Tunnel Avenue. Commercial office use of the existing building at 140 Valley Drive would be displaced by relocation of the existing Fire Station No. 81.

Businesses within the Baylands Specific Plan Area That Would Not Be Displaced and Would Remain in Their Current Location

Whereas site grading would cover the entirety of the Baylands Specific Plan area, Baylands site grading would not displace certain existing uses within the Specific Plan area,[111] including:

- Recology uses along the east side of Tunnel Avenue:
- Golden State Lumber's main facility along the east side of Tunnel Avenue;
- Kinder Morgan Tank Farm;
- Machinery & Equipment Company; and
- Bayshore Sanitary District Pump Station.

The existing Brisbane fire station would remain in its current location until such time as the proposed station on Valley Drive is ready for operation.

While Baylands development would not displace Golden State Lumber's main facility, Baylands grading and development would displace an area that is currently leased by the applicant to Golden State Lumber for loading, unloading, and temporary storage of lumber shipped by rail.[112] This area, which includes a Southern Pacific rail spur and a laydown yard, is designated in the Specific Plan as "Sustainable Infrastructure." Because Golden State Lumber currently receives approximately 30 percent of its stock by rail, should the applicant decline to retain Golden State Lumber's ability to continue using the leased property, the company would lose its ability to receive and ship lumber by rail.[113] A substantial economic effect on the business would result from such a loss, adversely affecting the lumber yard's ability to remain in its current location.[114]

The **Mission Blue Nursery**, which leases its current site from the applicant, is proposed to be relocated to Icehouse Hill as part of Specific Plan development. The impacts of this relocation

[111] The location of these uses is depicted in Draft EIR **Figure 3-2**.

[112] Golden State Lumber's main sales building, offices, outdoor storage area, and on-site parking are located on the east side of Tunnel Avenue outside of (but surrounded by) the Specific Plan area (see Draft EIR **Figure 3-2**).

[113] Because lumber is shipped on "center beam" rail cars, loading and unloading lumber requires access to both sides of rail cars. In the absence of the leased property, Golden State Lumber would only have access to the side of rail cars facing Tunnel Avenue. In addition, the company would lose its current laydown yard and would not be able to temporarily stage and store lumber adjacent to its rail spur.

[114] Because Golden State Lumber contributes more than 20 percent of Brisbane's sales tax revenue, it is a vital part of the City of Brisbane's economic health.

are addressed as part of the overall Baylands development through Draft EIR Chapter 4, *Environmental Setting, Impacts, and Mitigation Measures*.

As stated in Specific Plan Section 7.3.5, existing buildings on these sites are proposed to remain at their current elevations with property access provided to adjacent roadways at these buildings' existing grades, some of which are below the future 100-year storm event hydraulic grade line elevation with tidal flow and estimated sea level rise through the Year 2100.

Baylands-related infrastructure adjacent to off-site businesses would be located within existing roadway rights-of-way. The Specific Plan provides for maintaining existing grades adjacent to existing businesses located near or within the Specific Plan area. Although, there are no specific requirements to maintain access to these businesses at all times during construction of Baylands infrastructure, maintaining such access is a standard City development requirement.

Potential Relocation Sites for Displaced Businesses and Related Physical Environmental Impacts

Industrial Businesses within the Baylands Specific Plan Area

The NAI Northern California November 2022 Industrial Market Report for the San Francisco industrial market area reports a total of 96,288,682 square feet of existing industrial building area within San Francisco and San Mateo counties, 9.8 percent of which was either vacant or occupied but available for sale or lease (NAI Northern California/Costar 2022). As of November 2022, over 5.5 million square feet of flex industrial space were also under construction. The November 2022 Industrial Market Report indicated the availability of industrial space in proximity to Brisbane as shown in **Table 4.4-8**.

Table 4.4-8: Industrial Building Availability

Market Area	Total Industrial Building Area (s.f.)	Existing Vacancy Rate		Vacancy Rate after Relocation of Baylands Industrial Businesses	
		Square Footage	Percent	Square Footage	Percent
Brisbane/Daly City	6,491,000	749,255	10.8%		
Bayview/Hunters Point	7,492,000	491,752	6.6%		
South San Francisco	21,498,000	1,395,944	6.5%		
TOTAL	**35,481,000**	**2,636,984**	**7.4%**	**2,405,584**	**6.8%**
SAN FRANCISCO-SAN MATEO COUNTY TOTAL	**96,289,000**	**6,355,055**	**6.6%**	**6,123,655**	**6.4%**

SOURCE: NAI Northern California/Costar, 2022.

As indicated in **Table 4.4-8**, there is adequate existing vacant building area to accommodate the approximately 231,400 square feet of existing industrial uses within the Specific Plan area that would be displaced by Baylands development. As of November 2022, over 6.3 million s.f. of industrial building area was vacant within San Francisco and San Mateo counties, over 2.6 million s.f. of which was located within Brisbane and adjacent communities. The 231,400 square

feet of industrial uses that would be displaced from the Baylands represents 8.9 percent of the vacant industrial space within Brisbane and adjacent communities and 3.7 percent vacant industrial space within San Francisco and San Mateo counties. As shown in **Table 4.4-8**, relocation of 231,400 square feet of industrial uses from the Baylands to other locations within Brisbane and adjacent communities would retain a healthy vacancy rate. Thus, construction of new industrial buildings to accommodate the industrial businesses that will be displaced from the Baylands would not likely be necessary, as the region contains a sufficient amount of vacant industrial building area to accommodate the existing industrial uses that would be displaced by Baylands development.

Because construction of new buildings to accommodate industrial businesses displaced from the Baylands would not be necessary, construction impacts associated with displacement would be limited to interior improvements. Impact analyses undertaken for the EIR address the entirety of the proposed 2,200 dwelling units, 6.5 million square feet of commercial, and 500,000 square feet of hotel use within the Baylands. As a result, the 231,400 square feet of industrial uses to be dislocated from the Baylands are anticipated to move to other locations, most likely to sites nearby within San Francisco or San Mateo County.

Golden State Lumber Laydown Yard

Golden State Lumber's laydown yard has three locational requirements:

- Rail-served site with access to both sides of center beam rail cars;
- Adjacent to the Golden State Lumber building and main storage area; and
- Sufficient size for temporary lumber storage and staging.

The only option for relocating Golden State Lumber's existing laydown yard without also relocating its entire facility would be to extend the existing siding used by Golden State Lumber across Tunnel Avenue to a new laydown yard site immediately south of Golden State Lumber's existing main Tunnel Avenue facility. Such an area would have the capacity to simultaneously receive and unload two rail cars with an approximate 2-acre new lay-down area to replace the area that would be displaced by Specific Plan development (see **Figure 4.4-3**). This area is, however, designated for Low Density Commercial use in the Specific Plan. Whether Golden State Lumber could reach agreement with the applicant to move their lease is unknown.

Should Golden State Lumber and the applicant reach an agreement to relocate the existing laydown yard, the resulting physical environmental effects would be similar to those of the Specific Plan. Extending the existing siding across Tunnel Avenue would require temporary partial or complete closure of the roadway during construction, which would adversely affect emergency response along Tunnel Avenue. Implementation of this concept would mean that Tunnel Avenue traffic would be disrupted when rail cars would be moved to and from the new laydown area, adversely affecting emergency response; however, movement of lift trucks

hauling pallets of lumber across Tunnel Avenue would be eliminated. Should the existing siding across Tunnel Avenue be installed, the City would require standard signage, warning lights, and crossing gates.

Figure 4.4-3: Alternative Golden State Lumber Laydown Yard and Rail Extension



Significance Conclusion for Impact POP-2

Physical environmental impacts related to displacement of housing and business will be less than significant for the following reasons:

- There is no existing housing within the Baylands.
- All off-site infrastructure associated with Baylands development will be located within existing roadway rights-of-way.
- Although approximately 231,400 square feet of existing industrial businesses within the Baylands and the existing business at 140 Valley Drive would be displaced as of November 2022 by Baylands grading and development, there is more than 2.6 million square feet of vacant industrial space within Brisbane and adjacent communities and more than 6.3 million square feet of vacant industrial space within San Francisco and San Mateo counties. As a result, displacement of industrial businesses from the Baylands would not necessitate new construction of replacement industrial development for which significant physical environmental impacts would occur.

- Operational impacts of businesses relocating from the Baylands would continue to be generated at their new locations rather than within the Baylands. Impacts of the 231,400 square feet of existing industrial businesses within the Baylands and at 140 Valley Drive that would relocate are small in relation to the environmental baseline for San Francisco and San Mateo counties and would be spread out into various locations.
- Existing grades and roadway access to business adjacent to or completely surrounded by the Specific Plan area would be maintained at all times through Baylands development such that there would be no displacement of these existing businesses, and replacement development is not required.
- Baylands development would displace Golden State Lumber's laydown area and its ability to receive and ship lumber by rail, adversely affecting its business operations, the resulting adverse effects would be economic and therefore does not constitute a physical environmental effect as defined by CEQA. Such adverse economic effects would be addressed through the Baylands' planning review process.

c. Impact POP-3: Housing for all Economic Segments of the Community

Methodology for Determining Significance

Threshold POP-3 addresses the extent to which the Baylands Specific Plan might facilitate or impair the City's ability to provide housing for all economic segments of the community as defined by the City's RHNA numbers for very low-, low-, moderate- and above moderate-income households.

As shown in **Table 4.3-1**, the Baylands Specific Plan encompasses 80.1 percent of the City's total available land inventory for the production of housing identified in its 2023-2031 Housing Element. **Table 4.3-1** also demonstrates that Brisbane does not have a sufficient inventory of land available for housing production to meet its 2023-2031 Housing Element need in the absence of the Baylands Specific Plan.

The methodology used to analyze this impact is as follows:

1. Analyze residential development densities proposed by the 2025 Specific Plan and affordability of these densities for each economic segment of the community. If it is determined that the Specific Plan would facilitate housing for all economic segments of the community as outlined in the City's certified 2023–2031 Housing Element, no further analysis would be needed.
2. Should the Specific Plan impair the City's ability to provide housing for all economic segments of the community as outlined in the City's Housing Element, undertake further analysis to identify whether additional sites for housing would be required

outside of the Baylands and whether development of such sites would result in significant physical environmental impacts.

Impact Assessment

Ability to Provide Housing for All Economic Segments of the Community

Specific Plan's Relationship to the City's Housing Inventory

As indicated in **Table 4.3-1**, the Baylands Specific Plan represents approximately 81 percent of the land inventory identified in the Housing Element for the production of housing. As shown in Table 5-1 of the City's 2023–2031 Housing Element, Baylands development is anticipated to provide 55.7 percent of the City's quantified objective for very low-income housing, along with 95.0 percent of the City's quantified objectives for moderate- and above moderate-income housing.

Pursuant to Government Code Sections 65583.2(f) and 65583.2(h), Brisbane is classified as a "suburban jurisdiction," meaning that land zoned at densities greater than 20 dwelling units per acre on sites that can accommodate at least 16 dwelling units per site can facilitate affordable housing development.

The Specific Plan's proposed 2,200 dwelling units on 53.6 acres equates to approximately 41 dwelling units per acre. The Housing Element projects 514 below-market units within the Baylands, representing 28.6 percent of the minimum number of housing units permitted within the Baylands (1,800) and 23.4 percent of the maximum number of units permitted and currently proposed for the Baylands (2,200).

Significance Conclusion for Impact POP-3

The Specific Plan provides sufficient land for housing at appropriate densities to meet Housing Element-quantified objectives for the production of housing to meet the needs of all economic segments of the community as outlined in the City's certified 2023–2031 Housing Element. The Baylands Specific Plan would therefore have a less than significant impact related to directly or indirectly inhibiting the City's ability to provide housing for all economic segments of the community.

d. Impact POP-4: Urban Decay

Methodology for Determining Significance

Urban decay occurs when a downward spiral of business closures and multiple long-term business vacancies, directly or indirectly result in visible symptoms of physical deterioration[115] to properties or structures that is so prevalent, substantial, and lasting for a significant period of time that it impairs the proper utilization of the properties and structures, or the health, safety, and welfare of the surrounding community. To determine whether new retail or office/life science development within the Baylands would cause a downward spiral of business closures and multiple long-term business vacancies that could, directly or indirectly, result in visible symptoms of physical deterioration, an urban decay analysis was undertaken for the Baylands (see Appendix C and the analysis below).

Urban Decay

In September 2019, the Court of Appeal of the State of California, 3rd Appellate District in *Chico Advocates for a Responsible Economy v. City of Chico* (2019) 40 Cal.App.5th 839 (*CARE*) upheld the definition of urban decay set forth in the Chico Walmart Expansion Project Draft EIR. The Chico EIR defined urban decay as "among other characteristics, visible symptoms of physical deterioration that invite vandalism, loitering, and graffiti that is caused by a downward spiral of business closures and long-term vacancies. This physical deterioration to properties or structures is so prevalent, substantial, and lasting for a significant period of time that it impairs the proper utilization of the properties and structures, and the health, safety, and welfare of the surrounding community" (*CARE, supra,* at p. 849).

Typically, urban decay analyses are primarily prepared for retail development, or the retail components of large-scale mixed-use projects. Over time, some environmental impact reports have also conservatively extended the urban decay analysis to other land uses. Such is the case for the Baylands urban decay analysis, which includes office/life science space in addition to the more common analysis of retail space.

The urban decay analysis undertaken for the Baylands is not intended to determine the extent to which demand for retail or office/life science uses does or does not exist, but rather to assess what impact such use could have on the *existing* real estate base for these uses assuming they are built within the Baylands. The urban decay analysis undertaken for the Baylands focused on how a court described the phenomenon, as "a chain reaction of store closures and long-term vacancies, ultimately destroying existing neighborhoods and leaving decaying shells in their wake" (*Bakersfield Citizens for Local Control v. City of Bakersfield* (2004) 124 Cal.App.4th 1184, 1204). As with other socioeconomic impacts addressed in this section of the EIR, the following analysis does not consider adverse economic impacts to constitute urban decay (CEQA Guidelines Section 15131.) For example, increased retail vacancies or vacant office buildings are not considered urban decay, even if such vacancies would occur over a relatively long period of time. The urban decay analysis

[115] "Physical deterioration" can be identified by such features as abandoned buildings, boarded doors and windows, parked trucks and long-term unauthorized use of the properties and parking lots, extensive or offensive graffiti painted on buildings, dumping of refuse or overturned dumpsters on properties, dead trees and shrubbery, and uncontrolled weed growth.

undertaken for the Baylands examined whether there was sufficient market demand to support Specific Plan development without affecting existing office/life science properties or retailers so severely to lead to a downward spiral toward decay of the existing physical environment.

The Baylands urban decay analysis that follows is based on a detailed technical analysis undertaken by ALH Urban and Regional Economics[116] that included the following tasks:

- Office/Life Science Uses
    - Identify a competitive office/life science market area for the Baylands office/life science component and assess existing conditions, including the amount and age of existing inventory along with demand, rental rates, market conditions, development and ownership trends, and other economic health indicators for office/life science space in the Baylands market area.
    - Estimate demand for office/life science space in the market area.
- Retail Uses
    - Identify a retail market area from which the bulk of the Project's retail demand is estimated to originate and assess existing conditions.
    - Estimate existing and future retail market area demand.
    - Assess Project impacts by land use.
    - Identify and assess cumulative project impacts by land use.
- Identify urban decay implications of the Baylands Office/Life Science and retail components.

For the Specific Plan's office/life science space or retail space to have a significant impact, Baylands office/life science space or retail development would need to draw tenants away from existing buildings without the potential for that space to be re-tenanted, thus increasing the vacancy rate to such an unhealthy level that visible symptoms of physical deterioration of vacant buildings and their sites would occur. Proposed uses other than office/life science space and retail space are thus not addressed in the Baylands urban decay analysis.

Impact Assessment

The Baylands Specific Plan, estimated to total nearly 6.4 million square feet of occupied office space, would represent a 40.5 percent increase in the existing Brisbane/Daly City local market inventory. The first phase of Baylands development represents about 21 percent of the market inventory of San Mateo County.

[116] The full urban decay study for the Baylands is presented in Appendix C.

Office/Life Science Space

The Specific Plan would add 6,397,800 square feet of new office/life science space to the existing 15.8-million-square-foot inventory in the local Brisbane/Daly City market area, a 40.5 percent increase. Considering the 61.1-million-square-foot countywide inventory of office and life science space, the Specific Plan represents a 10.5 percent increase in San Mateo County's supply.

The San Mateo County economy as a whole is projected to experience demand for office/life science space in the near- and long-term future. For example, the demand projected from 2023 to 2025 totals 2.3 million square feet, or close to 1.0 million square feet per year. Over the next 5-year period, the incremental space demand is forecasted at 2.9 million square feet. At an average annual estimated demand of 645,683, the Specific Plan's office/life science space would require absorption of approximately 10 years' demand for office/life science space in San Mateo County. This is on par with the Specific Plan's proposed development time horizon.

For the Specific Plan's office/life science space to have a negative impact on the market, it would need to draw tenants away from existing buildings without the potential for that space to be re-tenanted, thus increasing the vacancy rate to an unhealthy level, characterized by multiple long-term vacancies. There are major factors that suggest these circumstances are unlikely to happen.

The current availability rate is low in the office/life science market area, at 8.1 percent for office and life science combined, which is favorable in contrast to other nearby areas. For example, the vacancy rate in San Francisco's downtown office market is near 30 percent. Future employment-based demand projections suggest that existing companies will be growing, and other new tenants would be interested in locating within the competitive office/life science market area. At worst, interception of this demand by the Project would slow development and absorption of the competitive office/life science buildings, but not create widespread, multiple long-term vacancies.

Development of the Specific Plan area itself will occur in phases and be driven by market conditions and tenant demand. To the extent that demand for Baylands office/life science buildings is less robust than expected, construction would slow down to better align with demand. This may mean that development timing of later phases would be pushed further out into the future.

The existing inventory of space in Brisbane and South San Francisco is relatively new, with many buildings less than 20 to 25 years old. Additionally, the market has a highly concentrated ownership pattern, with large, experienced companies controlling most of the space. This suggests that these landlords have the wherewithal to successfully maintain, market, and re-tenant large vacancies should tenant movement to the Baylands occur.

In conclusion, development and absorption of the proposed 6,397,800 square feet of Baylands office/life science space would not result in a sustained negative impact on the existing office/life science base in the competitive market area. Implementation of the Baylands Specific Plan would not cause a downward spiral of business closures and multiple long-term vacancies of office/life science spaces that would lead to urban decay.

Retail Space

The Specific Plan includes several components that will generate new demand for retail, including Baylands residents, employees, and hotel guests. **Table 4.4-9** compares projected annual retail sales of Baylands residents, employees, and hotel guests at brick and mortar shops with projected retail sales of the anticipated 91,980 square feet of occupied Baylands retail space.

Table 4.4-9: Retail Demand Generated by the Baylands Market Area

Retail Demand Characteristic	Total Spending
Annual brick and mortar spending by Baylands residents	$91,504,898
Annual daytime spending by Baylands employees and hotel guests	$207,441,271
TOTAL ANNUAL BAYLANDS-GENERATED RETAIL SPENDING	**$298,946,169**
Retail sales generated by the proposed 91,980 s.f. of retail use within the Baylands	$33,100,000

SOURCE: ALH Urban & Regional Economics, *The Baylands Urban Decay Analysis*, July 2023.

As identified in **Table 4.4-9**, Baylands development would generate approximately $298.9 million in brick-and-mortar spending by Baylands residents and daytime spending by Baylands employees and hotel guests annually. In comparison, $33.1 million in retail sales would be generated annually by 91,980 square feet of Baylands retail space, representing approximately 11.5 percent of the retail sales generated by the Specific Plan's residents, employees, and hotel guests. Thus, Baylands residents, employees, and hotel guests would generate approximately $265.8 million in retail sales to backfill any retail sales that might be diverted to the Baylands from offsite businesses. The Baylands Specific Plan would therefore not cause a downward spiral of business closures and multiple long-term vacancies of retail spaces.

Significance Conclusion for Impact POP-4

Baylands development would not result in urban decay and impacts would be less than significant for the following reasons:

- Development of the Specific Plan will occur in phases and be driven by market conditions and tenant demand. To the extent that demand for Baylands office/life science buildings is less robust than expected, construction would slow down to better align with demand. This would mean that development timing of later phases would be pushed further out into the future.

The existing inventory of space in Brisbane and South San Francisco is relatively new, with many buildings less than 20 to 25 years old. Additionally, the market has a highly concentrated ownership pattern, with large, experienced companies controlling most of the space. This suggests that these landlords have the wherewithal to successfully maintain, market, and re-tenant large vacancies should tenant movement to the Baylands occur.

- Baylands residents, employees, and hotel guests would generate approximately $265.8 million more in retail sales at full buildout than retail sales at Baylands businesses. Thus, even if Baylands development would divert some sales away from existing retailers, Specific Plan development would generate substantially greater new retail sales to backfill any diverted sales.

Impact POP-4 is therefore less than significant.

4.4.6 REFERENCES – POPULATION AND HOUSING EFFECTS

ABAG (Association of Bay Area Governments). 2021. *Final Regional Housing Needs Allocation (RHNA) Plan: San Francisco Bay Area, 2023–2031*. December 2021. Accessed August 7, 2024. https://abag.ca.gov/sites/default/files/documents/2021-12/Final_RHNA_Allocation_Report_2023-2031-approved_0.pdf.

ALH (ALH Urban and Regional Economics). 2023. *The Baylands Urban Decay Analysis*. July 2023.

California Department of Finance. 2024. *Table 2: E-5 Population and Housing Estimates, 1/1/2024*. Accessed May 31, 2024. https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fdof.ca.gov%2Fwp-content%2Fuploads%2Fsites%2F352%2FForecasting%2FDemographics%2FDocuments%2FE-5_2024_InternetVersion.xlsx&wdOrigin=BROWSELINK.

California EDD (California Employment Development Department). 2024. *Monthly Labor Force Data for Cities and Census Designated Places, June 2024 – Preliminary, Data Not Seasonally Adjusted*. July 19, 2024. Accessed May 31, 2024. https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Flabormarketinfo.edd.ca.gov%2Ffile%2Flfmonth%2Fsanmasub.xls&wdOrigin=BROWSELINK.

City of Brisbane. 2018. *Brisbane Baylands Final Environmental Impact Report*. Prepared by Environmental Science Associates. August 2018

City of Brisbane. 2023. *2023–2031 Housing Element*. May 18, 2023.

City of South San Francisco. 2020. *Genentech Campus Master Plan*. Adopted November 2020. Accessed May 31, 2024. https://www.ssf.net/home/showpublisheddocument/22971/637502127884100000.

EKI (EKI Environment & Water, Inc.). 2025. *Water Supply Assessment for the Baylands Specific Plan*.

Metropolitan Transportation Commission (MTC) & ABAG. 2021. *Plan Bay Area 2050 The Final Blueprint Growth Pattern*. January 21, 2021. Accessed August 7, 2024. https://www.planbayarea.org/sites/default/files/FinalBlueprintRelease_December2020_GrowthPattern_Jan2021Update.pdf.

NAI Northern California/Costar. 2022. *Industrial Market Report*. November 2022. Accessed August 7, 2024. https://nainorcal.com/wp-content/uploads/2022/11/San-Francisco-CA-Industrial-Market.pdf.

SMCDOH (San Mateo County Department of Housing). 2024. 2024 San Mateo County Income Limits. Accessed July 29, 2024. https://www.smcgov.org/media/149609/download?inline=.

United States Census Bureau. 2021. American Community Survey 5-Year Estimates Subject Tables. Table S0801, Commuting Characteristics by Sex. Accessed August 7, 2024. https://data.census.gov/table?q=Brisbane,+CA&tid=ACSST5Y2021.S0801.

Intentionally Blank

4.5 AESTHETIC AND VISUAL RESOURCES

4.5.1 INTRODUCTION

a. Overview

This section describes the existing visual setting for the Baylands Specific Plan and focuses on the visual changes that would be seen from public viewpoints, including scenic vistas, views of distinctive visual landmarks and scenic resources, and potential environmental effects of new sources of light and glare.

This EIR recognizes that assessing whether the 2025 Specific Plan project would result in comparatively better (substantially improved) or worse (substantially degraded) aesthetic quality is largely subjective and that the reaction of different viewers to the same visual setting and changes in aesthetic conditions will vary.

Public Resources Code Section 21099(a): Analysis of Aesthetic Impacts

Senate Bill (SB) 743 was codified within CEQA as Public Resources Code Section 20199 et seq. and states that "Aesthetic and parking impacts of a residential, mixed-use residential, or employment center on an infill site within a transit priority area shall not be considered significant impacts on the environment" (Public Resources Code Section 21099(d)(1)).

While the Baylands would meet the Public Resources Code Section 20199(a) definition of an infill site and the existing Bayshore Caltrain Station meets the definition of a major transit stop, only a portion of the Specific Plan area is located within a transit priority area (within ½ mile of a transit stop). Therefore, aesthetic impacts of the Baylands Specific Plan are not excluded from CEQA analysis pursuant to Public Resources Code Section 21099(d)(1) and are addressed in this EIR.

The assessment of visual resources impacts in this section is therefore qualitative and focuses on the physical changes to existing visual elements or features of the site and surrounding area, such as blockage of existing scenic vistas or physical damage to scenic features that would result from Specific Plan development, as well as consistency with provisions of Brisbane's General Plan and Municipal Code addressing scenic and visual quality. As permitted by state law, the Specific Plan does not identify the precise location, height, setbacks, design, and shape of each on-site building. Instead, the Specific Plan establishes guidelines for future architectural design of site-specific development projects, which are reviewed for consistency with the City's required findings for a design permit during the development review process.

b. Definitions

Aesthetic or visual resources include a combination of numerous elements, such as landforms, vegetation, water features, urban design, and/or architecture, that impart an overall visual impression that is pleasing to, or valued by, its observers. Factors important in describing the aesthetic resources of an area include scenic resources, scenic vistas, and visual character. Together, these factors not only describe the intrinsic aesthetic appeal of an area, but also

communicate the value placed upon a landscape or scene by its observers. Aesthetic resources include:

- **Scenic resources**, which are visually significant hillsides, ridges, and water bodies that are critical in shaping an area's visual character and scenic identity, whether positively or negatively. Relevant scenic resources include natural features such as Icehouse Hill, the Brisbane Lagoon, San Bruno Mountain and its adjacent ridgelines, and San Francisco Bay.
- **Scenic vistas**, which include expansive/panoramic views of large geographic areas and important visual features, such as views of striking or unusual natural terrain or unique urban or historic features as seen from public viewing areas. Relevant scenic vistas include public views across the Baylands of San Francisco Bay and the Brisbane Lagoon, Icehouse Hill, and San Bruno Mountain and the adjacent ridgeline as viewed from (1) public areas within Brisbane, San Francisco, and Daly City and (2) the US 101 freeway.
- **Visual character**, which broadly describes the unique combination of aesthetic elements and scenic resources that characterize a particular area. An area's visual character can be qualitatively assessed considering the overall visual impression or attractiveness created by the particular landscape characteristics. In urban and suburban settings, these characteristics largely include land use types and their general level of maintenance; urban landscaping and design; architectural design; topography; and the visual prominence of natural and developed open spaces in relation to buildings (including shade and shadows cast thereby), parking areas, streets, and above-ground infrastructure.

Correlated color temperature or **color temperature** is a specification of the color appearance of the light emitted by a light source, measured in Kelvin (K). The scale ranges from 1,000K (candlelight) to 10,000 (cold, sky blue) and is most commonly found between 2700K and 6500K. The lower end of the scale as a "warmer" feel with a redder or more orange hue to the color. The higher end of the scale has a "cooler" feel and has a more white or blue hue.

Foot-candle is a unit of measure of the intensity of light falling on a surface equal to one lumen per square foot. Although the foot-candle measurement is considered obsolete in some scientific circles, it is nevertheless commonly used because many existing light meters are calibrated in foot-candles. Moonlight produces approximately 0.01 foot-candles, while sunlight can produce up to 10,000 foot-candles. The general benchmarks for light levels are shown in **Table 4.5-1**.

Form refers to the unified mass or shape of an object that often has an edge or outline and can be defined by surrounding space. For example, a high-rise building would have a highly regular, rectangular form whereas a hill would have an organic, mounded form.

Table 4.5-1: Outdoor Lighting Levels

Lighting Levels	
Outdoor Light	**Foot-Candles**
Direct Sunlight	10,000
Full Daylight	1,000
Overcast Day	100
Dusk	10
Twilight	1
Deep Twilight	0.1
Full Moon	0.01
Quarter Moon	0.001
Moonless Night	0.0001
Overcast Night	0.00001
Gas Station Canopies	25–30
Typical Street Light	1–5

SOURCES: Musco Lighting 2012; The Engineering ToolBox 2013.

Fully Shielded means a light fixture constructed and installed in such a manner that all light emitted, either directly from the lamp or a diffusing element, or indirectly by reflection or refraction from any part of the fixture, is projected below the horizontal plane (from the bottom of the lamp).

Glare is an intense and blinding light that reduces visibility; a light within the field of vision that is brighter than the brightness to which the eyes are adapted to cause annoyance, discomfort, or loss of vision. Glare can be uncomfortable and/or physically disabling and can be experienced as a momentary flash (often referred to as "glint") or a longer phenomenon.

Illuminance is the amount of light present on a surface or plane, typically expressed in a horizontal plane (i.e., on the ground) or in a vertical plane (i.e., on the side of a building).

Infill site, as defined in Public Resources Code Section 21099(a)(4) means a lot[117] located within an urban area that has been previously developed, or on a vacant site where at least 75 percent of the perimeter of the site adjoins, or is separated only by an improved public right-of-way from, parcels that are developed with qualified urban uses.

Intact/Not Intact describes the extent to which views are free from visual encroachment in the natural and built landscape by incompatible elements.

[117] "Lot" is defined in Public Resources Code Section 21099 (a)(5) as "all parcels utilized by the project."

Landscape Character Unit refers to geographic areas that have similar visual features, a generally homogeneous visual character, and often, a single viewshed that is sometimes referred to as an "outdoor room."

Light trespass, light spillage is light falling beyond the area intended to be illuminated such as adjacent properties or habitat areas.

Lumen is a measurement of the perceived power of light emitted from a light source. It can be informally thought of as a measure of the total amount of visible light in some defined beam or angle or emitted from some source.

Luminaire (light fixture) is a complete lighting unit consisting of a lamp or lamps and ballast(s) (when applicable) together with the parts designed to distribute the light, to position and protect the lamps, and to connect the lamps to the power supply.

Representative viewpoints are specific locations where views of a project site are available from a public vantage point (e.g., a public roadway, park, or trail).

Sky glow is the light reflecting into the night sky that reduces visibility of stars and is a cumulative effect of numerous night lighting sources within a community and metropolitan region. Sky glow includes both natural sources, such as moonlight, and human sources. Sky glow from human sources is caused by light that is either emitted directly upward by luminaires (lighting fixtures) or reflected from the ground, producing a luminous background that has the effect of reducing the apparent darkness of the sky and reducing one's ability to view the stars. Sky glow is highly variable depending on immediate weather and atmospheric conditions, amount of light directed skyward, and the direction from which it is viewed.

Specular surface refers to a building façade or roof surface that reflects light in a mirror-like fashion.

String lights are light sources connected by free-strung wires or inside of tubing resulting in several or many points of light.

Transit Priority Area, as it is defined in Public Resources Code Section 21099(a)(7), means an area within one-half mile of an existing or planned major transit, if the planned stop is scheduled to be completed within the planning horizon included in a Transportation Improvement Program or applicable regional transportation plan. The portion of the Baylands within one-half mile of the Bayshore Caltrain Station is thus within a transit priority area.

View types. View types are characterized as foreground, middle-ground, and background views.

- **Foreground** views are those immediately presented to the viewer and include objects at close range that tend to dominate views (generally views within 0.5 mile of the viewer).

- **Middle-ground** views include those in the center of the viewshed and tend to include objects that are the center of attention if they are large or visually different from adjacent visual features (generally 0.5 to 3.0 miles from the viewer).
- **Background** views include distant and other objects that make up the horizon. Smaller objects in the background fade to obscurity with increasing distance, and background views typically include large-scale features 3 miles and farther from the viewer.

Viewshed refers to the geographical areas that are visible from a fixed vantage point and excludes points that are beyond the horizon or obstructed by terrain and other features (e.g., buildings, trees).

Visual unity is the degree to which the visual resources of the landscape join together to form a coherent, harmonious visual pattern. Unity refers to the compositional harmony or inter-compatibility between landscape elements.

4.5.2 PHYSICAL ENVIRONMENTAL SETTING

a. Baseline

The baseline for analysis of aesthetic and visual resources impacts is the physical environmental condition at the time of publication of the recirculated Notice of Preparation (spring 2023).

b. Visual Setting and Context

The City of Brisbane and the Baylands lie within a suburban setting located on the western shore of San Francisco Bay. Brisbane is nestled between the cities of San Francisco (Visitacion Valley and Little Hollywood neighborhoods) to the north, Daly City to the west, and South San Francisco to the south. The Baylands site is located west of US Highway 101, which runs immediately adjacent to the west shore of the San Francisco Bay, separating the Specific Plan area from the Bay.[118] Ground-level views of the Bay from the Baylands are currently blocked by vegetation within the freeway's right-of-way.

As viewed from US Highway 101 and flights leaving the San Francisco International Airport, Brisbane lies within a low-density "cove" formed by the ridges extending from San Bruno Mountain. These ridges, along with the Brisbane Lagoon and the Recology Solid Waste Transfer Facility to the north of the Baylands, physically and visually separate Brisbane and the Baylands from the highly urbanized cities of San Francisco to the north, Daly City to the west, and South San Francisco to the south. Brisbane's hillside geography also means that many residents have

[118] The only portion of Brisbane that directly borders San Francisco Bay is the Sierra Point Subarea, which is on the east side of the US 101 freeway southeast of the Baylands.

unobstructed views of San Francisco Bay and the Oakland Hills beyond, with the Baylands in the foreground of those views.

To the north of the Baylands is the Recology Solid Waste Transfer Facility, consisting primarily of large utilitarian buildings, parking areas, and outdoor storage and work areas. The eastern boundary of the Baylands is formed by the US 101 freeway, which physically separates the site from San Francisco Bay. The Baylands site is partially screened from view along the freeway by vegetative growth within the right-of-way. However, the northern approach to the Baylands along US Highway 101 affords brief but encompassing views of the site, with San Bruno Mountain in the background. Bayshore Boulevard forms the western edge of the Baylands. Icehouse Hill and vegetation along the eastern side of the Bayshore Boulevard right-of-way partially screen the Baylands from views from Bayshore Boulevard.

Central Brisbane is located directly west of the southern portion of the Baylands, across Bayshore Boulevard. Central Brisbane consists of both residential and commercial development. It is developed primarily with 1- to 2-story commercial buildings along Visitacion Avenue and 1- to 2-story single-family houses throughout. Northeast Ridge, which lies northwest of Central Brisbane and west of Guadalupe Canyon, consists of single-family houses and higher-density residential buildings.

A Prologis warehouse complex is located between Bayshore Boulevard and the Caltrain rail lines along the southwestern shore of the Brisbane Lagoon south of the Baylands.

c. Landscape Character Units

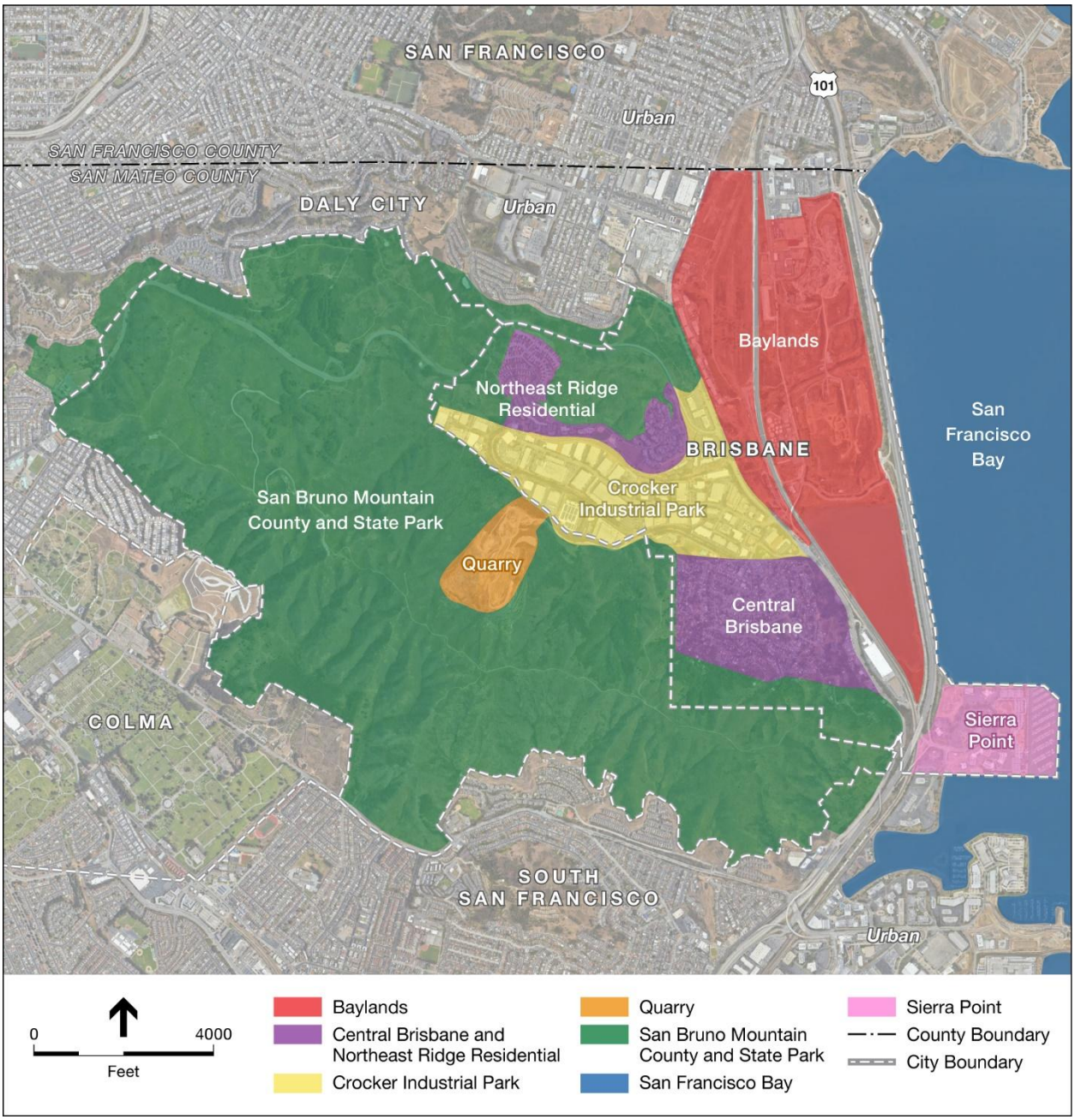
Brisbane and adjacent urban areas encompass distinct natural and constructed landscapes that form eight Landscape Character Units (see **Figure 4.5-1**). Although some Landscape Character Units have common visual features, they vary greatly in overall line, form, color, and texture.

Baylands Landscape Character Unit

The Baylands Landscape Character Unit is characterized by a combination of natural and manufactured features. When viewed from the US 101 freeway, the Baylands' predominant visual character is formed by the open water of the Brisbane Lagoon and the slopes of the former Brisbane landfill, with Icehouse Hill and San Bruno Mountain's ridgeline in the background. When viewed from the middle to upper elevations of Central Brisbane, the predominant visual character is that of a largely open land area with the Brisbane Lagoon and San Francisco Bay in the background.

Within the Baylands, the visual character of the eastern portion of the site is dominated by the slopes and tops of the former Brisbane landfill; Visitacion Creek; the Golden State Lumber yard; vehicle storage uses; small, older industrial buildings; Kinder Morgan Tank Farm; and the large utilitarian buildings of the Recology solid waste transfer facility to the north.

Figure 4.5-1: Landscape Character Units within or Visible to or from the Baylands



SOURCE: Metis Environmental Group, 2025

Separating the eastern portion of the Baylands from the western portion is the Caltrain railroad right-of-way and the Bayshore Caltrain Station. The western portion of the Baylands is visually characterized by a large block of vacant land, remnants of the area's former rail maintenance yard use, and the small industrial uses within the Brisbane Industrial Park.

The patchwork of current uses within the Baylands—older industrial buildings, undeveloped and barren parcels, former landfill, and soil stockpiles from former soils processing uses—and

the abandoned railyard, all contribute to an overall visual character that is in contrast to nearby established urban and suburban communities and the area's scenic resources. Although much of this on-site industrial activity is screened from view from major roadways along the site's periphery, views across and into the Baylands from higher elevations and more distant vantage points capture many of these elements.

Native vegetation types, including coastal scrub and perennial grasslands, are confined to relatively small areas on Icehouse Hill in the western portion of the Baylands, to the tidal and freshwater wetlands along the edges of drainage channels and Brisbane Lagoon, and to seasonal wetlands in the western portion of the site. The Visitacion Creek drainage channel bisects the Baylands along an east-west axis and currently provides a limited amount of riparian vegetation and habitat.

Icehouse Hill

Icehouse Hill is located in the southwestern portion of the site adjacent to Bayshore Boulevard and ranges in elevation from 25 to 200 feet above mean sea level. There are steep cuts adjacent to the Caltrain railroad and more gently sloping cuts along Bayshore Boulevard.



Icehouse Hill, 2024

Brisbane Lagoon

The 121.8-acre Brisbane Lagoon was formed by the construction of the US Highway 101 causeway. The lagoon encompasses open water/estuarine communities and is tidally connected to San Francisco Bay.



View of the Brisbane Lagoon looking southwest

Roundhouse

Constructed circa 1907, the Roundhouse is a classic example of a railroad roundhouse, despite being significantly damaged by fire in recent years. The Roundhouse was listed in the National Register of Historic Places in March 2010 (NR #10000113) and is therefore also listed in the California Register of Historical Resources.



Historic Southern Pacific Roundhouse (See Section 4.7, Cultural Resources and Tribal Cultural Resources, for additional photographs of the Roundhouse)

Constructed of brick and heavy timber, the building's semi-circular plan reflects its function as a railroad roundhouse built to service the steam-powered locomotives of the day. The western half of the building is severely fire-damaged, with portions of its roof missing, charred timbers, and missing or broken window frames. This abandoned building also shows evidence of vandalism and graffiti, despite the chain link fencing that encircles it.

Machinery & Equipment Building (Former SPRR Ice Manufacturing Plant)

Constructed in 1924, this L-shaped brick building consists of three sections: two storage areas in the 2-story square northern portion and the single-story rectangular southern section that was used as the tank and compressor room. This building is included as an "Existing Development Area" within the Specific Plan area.



Former SPRR Ice Manufacturing Plant

Kinder Morgan Brisbane Terminal (Tank Farm)


Kinder Morgan Brisbane Terminal

The Kinder Morgan Energy Partners, L.P. Brisbane Terminal consists of 20 large, light-colored tanks that are visually distinct from the surrounding natural features, such as Icehouse Hill and Brisbane Lagoon. The tank farm is partially screened from Central Brisbane and Northeast Ridge residential development by Icehouse Hill. The Kinder Morgan Tank Farm and the City's corporation yard are located adjacent to Tunnel Avenue and are visible at the southerly entrance to the Baylands from Bayshore Boulevard, as well as from many locations within the Baylands. The tank farm and existing corporation yard site are included in the Specific Plan as an "Existing Use Area." The existing Brisbane Corporation Yard within the Kinder Morgan parcel is proposed to be expanded and relocated to the Specific Plan's Sustainable Infrastructure area.

Brisbane Bayshore Industrial Park

The Brisbane Bayshore Industrial Park consists of 14 industrial buildings, including single- and multi-tenant structures occupied by a variety of warehousing- and supply-related service businesses along Industrial Way in the northwestern portion of the Baylands.


Brisbane Bayshore Industrial Park

San Bruno Mountain Landscape Character Unit

The San Bruno Mountain Landscape Character Unit features a harmonious pattern of steep vegetated mountain slopes and canyons. San Bruno Mountain is generally visually intact and retains its original character, with little encroachment from development. With an elevation over 1,300 feet above mean sea level, San Bruno Mountain is the dominant visual feature of this Landscape Character Unit and the City of Brisbane. Radio Road, leading up from the main entrance to the San Bruno Mountain State and County Park,


Ridges of San Bruno Mountain in the background as viewed from the Bayshore Caltrain Station

affords visitors the opportunity to drive to the summit of the mountain and enjoy views north to Mt. Tamalpais, south to Mt. Diablo, and west to the Farallon Islands. Extending from the mountain is a 4-mile-long ridge west from Bayshore Boulevard and then north, creating Brisbane's unique cove-like setting. San Bruno Mountain and its ridgeline provide a dramatic visual backdrop for the City, while its lower slopes provide residents of Central Brisbane with dramatic views across the Baylands to San Francisco Bay and the hillsides of the East Bay region beyond. The visual quality of the San Bruno Mountain Landscape Character Unit is considered high.

San Francisco Bay Landscape Character Unit

The San Francisco Bay Landscape Character Unit is located across the US 101 freeway to the east of the Baylands. Dramatic blue water views across the Baylands to San Francisco Bay are available throughout large portions of the Brisbane community. The San Francisco Bay Landscape Character Unit's visual quality is considered high.

Central Brisbane and Northeast Ridge Residential Landscape Character Unit

The residential development along the northeast ridge and Central Brisbane forms a single Landscape Character Unit. The northeast ridge residential developments are characterized by clusters of condominiums and townhouses in neutral tones, with rows of single-family residences extending up the hillsides of the western neighborhood. The area surrounding the northeast ridge residential area is clearly distinguished by its natural hillsides that stand out against Crocker Industrial Park and the residential development. Central Brisbane unites with the northeast ridge to form a coherent visual pattern. The residences in Central Brisbane span the lower foothills of San Bruno Mountain, dominating the topography and appearing in similar patterns and of varying colors as northeast ridge residences. The visual quality of Central Brisbane and the Northeast Ridge Residential Landscape Character Unit is considered moderate.



View of the Baylands, San Francisco Bay/ Brisbane Lagoon, and Urban Landscape Character Units

Sierra Point Landscape Character Unit

The Sierra Point Landscape Character Unit is located east of the US 101 freeway and southeast of the Baylands. Visually, Sierra Point consists primarily of the Brisbane marina and mid-rise office buildings and hotels on individual parcels, nearly all of which are provided with surface parking. Newer office development along the edge of San Francisco Bay is more intense than older development and is provided with structured parking. The Brisbane Marina provides a 270-foot guest dock and can house 580 boats ranging in size from 10 to 120 feet. The Marina has a public 300-foot fishing pier, along with panoramic views of San Bruno Mountain and the East Bay. Views between the Baylands and Sierra Point Landscape Character Units are limited by landscaping along the US 101 freeway.



Brisbane Marina



Existing view of Sierra Point from Thomas (Star) Hill in Brisbane looking southeast

Crocker Industrial Park Landscape Character Unit

Crocker Industrial Park's light-colored, square, bulky buildings at the base of Guadalupe Valley are largely intact. Together, the building patterns form unity with similar colors, scale, and repeating styles. The edges of Crocker Industrial Park are well defined and contrast against the natural vegetation and surrounding hillsides by adding a distinct variation in color and form of built structures and ornamental landscaping. Site-specific developments approved through the City's development and design review processes contribute to the overall aesthetic of this industrial and commercially focused area, which has a moderate visual quality.

Quarry Landscape Character Unit

The Quarry Landscape Character Unit is located on the foothill and north face of San Bruno Mountain. Past quarrying operations have resulted in steeply sloped benches with sparse vegetation and a light hue. The clearly defined lines of quarry benches where recontouring has occurred contrast with the natural vegetated slopes of San Bruno Mountain that surrounds the site. The lower portion of the quarry includes a road, equipment, stockpiles, and graded slopes

where soil is loose and little vegetation remains. The Quarry Landscape Character Unit no longer contains its original character and lacks unity. The disturbed nature of the quarry results in low visual quality.

Urban Landscape Character Unit

Densely urbanized areas, including a variety of residential, commercial, and industrial uses are located within the Urban Landscape Character Unit. Along Bayshore Boulevard, uses to the northwest of the Baylands include San Francisco's Visitacion Valley residential neighborhood; to the west, land uses include residential, commercial, and manufacturing uses within Daly City, and the PG&E Martin Substation. Also located within Daly City, approximately five blocks west of the Baylands along Geneva Avenue, is the Cow Palace, an indoor arena used for public events such as concerts, sporting events, and conventions.

To the north within San Francisco are urban residential neighborhoods and the Recology solid waste transfer station (which is also partly within Brisbane). The former Schlage Lock factory, which is currently undergoing site remediation for development of 1,679 dwelling units and up to 46,000 square feet of commercial use as part of a project called "Baylands North," is located immediately north of the Specific Plan area. The Bayview/Hunters Point Redevelopment Project, which has been approved for development of 10,250 dwelling units and 6.4 million square feet of commercial use, is also located within San Francisco, northeast of the Baylands across US Highway 101. Long distance views of downtown San Francisco to the north are also available from many locations.

The Urban Landscape Character Unit is of moderate visual quality due to its distance from the Baylands. However, nighttime views of city lights to the north in San Francisco are of high quality, although limited in extent.

d. Views within and from the Baylands

At some higher locations within the Baylands, important visual features can be seen in every direction, including San Francisco Bay and the East Bay hills to the east; John McLaren Park, the San Francisco financial district, and Candlestick Point State Recreation Area to the north; and San Bruno Mountain and Central Brisbane to the southwest. Views southward across the lagoon from Lagoon Road provide visual access to Sierra Point, Oyster Point, and San Bruno Mountain. Visibility of US Highway 101 is limited due to the Baylands' topography and landscaping along the freeway edge. Views from Icehouse Hill[119] and from Lagoon Road also depict publicly accessible locations, which are therefore defined as scenic vistas.

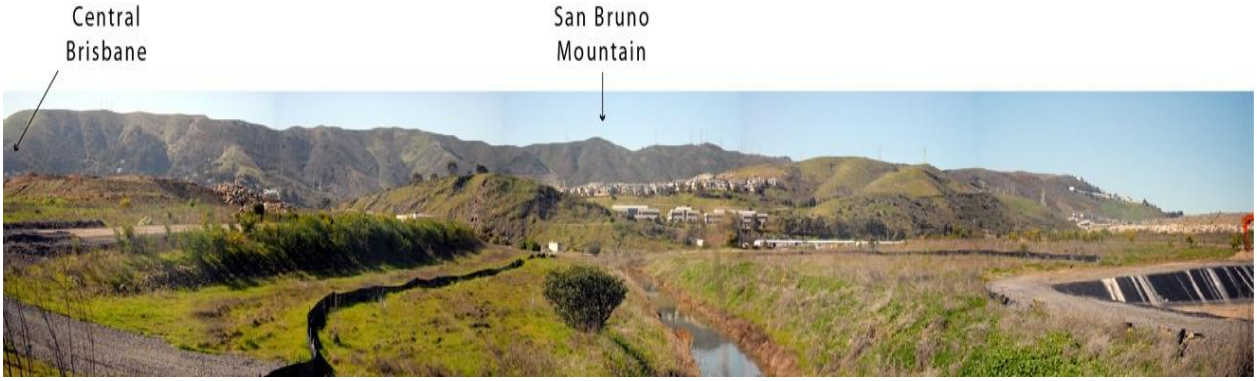
[119] While Icehouse Hill is not currently accessible to the general public, the proposed development of trails on the hill would provide for public access and views.



View from Visitacion Creek, Looking East



View from Icehouse Hill, Looking North toward John McLaren Park, San Francisco, and Candlestick Point



View from Visitacion Creek, Looking Southwest toward San Bruno Mountain



View from Lagoon Road, Looking South toward Oyster Point

Important visual features that can be seen across the Baylands from these surrounding areas include San Francisco Bay, Bayview Park, Candlestick Point, John McLaren Park, San Bruno Mountain, the East Bay hills, and high-rise buildings of the San Francisco financial district. While the visual simulations provided below in **Tables 4.5-2a through Table 4.5-2r** shows numerous viewpoints from publicly accessible locations, not all viewpoints provide significant visual access to important visual features. As such, Viewpoints 4 and 9 are not considered scenic vistas, but are included for informational purposes and to support the analysis of Specific Plan visual character changes.

e. Scenic Vistas

Scenic vistas represent public viewing opportunities that provide visual access to scenic resources, including views of the Bay, striking or unusual natural terrain, or unique urban or historic features. For the purposes of this analysis, a scenic vista includes two components. The first relates to defining what constitutes the "scenic resource" being viewed. On-site scenic resources were described in the previous subsection. However, there are also a number of "scenic resources" that are off-site but can be viewed either from across the Baylands or from off-site locations. These off-site scenic resources include San Francisco Bay, Bayview Park, Candlestick Point, John McLaren Park, San Bruno Mountain, the East Bay hills, and high-rise buildings of the San Francisco financial district. The second component of a scenic vista is the public viewing opportunity, whether on-site or off-site. If a site from which a scenic resource is viewed does not provide a public viewing opportunity (i.e., private view), it is not considered a scenic vista in this analysis.

f. Light and Glare

Because the Baylands lacks substantial existing development, only minimal nighttime lighting is generated, which is limited to the areas around the existing industrial uses in the northern and southwestern portions of the site. This allows for substantial nighttime visibility across the Baylands, including views of the city lights of the East Bay, as seen from residences in the higher elevations of Brisbane. The existing lack of substantial nighttime lighting within the Baylands also allows views of the lights of San Francisco in the distance from vantage points to the south. Nighttime views of the Bay are available from higher-elevation neighborhoods in Central Brisbane and the southern portion of San Francisco due, in part, to the darkness at the Baylands. However, nighttime views from these neighborhoods are affected by existing residential and street lighting and existing reflected light emanating from Daly City, San Francisco, and US Highway 101.

The Baylands site currently contains mainly soil cover and vegetation. Existing buildings and structures within the Baylands are largely devoid of reflective surfaces. As a result, little daytime glare is generated within the Baylands.

4.5.3 REGULATORY CONTEXT FOR BAYLANDS DEVELOPMENT

a. Federal Laws, Plans, Programs, and Regulations

There are no federal laws, plans, programs, or regulations addressing aesthetic and visual resources issues that would affect Baylands development

b. State Laws, Plans, Programs, and Regulations

California Scenic Highway Program

In 1963, the California legislature established the state's Scenic Highway Program (Streets and Highways Code Sections 260–263) to preserve and protect scenic highway corridors from changes that would diminish the aesthetic value of lands adjacent to highways and "establish the State's responsibility for the protection and enhancement of California's natural scenic beauty by identifying those portions of the state highway system which, together with the adjacent scenic corridors, require special scenic conservation treatment." The program includes both "eligible" and "official" scenic highways.

State standards for official scenic highways require that prior to official designation, local governmental agencies have already taken necessary actions to protect the scenic appearance of the scenic corridor, which encompasses the land generally adjacent to the highway right-of-way. Such actions include but are not limited to (1) regulation of land use and intensity of development; (2) detailed land and site planning; (3) control of outdoor advertising; (4) careful attention to and control of earthmoving and landscaping; and (5) review of the design and appearance of structures and equipment.

The Baylands site is not within or visible from any existing eligible or official scenic highway. The nearest Scenic Highway is the Interstate 280 freeway (I-280), approximately four miles to the west. San Bruno Mountain and the adjacent ridgeline block views between the Baylands and the I-280 scenic corridor.

Open Space Easement Act of 1974

Cities and counties are permitted to use open space easements as a mechanism to preserve scenic resources if they have adopted open space plans, as provided by the Open Space Easement Act of 1974 (Government Code Sections 51070, 51097). The Act permits cities and counties to acquire or approve an open space easement through a variety of means, including use of public funds.

c. City of Brisbane Plans, Ordinances, and Regulations

General Plan

General Plan policies and programs that pertain to aesthetic and visual resources are identified below.

Chapter V: Land Use

Policy LU.2: Development south of the Bayshore Basin drainage channel shall maintain a low profile, permitting low- or mid-rise buildings, not to exceed 6 stories in height, in order to preserve the existing views of San Francisco and San Francisco Bay as seen from Central Brisbane, and to maximize the amount of landscape and open space or open area in this portion of the subarea.

Program LU.6a: When drafting development standards, consider preserving a sense of openness in the design of structures and sites and the access to sky and sunlight for both new construction and renovation projects.

Policy LU.8: Acknowledge the mountain setting and the proximity to the Bay as central factors in forming the physical character of the City.

Program LU.8.a: In making land use decisions, consider the proximity of open space on San Bruno Mountain and public views of and access to the Bay as issues to be addressed.

Policy LU.9: Preserve the ridgelines and hilltops in their open state.

Program LU.9.a: Prohibit land use changes that would result in development that would break the natural ridgeline.

Policy LU.11: In the context of respecting private property rights, make every effort to preserve and enhance public views of the Mountain and the Bay.

Program LU.11.a: Identify and map vistas and view corridors of community-wide value to be preserved and enhanced.

Policy LU.18: Locate and design commercial recreational facilities and services so as to encourage use by a broad spectrum of Brisbane residents and businesses.

Policy LU.20: The establishment of open areas within private developments shall be utilized as a means of preserving unique environmental features on the site or avoiding the appearance of excessive bulk or concentration of structures.

Policy LU.22: Retain sufficient open areas between structures to meet safety requirements, protect privacy and provide opportunities for landscaping.

Policy LU.28: Design new streets to be attractive and comfortable for pedestrians and bicyclists, and to safely accommodate vehicular traffic. Street configuration, landscape and signage should all be considered as they contribute to community character.

Program LU.28.a: Require landscaping along all major arterial streets.

Program LU.28.b: Construct landscaped medians where appropriate in arterial streets.

Program LU.28.c: Use drought resistant, water-conserving non-invasive plant materials that reflect local character.

Program LU.28.f: Prohibit new commercial billboard sites and seek to remove those currently in place.

Chapter XII: Policies and Programs by Subarea

Policy BL.3: Address visual impacts of any future development in the following manner:

Program BL.3.a: Environmental review for the required Specific Plan shall include a visual impact analysis which shall include an evaluation of the impacts of building heights, including the impact of the proposal on view corridors.

Program BL.3.b: The required Specific Plan shall address the heights of buildings and building groups to achieve the following:

i. diversity of height within the subarea;

ii. creative excellence in architectural and site design;

iii. visual acceptability when seen from above;

iv. a complementary relationship to the overall topography, especially the Lagoon, San Bruno Mountain and the Bay, and the entrance to Central Brisbane; and

v. open space and open areas.

Development south of the Bayshore Basin drainage channel shall maintain a low profile permitting low- or mid-rise buildings, not to exceed 6 stories in height, in order to preserve the existing views of San Francisco and San Francisco Bay as seen from Central Brisbane, and to maximize the amount of landscape and open space or open area in this portion of the subarea.

The following design approaches shall not be included in the required specific plan or any development proposal:

i. Buildings or building groups that block view corridors to the Bay or appear as "fortresses" or "walls" lining the Bayfront, the Lagoon, or any arterial street.

Policy BL.6: Establish a safety buffer around and provide for visual screening of the Tank Farm.

Policy BL.7: Give aesthetic consideration to views of San Bruno Mountain, the Bay and the Baylands development itself from Central Brisbane as well as views from the Baylands in the design of any development.

Policy BL.10: Develop design guidelines as a part of the Specific Plan for the Baylands. In the design guidelines, incorporate standards for roofs, emphasizing color, materials and screening, so as to consider views from above.

Policy BL.11: Retain and enhance landscaping along Bayshore Boulevard to buffer traffic noise and enhance the visual appearance of land uses fronting of the roadway.

Policy BL.16: Enhance the natural landform and biotic values of Icehouse Hill and preserve its ability to visually screen the Tank Farm.

Municipal Code

Chapter 17.42 Design Permit – Required Findings

Chapter 17.42 of the Brisbane Municipal Code requires a design permit to be obtained "for the construction of any new principal structure" that is not subject to requirements for objective development standards pursuant to the Housing Accountability Act (i.e., non-residential development). Prior to the issuance of a design permit, the Planning Commission must make the following findings enumerated in Municipal Code Section 17.42.040:

A. The proposed development is consistent with the general plan and any applicable specific plan.

B. The proposal's scale, form, and proportion are harmonious, and the materials and colors used complement the project.

C. The orientation and location of buildings, structures, open spaces and other features integrate well with each other and maintain a compatible relationship to adjacent development.

D. Proposed buildings and structures are designed and located to mitigate potential impacts to adjacent land uses.

E. The project design takes advantage of natural heating and cooling opportunities through building placement, landscaping and building design to the extent practicable, given site constraints, to promote sustainable development and to address long term affordability.

F. For hillside development, the proposal respects the topography of the site and is designed to minimize its visual impact. Significant public views of San Francisco Bay, the Brisbane Lagoon and San Bruno Mountain State and County Park are preserved.

G. The site plan minimizes the effects of traffic on abutting streets through careful layout of the site with respect to location, dimensions of vehicular and pedestrian entrances and exit drives, and through the provision of adequate off-street parking. There is an adequate circulation pattern within the boundaries of the development. Parking facilities are adequately surfaced, landscaped and lit.

H. The proposal encourages alternatives to travel by automobile where appropriate, through the provision of facilities for pedestrians and bicycles, public transit stops and access to other means of transportation.

I. The site provides open areas and landscaping to complement the buildings and structures. Landscaping is also used to separate and screen service and storage areas, break up expanses of paved area and define areas for usability and privacy. Landscaping is generally water conserving and is appropriate to the location. Attention is given to habitat protection and wildland fire hazard as appropriate.

J. The proposal takes reasonable measures to protect against external and internal noise.

K. Consideration has been given to avoiding off-site glare from lighting and reflective building materials.

L. Attention is given to the screening of utility structures, mechanical equipment, trash containers and rooftop equipment.

M. Signage is appropriate in location, scale, type and color, and is effective in enhancing the design concept of the site.

N. Provisions have been made to meet the needs of employees for outdoor space.

Chapter 17.45, Housing Development Permits

Municipal Code Chapter 17.45 requires issuance of a housing development permit "for the construction of any new principal structure that meets the definition of a housing development or a streamlined housing development project …" Section 17.45.030 provide objective development standards for:

- Site design
- Roof design
- Materials
- Window Design
- Stepbacks

- Massing and articulation
- Parking Design and Location
- Accessory Elements
- Additional objective standards, including but not limited to development regulation, parking standards in Chapter 17.34, and signage standards in Chapter 17.36.

Chapter 15.70, Water Conservation in Landscaping

Chapter 15.70 of the Brisbane Municipal Code requires Baylands landscaping to be designed for water efficiency. Two options are provided for site-specific developments to demonstrate that the landscape meets the City's water efficiency goals, consistent with the State's Model Water Conservation in Landscaping Ordinance, including:

1. **Prescriptive Compliance Option.** The prescriptive compliance option includes specific landscape area limitations for moderate to high water use plants along with other site preparation compliance measures.
2. **Water Budget Calculation Option.** Chapter 15.70 provides for preparation of a water budget calculation for proposed landscaping using the City's water efficient landscape worksheet. Water budget calculations, if prepared, are required to adhere to water budget parameters that are consistent with the State's Model Water Conservation in Landscaping Ordinance.

Chapter 15.88, Brisbane Dark Sky Ordinance

In November 2023, the Brisbane City Council adopted Municipal Code Chapter 15.88 to establish quantitative standards to reduce nighttime lighting impacts while providing the lighting necessary to ensure community safety and security. The requirements of Chapter 15.88 focus on the following key strategies:

- **Sitewide illumination limits that vary by zoning district:** Chapter 15.88 sets standards to limit the total illumination generated by all exterior lighting on a given property.

  Because Chapter 15.88 does not establish specific property illumination standards for development within the Baylands,[120] this EIR establishes specific standards in Threshold AES-4 to analyze impacts to the community's dark night sky that have been derived from the illumination limits set forth in Chapter 15.88.

  - Maximum permitted illumination for residential zones and uses are based on lumens per square foot of developed lot area (roughly equivalent to lot coverage).

[120] All other provisions of Municipal Code Chapter 15.88 apply to Baylands development.

  - Maximum permitted illumination within commercial and open space uses is based on lumens per square foot of hardscape (i.e., driveways, parking lots, patios). The maximum permitted illumination of open space areas per square foot of hardscape area is ten percent of that allowed within commercial zones.

- **Shielding:** All outdoor light fixtures are required to be fully shielded, that is, physically covering the light source so that light is only emitted downward, except low-intensity string lights, seasonal lighting, and lighting of a US or state flag.
- **Light trespass:** The light source (i.e., bulb) cannot be visible off-site of the property. Low-intensity string lights, seasonal lighting, and lighting of a US or state flag are exempt from light trespass standards.
- **Color temperature:** The "correlated color temperature" of outdoor lighting, except seasonal or other exempted lighting, shall be 3000 Kelvin or less, which is a "warmer" yellow light as opposed to "cooler" blue light hues that mimic daylight.
- **Curfews and other lighting controls:** Most outdoor lighting is required to go off after 10:00 p.m. or close of business, whichever is later. Lighting that is activated by motion sensor which extinguishes ten minutes after activation and lighting at building entrances, parking areas and driveways (residential), or driveway egress points (commercial) is not subject to curfew requirements. Commercial uses are required to utilize automated control systems such as motion sensors, timers and/or photocells that are programmable and have battery backup.

  Chapter 15.88 also exempts or establishes limited requirements over certain lighting types:

  - Low-intensity landscape lighting, indoor lighting, combustible fuel lighting when used temporarily in occupied areas, fire alarm notification devices, and any form of lighting regulated by authorities other than the City (e.g., school districts, federal agencies such as the Coast Guard).
  - Lighting of addresses, temporary emergency or construction lighting, and temporary lighting not subject to city permitting are exempt from specific standards but are required to be deployed to comply with Chapter 15.88 standards to the greatest practical extent.
  - Seasonal/holiday lighting is exempt from shielding requirements between September 15 and January 31 but still subject to curfew requirements. Brisbane Stars are not considered as seasonal/holiday lighting and are exempt from most regulations but are subject to curfew requirements.
  - Streetlights are not subject to curfew requirements. The lumen output of each streetlight shall be the lowest reasonable to meet safety standards but in no case exceed 10,000 lumens.

- Lighting for recreational and athletic fields is required to meet appropriate Illuminating Engineering Society standards, must extinguish by 8:00 p.m. except when being used for active play, and include timers to prevent lights being left on accidentally.

The provisions of Chapter 15.88 do not apply to construction activities.

4.5.4 RELEVANT SPECIFIC PLAN PROVISIONS

The Baylands Specific Plan includes the following provisions that address measures to avoid or minimize aesthetic and visual resource impacts.

a. Architectural Design Guidelines

Baylands Specific Chapter 3 provides design guidelines for each building type, including guidelines for:

- Building modulation and articulation
- Roof design
  - Roofline modulation and variety
  - Rooftop terraces and shade structures
- Façade design
  - Fenestration
  - Building entries
  - Materials
- Parking and access
- Signage design
  - Tenant signs
  - Commercial building identification signs
- Sustainability strategies supporting zero carbon buildings

In addition to design guidelines, the Specific Plan also contains the following provisions:

- "To avoid a continuous massing wall and blockage of views to the Bay, a minimum (70-foot) building separation[121] is required for the Multi-Family High building type. Height flexibility and massing also prevent blockage of views." (Applies to the Roundhouse District.)
- "These buildings also vary in height, massing and separation, ensuring there is no continuous wall along the tracks that may potentially obstruct views of the Bay from neighborhoods to the west." (Applies to the Bayshore District.)
- "To preserve views to the San Francisco Bay, any development within 350 feet west of US Highway 101 shall be limited to a height of 80 feet based on the grading plan included in the proposed Brisbane Baylands Infrastructure Plan." (Applies to the Campus East District.)

b. Nighttime Lighting

Baylands Specific Plan Section 3.8 requires Baylands development to comply with the following lighting design standards.

- Limit light spill across the property lines, such that illumination at the property line of any use within the Specific Plan area that is attributable to the subject property does not exceed 0.1 foot-candles on business properties and 0.05 foot-candles on residential properties and open space areas. On-site lighting of site-specific development within the Specific Plan area is required to prevent direct-beam illumination from leaving the site.
- Street lighting shall be comprised of shorter, LED, pedestrian-scaled fixtures, rather than tall cobra head fixtures, and focus the light downward onto the pedestrian through zone.
- Off-street pedestrian walkways and trails shall have bollard-type lighting to ensure visibility and safety for pedestrians, cyclists, and others.
- Laser source lights and searchlights, and any other high-intensity light for outdoor advertising or entertainment used to attract attention to commercial activities or community events, shall be prohibited.
- Light fixtures that produce a warm light and focus the light downward onto the pedestrian zone shall be selected.
- Landscape lighting shall be unobtrusive and shielded to prevent glare such as bollard-type fixture or ground-mounted up-lights for trees.

[121] In addition to the required 70-foot "building to building separation between towers" required for Multi-Family High buildings, the Specific Plan requires a 40-foot building-to-building separation for Multi-Family Mid buildings and 30 feet for Multi-Family Low, Townhome, and Duplex/Single Family buildings. Required building-to-building separation requirements for commercial buildings include 70 feet for TOD Commercial, with no requirements for separating other commercial building types.

- Entry monuments shall be lighted with low-level lights with fixtures concealed to highlight the names, maps, etc.
- All parking lots, recreational areas, walkways, and trail lighting shall have no light emitted above 90 degrees.
- Specific Plan lighting shall be designed to control light energy and ensure that exterior lighting is directed downward and away from adjacent streets and buildings in a manner designed to minimize off-site light spillage.
- Preserve Brisbane's existing dark sky views through light pollution reduction measures, including compliance with CALGreen light reduction standards, and compliance with one or more of the following measures:
    (i) Use of exterior light fixtures that prevent light trespass, and direct light downwards instead of up to the sky and avoid use of blue light.
    (ii) When interior or exterior lights must be left on at night, the operator of the buildings shall examine and adopt alternatives to bright, all-night, floor-wide lighting, which may include:
    (iii) Installing motion-sensitive lighting.
    (iv) Using desk lamps and task lighting.
    (v) Reprogramming timers.
    (vi) Use of lower-intensity lighting

The Specific Plan also provides the following standards for lighting within habitat areas:

- Site lighting within habitat areas shall be used minimally and appropriately to reduce the impact on the ecological environment, and deployed as needed for accessibility, safety, and security.
- Near wetland habitat areas, street lighting shall be provided only at intersections.
- Low intensity streetlamps and low elevation lighting poles shall be used.
- Internal silvering of the globe or external opaque reflectors shall be provided to direct light away from preserved wetland or open water habitats.
- Private sources of illumination around homes shall also be directed and/or shaded to minimize glare into these habitats.

The following examples of treatments to address the potential of bird strikes within the Baylands are provided in the Specific Plan:

- Use of low profile, low intensity lighting directed downward.
- Use of shielded fixtures for outdoor lighting.

c. Glare

Specific Plan provision addressing glare are described below.

- Section 3.8.1 includes the following requirements:
    - Landscape lighting shall be unobtrusive and shielded to prevent glare such as bollard-type fixture or ground-mounted up-lights for trees.
    - Private sources of illumination around homes shall also be directed and/or shaded to minimize glare into these habitats.
- Multi-family High and Multi-family Mid building façades are not permitted to exceed a 60/40 window to wall ratio.

4.5.5 SIGNIFICANCE CRITERIA

The following criteria were used to determine the significance of aesthetic resources impacts.

Threshold AES-1 **The Baylands Specific Plan would cause a significant impact if public views of identified scenic resources (San Bruno Mountain and adjacent ridgelines, San Francisco Bay, and the Brisbane Lagoon), including those within a state scenic highway, would be substantially or completely blocked.**

Threshold AES-2 **The Baylands Specific Plan would cause a significant impact if scenic resources, including those within a state scenic highway, were to be substantially removed or altered.**

Threshold AES-3 **The Baylands Specific Plan would cause a significant impact if it would not be consistent with the visual quality related policies and programs set forth in the Brisbane General Plan and Municipal Code, thereby impeding attainment of a complementary visual relationship between Baylands development and:**

- **Existing and planned development surrounding the Baylands,**
- **The area's overall topography;**
- **Brisbane Lagoon;**
- **San Bruno Mountain;**
- **San Francisco Bay; or**
- **Entrances to Central Brisbane.**

Threshold AES-4 **The Baylands Specific Plan would cause a significant impact if new sources of light created by Baylands development would adversely affect light-sensitive land uses or nighttime views by:**

- **Permitting light sources to direct night lighting beyond the ground surface onto windows of residential or hotel buildings within or outside of the Baylands;**
- **Causing light trespass from a site-specific development project onto residential, commercial, hotel, or open space areas exceeding either:**
  - **0.1 foot-candles on business properties or 0.05 foot-candles on residential properties and open space areas outside of the site-specific development area; or**
  - **0.01 foot-candles as measured 10 feet beyond the boundaries of the site-specific development project;**
- **Causing a safety hazard by directing light into the view of motorists; or**
- **Reducing nighttime views of either distant lights (e.g., across the Bay or in San Francisco) or of stars in a dark night sky by permitting:**
  - **Any exterior lighting emitted either directly or indirectly from a fixture above a horizontal plane from the bottom of the lamp;**
  - **Any unshielded or partially shielded fixture;**
  - **Any exterior lighting with a correlated color temperature greater than 3,000 Kelvin that is not otherwise exempted by the provisions of Municipal Code Chapter 15.88;**
  - **More than 1.75 lumens per square foot of developed lot area within a residential parcel;**
  - **More than 3.5 lumens per square foot within commercial, amenities, public facilities, and sustainable infrastructure areas; or**
  - **More than 0.35 lumens per square foot of trail or hardscape area within a park or open space area.**

Threshold AES-5 **The Baylands Specific Plan would cause a significant impact if new sources of glare created by Baylands development would adversely affect views in the area by placing reflective building materials on buildings, signage, or thematic elements so as to produce glare that would create a visual hazard or annoyance for a prolonged period of time.**

4.5.6 PROJECT IMPACTS AND MITIGATION MEASURES

a. Impact AES-1: Public Views of Identified Scenic Resources

Methodology for Determining Significance

Visual simulations were undertaken to illustrate changes to public views of scenic vistas that would result from the Baylands Specific Plan.[122] These visual simulations encompass the maximum amount of development permitted by the Specific Plan and its development regulations. These visual simulations were used to assess the potential for proposed Baylands development to block public views of identified scenic resources (San Bruno Mountain and the adjacent ridgeline, San Francisco Bay, and the Brisbane Lagoon), or result in visual degradation of a scenic vista as viewed from public locations that would be discernible across the Baylands from the representative public viewpoints in Brisbane and San Francisco. Should the Specific Plan substantially or completely block views of San Bruno Mountain and its adjacent ridgelines, or views of San Francisco Bay and the Brisbane Lagoon from public vantage points, a substantial adverse effect on a scenic vista (i.e., significant impact) would result.

Establishing the Viewpoints

The analysis of changes to public views of scenic resources is accompanied by a series of photographs and visual simulations for representative public viewpoints from, within, and surrounding the Baylands (see **Figure 4.5-2**). The selected representative viewpoints include those that were previously analyzed in the Program EIR leading to the adoption of GP-1-18. A total of eighteen (18) viewpoints are analyzed, including viewpoints from:

- Brisbane outside the Baylands;
- San Francisco;
- Daly City; and
- Within the Baylands.

Overall, the viewpoints identified in **Figure 4.5-2** represent a reasonable range of public viewpoints and provide for comparison of the visual effects of the proposed Specific Plan with existing conditions. As such, the photographs and visual simulations for these viewpoints

[122] As noted in Section 4.5.2b, above, neither the Specific Plan area nor off-site infrastructure are within or visible from any existing eligible or official scenic highway. The nearest Scenic Highway is the Interstate 280 freeway (I-280), approximately 4 miles to the west. San Bruno Mountain and the adjacent ridgeline block views between the Baylands and the I-280 scenic corridor. Therefore, the analysis of Threshold AES-1 addresses only scenic vistas outside of an eligible or official scenic highway.

provide a reasonable basis for evaluating the effects of proposed Baylands Specific Plan development on scenic vistas.

Building the 3-D Conceptual Models

To evaluate the impacts of the Baylands development on existing scenic vistas, geo-referenced site photographs from the viewpoints described above were taken with a 35-millimeter (mm) lens at 50-mm focal length. A digital three-dimensional model of the Baylands and surrounding area was constructed, incorporating the proposed grading plan provided in the draft Infrastructure Plan (Draft EIR Appendix A.3), using SketchUp™, a three-dimensional modeling program. The model of the Baylands and the surrounding area was used as a base for the conceptual model of proposed Baylands development, which were placed in the Baylands and surroundings model using geo-referenced locations per Google Earth™.

As permitted by state law, the Baylands Specific Plan does not identify the precise location, height, setbacks, and massing and shape of each on-site building. Instead, the Specific Plan sets forth the land use, zoning, development regulations, and design guidelines to which future site-specific development projects must adhere. These regulations provide for numerous possible variations of specific building massing throughout the Baylands. As a result, the three-dimensional model was constructed to represent a reasonable demonstration of worst-case potential for view obstruction of scenic vistas given applicable development requirements, such as total amount of allowable building area, allowable building heights, setbacks, and floor area ratios (FARs).

The model presents the result of applying assumptions for typical building widths, FARs, and floor level heights, combined with the maximum heights for buildings in any given land use district given the total number of dwelling units and amount of non-residential building square footage permitted within the Baylands.

The tallest proposed buildings with the greatest potential to intrude into scenic vistas from public viewpoints were modeled at their maximum permitted height. Other buildings were modeled with minimum permitted setbacks and building separations to maximize bulk and the potential to block views through the Baylands. The resulting model thus reflects the maximum number of dwelling units and commercial square footage permitted for the Baylands Specific Plan area arranged so as to provide a conservative analysis illustrating maximum impacts. Because Impact AES-1 analyzes effects on scenic vistas, the Baylands development model illustrates the maximum extent to which views of scenic vistas would be blocked rather than individual building shapes, architectural styles, articulation, setbacks, fenestration (windows), or cladding materials. Similarly, while development of open space areas and parks as proposed in the Specific Plan would change the appearance and character of the site, the models do not reflect those visual changes as they would not affect scenic vistas.

Building the Visual Simulations

The three-dimensional model was used in conjunction with Google Earth™ and site photos to create visual simulations of proposed Specific Plan development from the selected viewpoints used to analyze visual impacts in the Program EIR previously prepared for the Baylands along with additional new viewpoints. The visual simulations illustrate changes to the existing setting that would occur as a result of Specific Plan development. Simulations were not created to show interim changes in visual character, such as site preparation and grading activities during construction and phased development over time, because such changes would not impair the visibility of existing scenic vistas.

Impacts Associated with Off-Site Project Components

Lands associated with the Bayshore Mobility Plan, relocated Fire Station No. 81, conversion of the existing Bayshore School to an elementary school, and off-site infrastructure improvements would not involve construction of facilities that could adversely affect public views of San Bruno Mountain and its adjacent ridgelines, San Francisco Bay, or the Brisbane Lagoon. The relocated fire station would be no taller than the existing two-story building at the relocation site and no new structures are planned at the existing fire station site. No new structures are proposed at the existing Bayshore School, nor would the height of any existing structure be increased. Improvements at the Martin Substation would be no taller than existing facilities. Off-site improvements would involve utility line trenching that would not affect scenic vistas.

Determination of Significance

Scenic vistas that could be adversely affected by Baylands development include public views of San Bruno Mountain and its adjacent ridgelines, as well as public views of San Francisco Bay and the Brisbane Lagoon. Thus, should the Specific Plan substantially or completely block views of San Bruno Mountain and its adjacent ridgelines or views of San Francisco Bay or Brisbane Lagoon from public vantage points, significant impact would result.

Impact Assessment

Construction Impacts

Construction activities would involve grading and landform alteration, including removal of vegetation in areas to be graded, extraction and temporary stockpiling of soils, demolition of existing structures, storage of construction equipment and building materials, and construction of buildings and infrastructure. Construction activities, including staging of construction equipment and storage of construction materials, would be visible from much of the upper elevations of Central Brisbane, as well as to travelers along the US 101 freeway and Bayshore Boulevard. While these activities would be visible from several public viewing locations, they would be short term and except for building construction,[123] would not be of a sufficient height or scale as to block or otherwise damage scenic vistas.

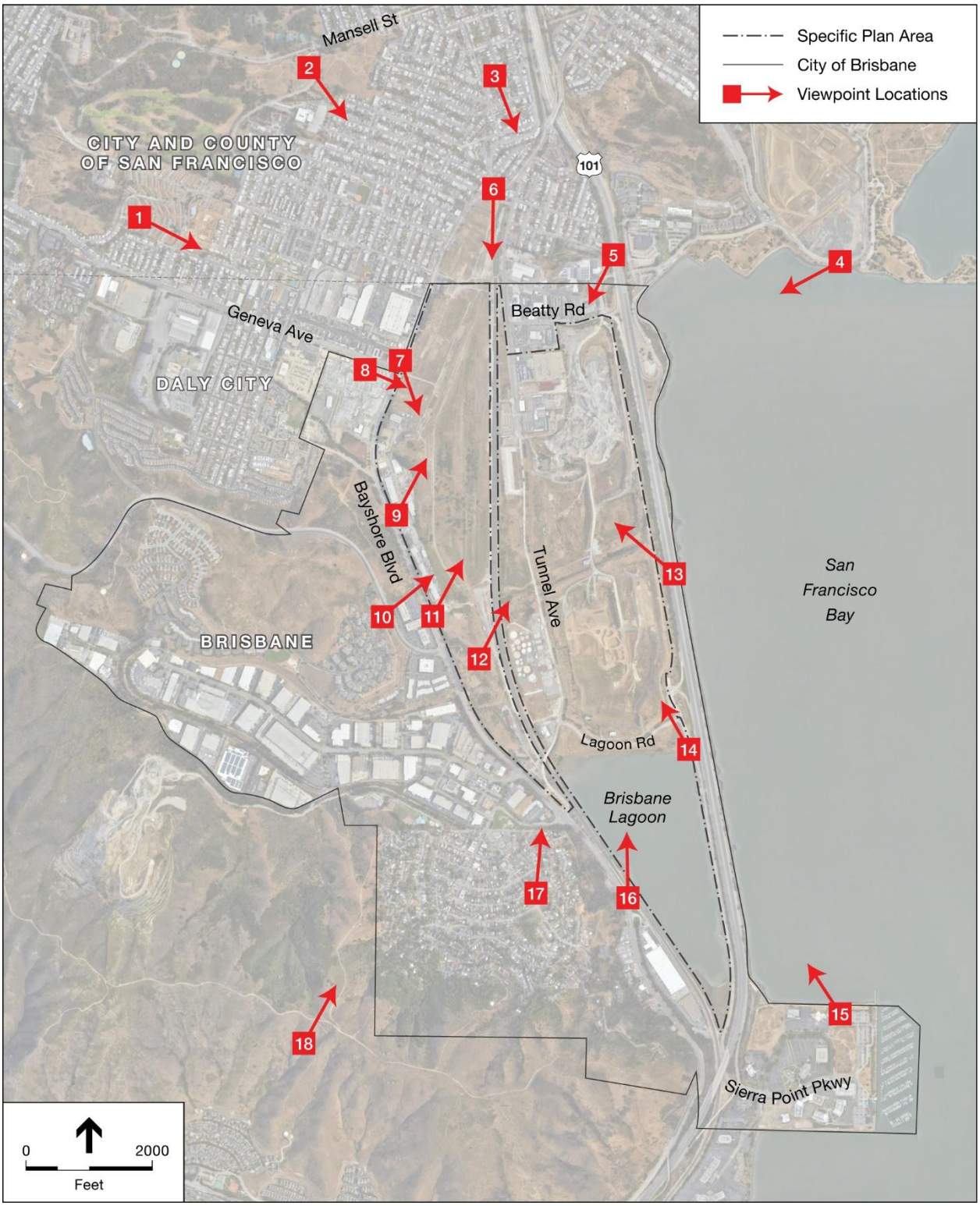
Long-Term Post-Construction Impacts

Table 4.5-2 compares existing views from 18 vista points with visual simulation of 2025 Specific Plan project development. As demonstrated in these visual simulations, Baylands development would obstruct some views of San Francisco Bay and San Bruno Mountain when viewed from lower elevations. In addition, from ground level and lower elevations, buildings within the Baylands would appear as a solid mass. Note, however, that the actual architectural design of Baylands development would provide for substantially greater variation in building shapes, façade colors and textures, and roof lines than what is possible to show with visual simulations.

As illustrated in Viewpoint 1, the proposed towers that would be 20+ stories in height along the west side of the Caltrain right-of-way partially block views of the Bay, even though the Specific Plan adheres to Program EIR Mitigation Measure 4.A-1a. This measure requires development within 350 feet of the eastern boundary of the Baylands (US Highway 101) be designed to avoid blockage of views of the Bay shoreline by limiting the height of buildings within 350 feet of the freeway to 80 feet in height.

[123] The potential for building construction to obstruct views of identified scenic features is addressed as a long-term post-construction impact since its impact would not cease with completion of construction activities.

Figure 4.5-2: Location of Viewpoints for Visual Simulations



SOURCE: Metis Environmental Group, 2022

Table 4.5-2a: Visual Simulations of Specific Plan Development: Viewpoint 1

Viewpoint 1: Blythedale Avenue at Brookdale Avenue in San Francisco's Sunnydale neighborhood, facing east



Existing View

Higher elevations in San Francisco's Sunnydale neighborhood have partial views of the Bay from public locations.



Visual Simulation of Specific Plan Development

Buildings that are 20+ stories in height along the west side of the Caltrain right-of-way and a mid-rise building in the northwestern portion of the Baylands would partially obscure the view of San Francisco Bay and the East Bay hills, although portions of the Bay and most of the hills beyond the Bay would remain visible from this location.

Table 4.5-2b: Visual Simulations of Specific Plan Development: Viewpoint 2

Viewpoint 2: Overlook Point at John McLaren Park, facing southeast



Existing View

The overlook point at John McLaren Park provides an uninterrupted view of the Bay, Brisbane Lagoon, and San Bruno Mountain (right).



Visual Simulation of Specific Plan Development

Views would be altered by buildings 20+ stories in height along the west side of the Caltrain right-of-way in the foreground of views of the Bay. Views of the Bay, Brisbane Lagoon, and San Bruno Mountain would largely be preserved.

Table 4.5-2c: Visual Simulations of Specific Plan Development: Viewpoint 3

Viewpoint 3: Goettingen Street at Wilde Avenue in Visitacion Valley, facing south



Existing View

This higher elevation in Visitacion Valley allows views of the Bay (left) and the San Bruno Mountain ridge (right).



Visual Simulation of Specific Plan Development

Baylands development would not impede views of the Bay or San Bruno Mountain from this viewpoint, but would be seen as a solid mass of moderate-height buildings. Taller Baylands buildings west of the Caltrain tracks would be visible at the far right, where they would partially obscure views of the lower portion of San Bruno Mountain.

Table 4.5-2d: Visual Simulations of Specific Plan Development: Viewpoint 4

Viewpoint 4: Candlestick Point State Recreation Area, facing southwest



Existing View

Scenic vista from the Candlestick Point State Recreation Area toward the Baylands north of Visitacion Creek (left) include the Bay (foreground) and San Bruno Mountain (background).



Visual Simulation of Specific Plan Development

Baylands buildings that would be 20+ stories in height along the Caltrain right-of-way would partially block views of San Bruno Mountain, while views of the main ridgeline would remain.

Table 4.5-2e: Visual Simulations of Specific Plan Development: Viewpoint 5

Viewpoint 5: US 101 freeway southbound view entering San Mateo County and the City of Brisbane



Existing View

Tall trees along the edge of southbound lanes block views to the east; however, a break in the existing windrow near the county line allows partial views of San Bruno Mountain.



Visual Simulation of Specific Plan Development

Development within the Campus East District parallel to the freeway would be visible from the southbound US 101 freeway. While new buildings would obscure much of the existing view of the toe of San Bruno Mountain, views of the ridgeline would remain.

Table 4.5-2f: Visual Simulations of Specific Plan Development: Viewpoint 6

Viewpoint 6: Bayshore Boulevard at San Bruno Avenue in San Francisco, facing south



Existing View

A largely unrestricted view of San Bruno Mountain is available at the Bayshore Boulevard – San Bruno Avenue intersection, with intersection traffic controls and trees in the foreground.



Visual Simulation of Specific Plan Development

Three- to 4-story buildings in the foreground would retain views of San Bruno Mountain's main ridgeline that would be blocked by taller residential and commercial towers adjacent to the Bayshore Caltrain Station (left).

Table 4.5-2g: Visual Simulations of Specific Plan Development: Viewpoint 7

Viewpoint 7: Bayshore Boulevard north of Geneva Avenue, looking southeast



Existing View

Existing vegetation and intersection traffic controls are visible at the Bayshore Boulevard – Geneva Avenue intersection in the foreground of view of San Bruno Mountain ridgeline.



Visual Simulation of Specific Plan Development

Closely spaced 3- to 4-story residential buildings southeast of Geneva Avenue would appear as a solid mass and block a large portion of this view of San Bruno Mountain.

Table 4.5-2h: Visual Simulations of Specific Plan Development: Viewpoint 8

Viewpoint 8: Geneva Avenue at Talbert Street, facing east



Existing View

The area's existing flat terrain does not provide for views of the Bay from Geneva Avenue at Bayshore Boulevard.



Visual Simulation of Specific Plan Development

Views along the western approach to the Geneva Avenue bridge over the Caltrain right-of-way in the foreground would be framed by 3- to 4-story residential buildings in the foreground with towers 20+ stories in height adjacent to the west side of the Caltrain right-of-way, appearing as a solid mass of buildings that obscure part of the horizon.

Table 4.5-2i: Visual Simulations of Specific Plan Development: Viewpoint 9

Viewpoint 9: Bayshore Boulevard at Industrial Way, facing northeast



Existing View

Looking across Bayshore Boulevard at the existing Industrial Way. The historic brick Roundhouse is partially visible at right (left of the light brown building) in middle-ground and Bayview Hill is visible in background.



Visual Simulation of Specific Plan Development

Closely spaced 3- to 4-story residential buildings present a solid mass of development that would obscure most of the existing view. The existing industrial use in the right foreground is not owned by the Specific Plan applicant and is therefore shown as it exists, illustrating visual contrast.

Table 4.5-2j: Visual Simulations of Specific Plan Development: Viewpoint 10

Viewpoint 10: Mission Blue Drive off Guadalupe Canyon Parkway (Northeast Ridge), facing east



Existing View

Scenic views of the Bay are available over the top of existing development in the Brisbane Technology Park, with Candlestick Point, the Hunters Point Gantry Crane, and the East Bay hills visible beyond.



Visual Simulation of Specific Plan Development

New buildings in the southern portion of the Baylands would not substantially impede views of the Bay or other visual landmarks, but would alter the middle-ground view from that of a largely undeveloped area to a continuation of existing mid-rise commercial development.

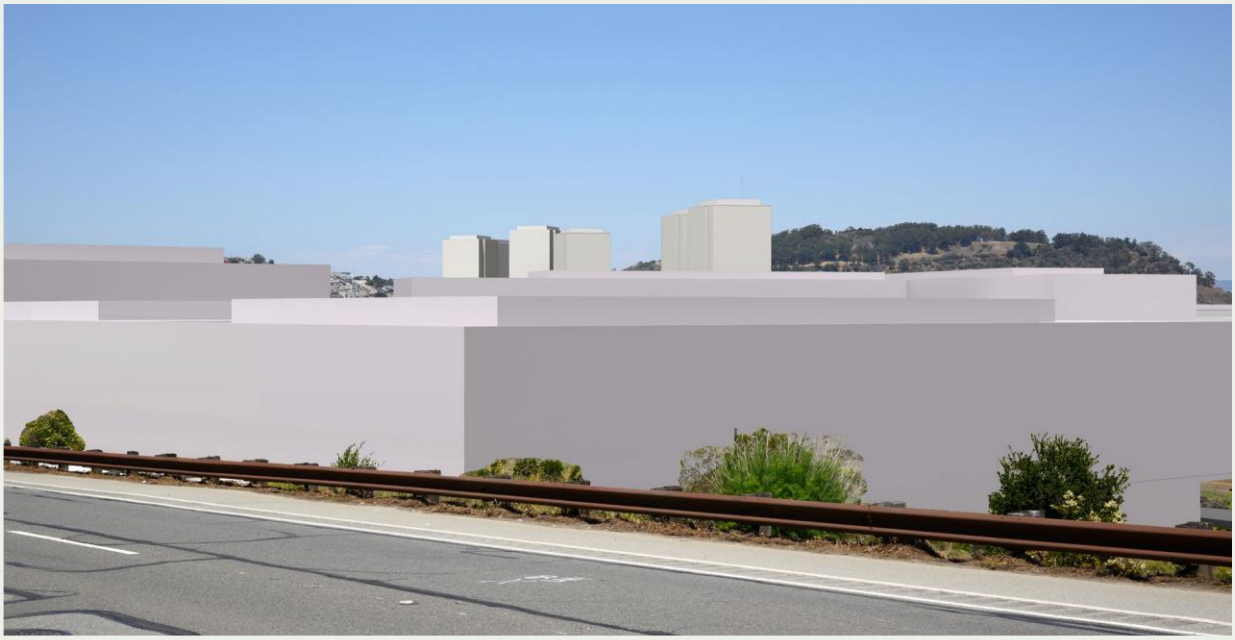
Table 4.5-2k: Visual Simulations of Specific Plan Development: Viewpoint 11

Viewpoint 11: Bayshore Boulevard near Guadalupe Canyon Parkway, facing northeast



Existing View

Views from Bayshore Boulevard north of Icehouse Hill are available across the former railyards in the western portion of the Baylands site, with existing commercial and industrial development and Bayview Hill beyond.



Visual Simulation of Specific Plan Development

Low- to mid-rise office buildings and towers 20+ stories in height would eliminate most of the existing view, rendering only the topmost portion of Bayview Hill still visible.

Table 4.5-2l: Visual Simulations of Specific Plan Development: Viewpoint 12

Viewpoint 12: Icehouse Hill, facing northeast



Existing View

Views from the top of Icehouse Hill include the Bay, Candlestick Point, Bayview Hill, and high-rise buildings in San Francisco's financial district.

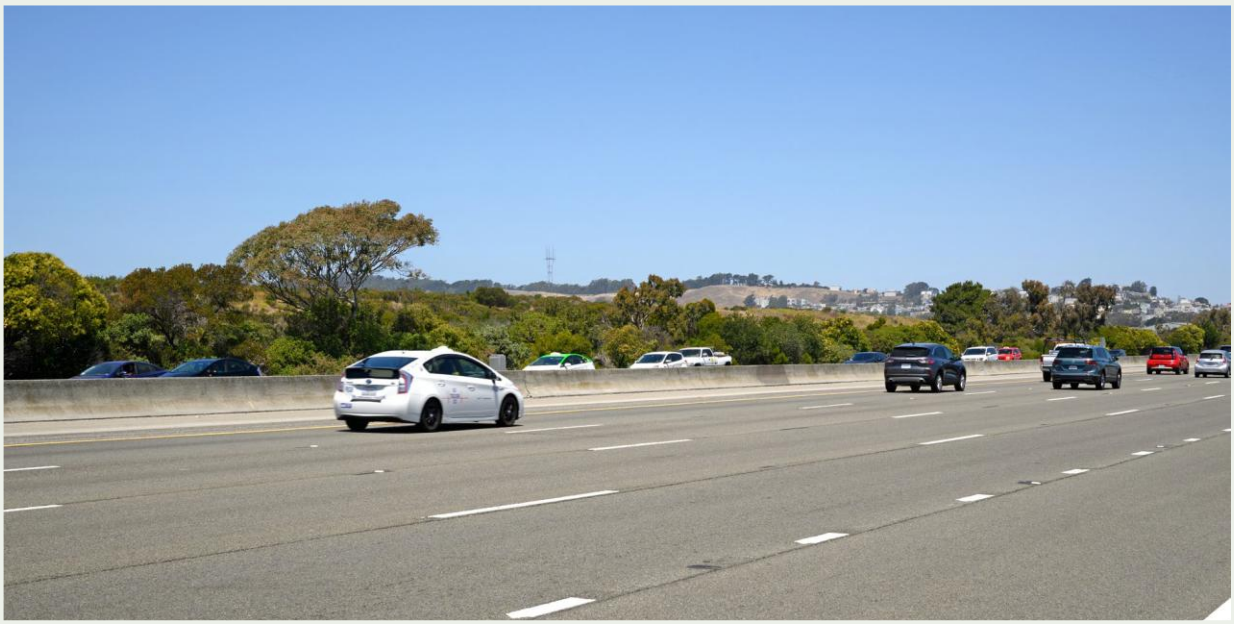


Visual Simulation of Specific Plan Development

New buildings would block a limited portion of the view of the Bay shoreline. Other views would be maintained. The towers 20+ stories in height along the west side of the Caltrain right-of-way would block a portion of long-distance views of downtown San Francisco financial district high-rise buildings.

Table 4.5-2m: Visual Simulations of Specific Plan Development: Viewpoint 13

Viewpoint 13: Northbound US 101 freeway south of Visitacion Creek, facing northwest



Existing View

Views from the US Highway 101 northbound lanes are limited to glimpses of San Bruno Mountain behind trees along the freeway right-of-way with Sutro Tower visible in the background.



Visual Simulation of Specific Plan Development

New buildings would block existing middle-ground and distant views. However, existing trees would remain in the foreground and would partially screen the new buildings.

Table 4.5-2n: Visual Simulations of Specific Plan Development: Viewpoint 14

Viewpoint 14: Northbound US 101 freeway north of the Brisbane Lagoon, facing northwest



Existing View

Views from the US Highway 101 northbound lanes at this location are of the former landfill within the Baylands, with McLaren Park and Sutro Tower visible in the background.



Visual Simulation of Specific Plan Development

New buildings would obscure portions of the existing distant views, but McLaren Park and Sutro Tower would remain partially visible in the distance. Adjacent to the freeway, the 55-acre solar field would be visible. Beyond the solar field, in the center of the photo, towers 20+ stories in height adjacent to the Caltrain right-of-way would be visible.

Table 4.5-2o: Visual Simulations of Specific Plan Development: Viewpoint 15

Viewpoint 15: North shore of Sierra Point facing northwest



Existing View

Scenic vistas from the north shore of Sierra Point near the Brisbane Marina include the Bay (foreground), San Bruno Mountain (to the left), and distant views of San Francisco hillsides (center and right), including Mount Davidson (left), McLaren Park (center) with Sutro Tower behind, and the toe of Bayview Hill (right).



Visual Simulation of Specific Plan Development

Taller buildings within the Baylands would partially block views of distant hillside landforms. However, views of San Bruno Mountain would not be impeded. Sutro Tower, parts of McLaren Park, and the toe of Bayview Hill would remain visible.

Table 4.5-2p: Visual Simulations of Specific Plan Development: Viewpoint 16

Viewpoint 16: Bayshore Boulevard north of Van Waters and Rodgers Road, facing north



Existing View

Views are available across the Brisbane Lagoon to the Baylands, with Bayview Hill (right) beyond. McLaren Park and development in Visitacion Valley are visible beneath the railroad signals.



Visual Simulation of Specific Plan Development

Taller Baylands buildings would partially obscure views of McLaren Park, although Bayview Hill would remain visible.

Table 4.5-2q: Visual Simulations of Specific Plan Development: Viewpoint 17

Viewpoint 17: Thomas Hill in Brisbane, facing north



Existing View

Elevated viewpoint provides a scenic vista of the Brisbane Lagoon, San Francisco Bay, Bayview Hill, and Candlestick Point.



Visual Simulation of Specific Plan Development

Low- to mid-rise development and the 55-acre solar farm within the eastern portion of the Baylands would be clearly visible. Scenic views of the Brisbane Lagoon, San Francisco Bay, Bayview Park, and Candlestick Point would remain intact.

Table 4.5-2r: Visual Simulations of Specific Plan Development: Viewpoint 18

Viewpoint 18: San Bruno Mountain Ridge Trail, facing northeast



Existing View

Scenic vista from the San Bruno Mountain Ridge Trail includes views of the Brisbane Lagoon, San Francisco Bay, Bayview Hill, Candlestick Point, and downtown San Francisco.



Visual Simulation of Specific Plan Development

Due to the elevation of this viewpoint, Baylands development would not obscure scenic views from the San Bruno Mountain Ridge Trail.

Significance Conclusion for Impact AES-1

As demonstrated by the visual simulations in **Table 4.5-2**, proposed Baylands development would impede scenic views of San Francisco Bay, Brisbane Lagoon, and San Bruno Mountain from several public viewpoints (Viewpoints 1, 4, 6, 7, 11, 15), primarily due to:

- The concentration of development within the western portion of the site causing Baylands development to appear as a solid mass of buildings; and
- Placement of taller buildings (20+ stories, 270 feet high) along the Caltrain right-of-way.

A significant impact would therefore result.

Program EIR Mitigation Measures

MM AES-1a: Maintain Views of Scenic Resources (Program EIR Mitigation Measure 4.A-1a). Development within 350 feet of the eastern boundary of the Baylands Specific Plan area (US Highway 101) shall be designed to avoid blockage of views of the Bay shoreline by limiting the height of buildings within 350 feet of US Highway 101 to a maximum height of 80 feet based on the grading plan included in the Brisbane Baylands Infrastructure Plan (January 2023).

Significance Conclusion with Implementation of Program EIR Mitigation Measures

As demonstrated in **Table 4.5-2**, implementation of Program EIR Mitigation Measure 4.A-1a and the Specific Plan's development standards would not effectively preserve scenic views of the Bay or San Bruno Mountain as seen from Central Brisbane, the Sunnydale neighborhood, US Highway 101, or the Candlestick Point State Recreational Area shoreline.

Thus, a significant impact would remain, and additional mitigation would be required.

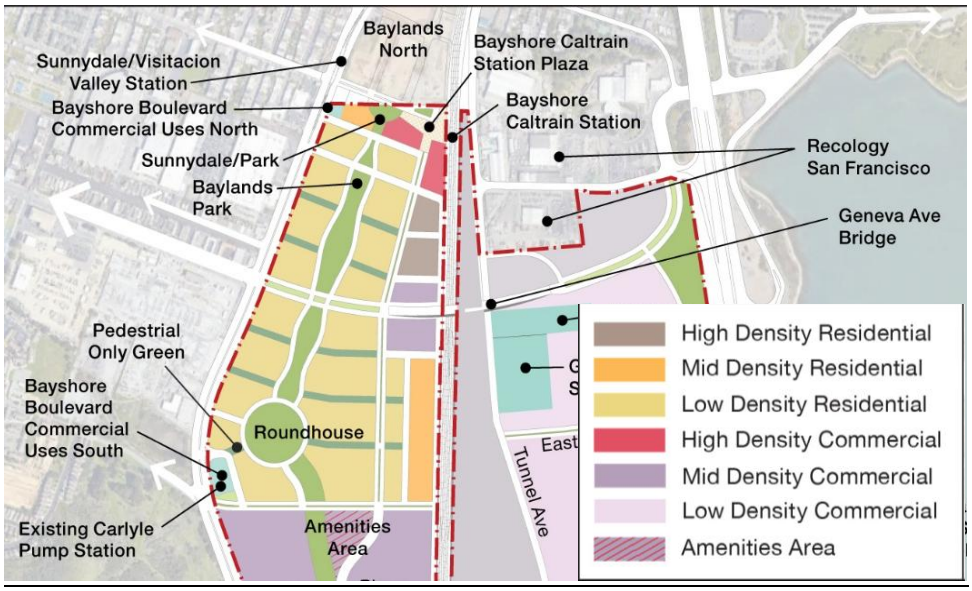
Additional Mitigation Measures

MM AES-1b: Additional Provisions to Maintain Views of Scenic Resources. To further reduce loss of scenic views of San Francisco Bay and San Bruno Mountain, ~~building heights within the area west of the Caltrain right-of-way shall be limited to no more than:~~ a maximum of four tower buildings in excess of 150 feet and no greater than 270 feet in height (two commercial and two residential) shall be permitted.

- ~~12 stories (150 feet) for office buildings~~
- ~~8 stories (100 feet) for residential buildings~~

The Specific Plan shall be revised within the area west of the Caltrain right-of-way, north of Main Street to include four high-density blocks (two commercial and two residential) within which tower buildings no greater in height than 270 feet may be permitted as illustrated in Modified Specific Plan Figure 2.1, below.

Specific Plan Figure 2.1 Modified per Revised Mitigation Measure MM AES-1b



MM AES-1c: ~~**View Corridors**~~**Building Separation and Façade Breaks**.~~ The Specific Plan shall be revised to incorporate objective development standards intended to break up views of solid masses of buildings from Bayshore Boulevard and the US 101 freeway by providing for view corridors either through the Baylands or to internal open space areas/open areas such that the public would be able to view scenic resources including the San Bruno Mountain and its adjacent ridgelines, San Francisco Bay, the Brisbane Lagoon, and internal open space/open areas in between Baylands buildings.~~ Building breaks shall be provided along the Bayshore Boulevard and Sierra Point Parkway frontages to limit perceived building length along high visibility corridors. These building breaks shall provide a minimum 30-foot-wide break between building masses for residential and commercial buildings along these frontages. Building breaks shall be provided at grade and be open to sky. A minimum of 50 percent of the building break area shall be landscaped. Building breaks may be provided via street, passageway, setback, or courtyard with a minimum depth of 40 feet.

These building breaks shall be provided such that:

- Continuous residential frontage, including individual and multiple abutting buildings, shall be a maximum of 250 feet in length.

- Commercial buildings shall be a maximum of 300 feet in length.
- Tower buildings shall be oriented so as to not place the longer façade of the building parallel to the Caltrain right-of-way.
- Vertical façade breaks shall be provided on all tower façades greater than 60 feet in length. Specific Plan design standards shall also provide for changes in building façade materials, colors, textures, and/or patterns.

Tower buildings shall be limited to one per High Density Residential and High Density Commercial block. Towers (residential floor plates that are more than 110 feet from ground level and commercial floor plates that are more than 150 feet from ground level) shall be subject to the following standards:

- Minimum setback increased from 3 feet for floor plated below 110 feet in height from ground level to 25 feet except along Frontage Road
- Maximum average floor plate size of 12,000 square feet
- Maximum diagonal dimension of 190 feet as measured along the longest dimension possible between two points on the floorplate

Significance Conclusion with Implementation of all Mitigation Measures

Mitigation Measures MM AES-1a and MM AES-1b would reduce the significant impacts resulting from the towers 20+ stories in height proposed along the west side of the Caltrain right-of-way, which partially block views of the Bay and San Bruno Mountain. Mitigation Measures MM AES-1a and MM AES-1b would limit development within the western portion of the Baylands so office buildings would not exceed 12 stories (or 150 feet), and residential buildings would not exceed 8 stories (or 100 feet) for residential buildings such that public views of scenic resources would not be substantially blocked. Similarly, the significant visual impacts associated with the proposed buildings up to 100 feet in height east of the Caltrain right-of-way would be reduced with implementation of Mitigation Measure MM AES-1a, as development would be limited to 6 stories (80 feet) in height. The reduction in building height would allow the public to view more of San Bruno Mountain and its ridgelines, the San Francisco Bay, and the Brisbane Lagoon. Further, Mitigation Measure MM AES-1c would reduce significant impacts by providing view corridors for the public to view scenic resources between Baylands buildings. These view corridors would break up solid masses of buildings such that public views of scenic resources would not be substantially or completely blocked. Thus, Mitigation Measures MM AES-1a through MM AES-1c would reduce Impact AES-1 to less than significant.

b. Impact AES-2: Physical Effects on Scenic Resources

Methodology for Determining Significance

Methodology for Evaluating Effects on Scenic Resources, including those within a Scenic Highway Corridor

The significance determination related to damaging scenic resources within a state scenic highway first considers whether the Specific Plan area lies within the viewshed of a state scenic highway. If this condition is not met, no impact would occur related to a state scenic highway.

If the Specific Plan area lies within the viewshed of a state scenic highway, analysis would be undertaken to determine the potential for development permitted by the proposed Specific Plan to remove or alter scenic resources within the scenic highway corridor.

Methodology for Evaluating Effects on Scenic Resources Outside of a Scenic Highway Corridor

The significance determination related to damaging scenic resources outside of a state scenic highway involves evaluating whether the Baylands Specific Plan would have adverse effects on specific scenic resources. Threshold AES-2 expands the scenic resources inventory to be evaluated beyond those located within a state scenic highway corridor to the specific scenic resources that could be affected by Baylands development. These include:

- On-site Scenic Resources
    - Icehouse Hill
    - Visitacion Creek
    - Brisbane Lagoon
- Off-site Scenic Resources
    - San Bruno Mountain and its adjacent ridgelines
    - San Francisco Bay

Development that would be permitted by the Baylands Specific Plan is evaluated for its potential to substantially remove or alter the visual quality of these resources. Development would be considered to be a significant impact if it would degrade the natural character of Icehouse Hill, Visitacion Creek, or the Brisbane Lagoon as the result of:

- Creation of large, manufactured slopes on Icehouse Hill due to grading for trails or for adjacent land uses and infrastructure;
- Channelization of Visitacion Creek with a concrete structure; or

- Removal of natural vegetation or construction of substantial manufactured features along the edges of the Brisbane Lagoon.

Although the 2025 Specific Plan proposes a trails system on Icehouse Hill along with conceptual trail routing, no information is provided in the Specific Plan regarding trail width or other design features. For analysis purposes, it is reasonably assumed that trails on Icehouse Hill would be consistent with US Forest Service trail design guidelines.[124] Icehouse Hill trails are therefore assumed to have a minimum width of 36 inches with 60-inch-wide passing areas provided approximately every 1,000 feet along the trail.

Impacts Associated with Off-Site Project Components

Lands associated with the Bayshore Mobility Plan, relocated Fire Station No. 81, conversion of the existing Bayshore School to an elementary school, and off-site infrastructure improvements would occur outside of state scenic highways, and do not include any scenic resources other than trees, impacts to which are addressed in Impact AES-3.

Impact Assessment

Effects on Scenic Resources within a Scenic Highway Corridor

The nearest California Scenic Highway to the Baylands site is the Interstate 280 (I-280) freeway, approximately four miles to the west of the Specific Plan area. San Bruno Mountain and the adjacent ridgeline block views between the Baylands and the I-280 scenic corridor. Due to the lack of a designated (or eligible) scenic highway within or near the Baylands, development permitted by the proposed Specific Plan would not remove or damage scenic resources within a state scenic highway corridor.

Effects on Scenic Resources Outside of a Scenic Highway Corridor

The Baylands Specific Plan provides for both preservation of and improvements to existing scenic resources within the site, including Icehouse Hill, Brisbane Lagoon, and Visitacion Creek. The Visitacion Creek corridor, Icehouse Hill, and the edges of Brisbane Lagoon all would be improved, including restoration and enhancement of wetland and habitat areas as described in EIR Section 4.6, *Biological Resources*.

Construction of Manufactured Slopes on Icehouse Hill

Construction of trails on Icehouse Hill would require grading and construction of manufactured slopes, which would vary in size and visibility depending on their location in relation to public vantage points and the steepness of natural slopes along the trail route. Assuming 2:1

[124] US Forest Service Trails Accessibility Guidelines can be found at https://fs.usda.gov/t-d/pubs/htmlpubs/htm06232801/page25.htm.

(horizontal to vertical) cuts/fills, typical trail construction of a 3- to 5-foot-wide trail on Icehouse Hill would disturb up to a 9- to 15-foot-wide cross-section with manufactured (cut and fill) slopes up to 6 to 10 feet high.

The relocation of Mission Blue Nursery to the existing police shooting range will use existing access routes for roadway and utility access and not require construction of new of larger manufactured slopes on Icehouse Hill.

Channelization of Visitacion Creek with a Concrete Structure

Visitacion Creek is proposed to remain an open natural channel with restored and enhanced habitat areas. While trails are proposed along the margins of Visitacion Creek, large, manufactured slopes would not be required.

Removal of Natural Vegetation or Construction of Substantial Manmade Features along the Edges of the Lagoon

Lagoon Park, which is to be developed along the northern edge of the Brisbane Lagoon, will primarily consist of restored and enhanced habitat. Existing riprap is proposed to be filled in and vegetated with wetland vegetation. Biological resources analyses set forth in Section 4.6 demonstrated that proposed park improvements would be compatible with biological values and functions of the lagoon's northern edge.

Proposed trails and recreational features within the park would also be visually compatible with the area's visual character.

San Francisco Bay Trail Extension

The Baylands Specific Plan also provides for extending the San Francisco Bay Trail through the Baylands site, which would preserve a 100-foot shoreline band areas around the Visitacion Creek corridor and Brisbane Lagoon, as well as public access, including visual access, to the Brisbane Lagoon. Views of San Francisco Bay from the trail, which are currently blocked by existing vegetation within the freeway right-of-way would remain blocked.

As shown in **Figure 3-5**, the Specific Plan permits some new development east of Sierra Point Parkway and the San Francisco Bay Trail extension near Geneva Avenue in the northern portion of the site. Such development could obstruct views of the Bay from the trail depending on its location and height. However, preservation of habitat areas within the Visitacion Creek corridor and along the north shore of Brisbane Lagoon would include the 100-foot shoreline band areas around these features, which are under the jurisdiction of the Bay Conservation and Development Commission to ensure public access—including visual access—to the Bay.

Significance Conclusion for Impact AES-2

Within a State Scenic Highway Corridor

Due to the lack of a designated (or eligible) scenic highway within of adjacent to the Baylands, development permitted by the proposed Specific Plan would not substantially remove or alter scenic resources within a state scenic highway corridor.

Outside of a State Scenic Highway Corridor

The Baylands Specific Plan provides for preservation and improvement of existing scenic resources within Visitacion Creek and along the north shore of Brisbane Lagoon, including restoration of wetland and habitat areas that would retain a natural rather than manufactured character. In addition, by extending the San Francisco Bay Trail through the site, the Baylands Specific Plan would have a beneficial effect by preserving 100-foot shoreline band areas around the Visitacion Creek corridor and Brisbane Lagoon and providing public access—including visual access—to the lagoon.

Habitat areas on Icehouse Hill would be preserved, and the relocated Mission Blue Nursery would be located on an existing flat pad and use an existing access road.

A significant impact would nevertheless result since trails on Icehouse Hill would require manufactured slopes typically up to 6 to 10 feet high, with higher, more visually prominent slopes constructed where trails would traverse along steep hillsides. Newly constructed trails on Icehouse Hill would thus be seen as long "ribbons" of disturbed bare ground.

Program EIR Mitigation Measures

The Program EIR did not propose any mitigation measures addressing the aesthetic impacts of trail construction on Icehouse Hill.

Significance Conclusion with Implementation of Program EIR Mitigation Measures

By requiring trail design to minimize loss of native plants, Program EIR Biological Resources Mitigation Measures 4.C-1a through 4.C-1c (included in this EIR as Mitigation Measures MM BIO-1a through MM BIO-1c) would reduce but not necessarily avoid the visual impacts of trail construction.

Thus, a significant impact would result.

Additional Mitigation Measures

MM AES-2: Design and Restoration of Manufactured Slopes on Icehouse Hill. Trails on Icehouse Hill shall be limited to the minimum necessary width for safe two-way travel (typically 36 inches wide with 60-inch-wide passing areas approximately

every 1,000 feet along the trail). Manufactured slopes constructed for trails on Icehouse Hill shall be revegetated with non-irrigated, non-invasive vegetation that is visually and biologically compatible with adjacent existing natural vegetation. Such revegetation shall use plant material of varying heights to create an undulating appearance.

Where manufactured slopes over 10 feet in height cannot be avoided, slopes shall be contoured or undulated to produce a naturalized appearance, unless such slope design would conflict with geotechnical recommendations approved by the City Engineer and/or require higher slopes that would disturb sensitive vegetation.

Significance Conclusion with Implementation of All Mitigation Measures

The combination of Mitigation Measure MM AES-2 and Mitigation Measures MM BIO-1a through MM BIO-1c would ensure that Icehouse Hill trails would minimize site grading, removal of vegetation, and resulting visual impacts.

Impact AES-2 would be less than significant with mitigation incorporated.

c. Impact AES-3: Consistency with Visual Quality Policies and Programs

Methodology for Determining Significance

Because it is recognized that any one person's assessment of whether the visual changes that would result from Specific Plan development would be comparatively better (substantially improved) or worse (substantially degraded) than existing conditions, the following evaluation focuses on consistency with adopted visual quality policies and programs. This analysis recognizes that well-designed and well-landscaped urban development that is *compatible* in scale and appearance with its surroundings need not be *the same as* but can be substantially *different* than the surrounding visual area's visual character.

This analysis considers consistency with the City's visual quality-related policies and programs including findings required for approval of a design permit by the Brisbane Planning Commission. As such, analysis considers the City's General Plan policies that pertain to aesthetic and visual resources, including preservation of the ridgelines and hilltops in their open state, enhancement of the natural landform, and biotic values of Icehouse Hill. The analysis also considers:

- Municipal Code Chapter 17.42 provides design permit requirements for non-residential development, including preservation of significant public views of San Francisco Bay, Brisbane Lagoon, and San Bruno Mountain, as well as integration of the orientation and location of buildings and structures to maintain a compatible relationship to adjacent development.

- Municipal Code Chapter 17.45, which provides objective development standards for residential development.

As required by Program EIR Mitigation Measure 4.A-3, the Specific Plan provides design guidelines for each building type proposed within the Baylands. These guidelines were reviewed to determine the extent to which Baylands development would facilitate or impede attainment of a complementary visual relationship between Baylands development in order to be consistent with the applicable policies and regulations governing scenic quality set forth in the Brisbane General Plan and Municipal Code Chapter 17.42 and 17.45.

Off-site, above-ground improvements including the Bayshore Mobility Plan, relocation of Fire Station No. 81, and conversion of the existing Bayshore School to an elementary school would be constructed in compliance with local and state requirements. Improvements at the Martin Substation and other above-ground electrical improvements would be constructed per applicable PG&E and state design requirements. Trenching and installation of off-site utility lines would not be subject to aesthetic design standards.

A significant impact would result if Baylands development would:

- Propose building heights, massing, or other features that would conflict in character with existing or planned development surrounding the Baylands and thereby preclude consistency of site-specific development projects with the required findings for a design permit set forth in Municipal Code Section 17.42.040;
- Substantially alter the topography of Icehouse Hill;
- Eliminate or substantially reduce views of San Francisco Bay or the Brisbane Lagoon from public viewpoints;
- Eliminate or substantially reduce views of San Bruno Mountain from public viewpoints; or
- Present a cluttered or unkept appearance at entrances to the City and Central Brisbane, including interchanges on the US 101 freeway, Geneva Avenue at Bayshore Boulevard, and Tunnel Avenue between Bayshore Boulevard and its intersection with Lagoon Road.

Impact Assessment

As described in Chapter 3, *Project Description*, Specific Plan buildout would result in new buildings and open space amenities throughout the Baylands, as summarized below.

- Baylands features that would be replaced
    - Older industrial uses along Industrial Way;
    - Temporary and interim uses along Tunnel Avenue;

    - Existing and previous uses of the former landfill area, such as recycling operations and associated earth-moving and soil processing equipment; temporary soil piles, and holding ponds.

- Baylands features that would replace the above features
    - Substantial new residential and commercial buildings ranging in permitted height from 40 to over 250 feet;
    - An extensive roadway system with street trees;
    - Parks and landscaping;
    - Habitat restoration within Visitacion Creek and along the northern shore of the Brisbane Lagoon; and
    - Large-scale infrastructure and public facilities, including a water recycling facility, water storage tank, 55-acre solar generation field, electrical switching substation, utility-scale battery storage, combined middle/high school, and a new fire station.

Baylands development would provide physical and visual access to expanded habitat and conservation areas, and new parks and recreational facilities, along with restoration and adaptive reuse of the derelict historic Roundhouse structure. To the extent that their functionality would not be compromised, rooftop solar and battery storage as well as other roof-mounted and HVAC equipment would be screened pursuant to existing City design permit and code requirements, including General Plan Policies LU.2, LU.9, and BL.10; General Plan Programs LU.6a. LU.8a, and BL.3b; and Municipal Code Section 17.42 and 17.45.

Overall, Specific Plan development would urbanize the Baylands with substantially greater development intensity and buildings that are taller, larger, and more abundant and closely spaced than existing buildings within Central Brisbane and nearby portions of Daly City and San Francisco. The towers 20+ stories in height proposed along the Caltrain rail line from the Bayshore Station south would be the tallest buildings within Brisbane and adjacent developed areas in Daly City and San Francisco, would be visually incongruous with the scale and character of development adjacent to the Baylands, and would block views of the Bay and San Bruno Mountain from public viewpoints. Other buildings within the Baylands would present a solid mass from public viewpoints, blocking public views of the Bay and open space/open areas within the site. Therefore, the Specific Plan would conflict in character with development surrounding the Baylands and not maintain a compatible visual relationship to adjacent development.

Baylands development would not alter the topography of Icehouse Hill. As documented in **Table 4.5-2**, Baylands development would impede scenic views of San Francisco Bay, Brisbane Lagoon, and San Bruno Mountain from several public viewpoints due to the concentration of development within the western portion of the site and the number of taller (20+ story) buildings proposed along the Caltrain right-of-way. **Table 4.5-2** also documents several

instances where Baylands development would present a solid mass of buildings, particularly at the intersection of Geneva Avenue and Bayshore Boulevard, that would be partially broken up by the architectural differences of individual buildings.

In addition, the location of large-scale infrastructure facilities, such as the electrical switching substation, within the Sustainable Infrastructure area north of the Geneva Avenue extension could present a cluttered or unkept appearance at the entrance to the Baylands and City of Brisbane from the US 101 freeway interchange in the northeastern portion of the Baylands if not appropriately designed and screened.

Consistency of Specific Plan design guidelines with the required findings for a non-residential design permit, enumerated in Municipal Code Section 17.42.040 is presented in **Table 4.5-3**.

Table 4.5-3: Specific Plan Consistency with Required Findings for Non-Residential Design Permits

Required Findings for a Design Permit	Specific Plan Consistency Analysis
A. The proposed development is consistent with the general plan and any applicable specific plan.	All Baylands development would be required to be consistent with the Brisbane General Plan and Baylands Specific Plan.
B. The proposal's scale, form, and proportion are harmonious, and the materials and colors used complement the project.	As discussed in Impact AES-1, the Specific Plan would permit development that appears as a solid mass from adjacent public streets and blocks views of San Bruno Mountain and San Francisco Bay.
C. The orientation and location of buildings, structures, open spaces and other features integrate well with each other and maintain a compatible relationship to adjacent development.	As discussed in Impact AES-1, the Specific Plan would permit development that appears as a solid mass from adjacent public streets and blocks views of San Bruno Mountain and San Francisco Bay.
D. Proposed buildings and structures are designed and located to mitigate potential impacts to adjacent land uses.	Specific Plan development would be subject to the mitigation measures set forth in this EIR, which mitigate impacts to adjacent land uses.
E. The project design takes advantage of natural heating and cooling opportunities through building placement, landscaping and building design to the extent practicable, given site constraints, to promote sustainable development and to address long term affordability.	The Specific Plan includes a sustainability program that requires all-electric buildings supplied from 100 percent renewable sources. Baylands development would produce a substantial portion of its electrical demand on-site, provide 30 MW of distributed battery storage, and reduce energy consumption.
F. For hillside development, the proposal respects the topography of the site and is designed to minimize its visual impact. Significant public views of San Francisco Bay, the Brisbane Lagoon and San Bruno Mountain State and County Park are preserved.[125]	The trail system to be constructed on Icehouse Hill would require manufactured slopes along most of its length but would not alter the hill's overall topography. As documented in Impact AES-1, the Specific Plan would permit development that blocks views of San Bruno Mountain and San Francisco Bay.
G. The site plan minimizes the effects of traffic on abutting streets through careful layout of the site with respect to location, dimensions of vehicular and pedestrian entrances and exit drives, and through the provision of adequate off-street parking. There is an adequate circulation pattern within the boundaries of the	As discussed in Impacts TRA-3 and TRA-4, the 4-lane cross-section proposed for the Geneva Avenue bridge presents safety concerns at intersections on the west side of the bridge for motorists, bicyclists, and pedestrians. In addition,

[125] The requirement for findings related to public views or San Francisco Bay, the Brisbane Lagoon, and San Bruno Mountain State and County Park is not limited to hillside development projects.

Required Findings for a Design Permit	Specific Plan Consistency Analysis
development. Parking facilities are adequately surfaced, landscaped and lit.	Roundhouse Circle, as well as East and West Park Boulevard would not meet City design standards.
H. The proposal encourages alternatives to travel by automobile where appropriate, through the provision of facilities for pedestrians and bicycles, public transit stops and access to other means of transportation.	The Specific Plan provides for extensive pedestrian and bicycle facilities, enhances access to the Caltrain Bayshore Station, and proposes a shuttle system throughout the site, connecting the Baylands to the Caltrain Station and other locations within Brisbane.
I. The site provides open areas and landscaping to complement the buildings and structures. Landscaping is also used to separate and screen service and storage areas, break up expanses of paved area and define areas for usability and privacy. Landscaping is generally water conserving and is appropriate to the location. Attention is given to habitat protection and wildland fire hazard as appropriate.	The Specific Plan proposes a 157-acre system of habitat restoration and enhancement, parks, trails, and recreational amenities. Landscape irrigation would exclusively use recycled water from an on-site water recycling facility.
J. The proposal takes reasonable measures to protect against external and internal noise.	The Baylands geologic setting and proposed intensity of development necessitates pier foundations for most buildings within the site.
K. Consideration has been given to avoiding off-site glare from lighting and reflective building materials.	As discussed in Impact AES-5, the Specific Plan requires placement of reflective materials on building roofs as an energy conservation measure. Additional sources of glare include above-ground infrastructure, public art installations, signage and thematic elements.
L. Attention is given to the screening of utility structures, mechanical equipment, trash containers and rooftop equipment.	Specific Plan design guidelines provide for screening of mechanical equipment, trash containers, and rooftop equipment. The Specific Plan does not, however, provide for screening of utility structures along the north side of Geneva Avenue east of Caltrain.
M. Signage is appropriate in location, scale, type and color, and is effective in enhancing the design concept of the site.	The Specific Plan provides guidelines for signage design.
N. Provisions have been made to meet the needs of employees for outdoor space.	The Specific Plan provides for parks and trails in proximity to commercial office uses. Design guidelines permit but do not require use of roof areas as outdoor space for employees.

As indicated in **Table 4.5-3**, the Baylands Specific Plan would permit development for which required finding for approval of a design permit could not be made. For example, the requirement for placement of reflective materials on roofs of many buildings would preclude approval of a design permit unless those reflective materials were removed.

Significance Conclusion for Impact AES-3

Specific Plan development would urbanize the Baylands with substantially greater development intensity that would be visually incongruous with the scale and character of adjacent developed areas in Daly City and San Francisco. Baylands buildings that would be taller, larger, more closely spaced, and include a row of towers 20+ stories in height along the Caltrain rail line that would be the tallest buildings within Brisbane and adjacent developed areas.

As documented in the discussion of Impact AES-1 and documented in **Table 4.5-2**, Baylands development would impede scenic views of San Francisco Bay, Brisbane Lagoon, and San Bruno Mountain from several public viewpoints and present a solid mass of buildings, particularly at the intersection of Geneva Avenue and Bayshore Boulevard. In the absence of specific screening requirements in the Specific Plan for facilities within the Sustainable Infrastructure area along the north side of Geneva Avenue, Specific Plan development could present a cluttered or unkept appearance at the entrance to the Baylands and City of Brisbane. Specific Plan design guidelines would permit development inconsistent with the standards of Municipal Code Section 17.42.040.

Thus, a significant impact would result.

Program EIR Mitigation Measures

Program EIR Mitigation Measures 4.A-1a (Maintain Views of Scenic Resources), 4.A-3 (Outdoor Lighting Sources), and 4.A-4b (Daytime Glare) have been carried forward from the Program EIR as Mitigation Measures MM AES-1a, MM AES-4a, and MM AES-5, respectively.

Significant Conclusion with Implementation of Program EIR Mitigation Measures

A significant impact would remain with implementation of Program EIR mitigation measures.

- Implementation of 2025 Specific Plan development standards and Program EIR Mitigation Measure 4.A-1a would not effectively preserve scenic views of the Bay or San Bruno Mountain as seen from public viewpoints.
- The analysis of Impact AES-4, below, concludes that Program EIR Mitigation Measure AES-4a would not be consistent with Brisbane's dark sky ordinance, Municipal Code Chapter 15.88.
- In addition, the analysis of Impact AES-5, below, determines even though Measure 4.A-4b would prohibit mirrored glass, daytime glare could result from metal surfaces on above-ground infrastructure, signage, outdoor public art installations, concave surfaces that concentrate reflective light, and reflective façade materials that slope back from the ground surface at less than a 90° angle that can reflect high-angle sunlight along the ground surface.

Additional Mitigation Measures

Mitigation Measure AES-1b limits building heights to reduce loss of scenic views of San Francisco Bay and San Bruno Mountain and thereby maintain views of scenic resources.

Mitigation Measure AES-1c requires provision of view corridors for the public to view scenic resources in between Baylands buildings.

MM AES-3: Visual screening of infrastructure along the north Side of Geneva Avenue. The design of infrastructure facilities and westbound right-of-way along Geneva Avenue between the US 101 freeway and the Geneva Avenue bridge shall be provided with a combination of berms, decorative walls, and landscaping to screen views of infrastructure facilities along the north side of the roadway in accordance with the required findings for a design permit set forth in Brisbane Municipal Code Chapter 17.42.

Significance Conclusion with Implementation of all Mitigation Measures

Mitigation Measures MM AES-1a through MM AES-1c, along with MM AES-3, would achieve consistency with visual quality-related policies and programs set forth in the Brisbane General Plan and Municipal Code, thereby attaining a complementary visual relationship between Baylands development and:

- Existing and planned development surrounding the Baylands;
- The area's overall topography;
- Brisbane Lagoon;
- San Bruno Mountain;
- San Francisco Bay; and
- Entrances to Central Brisbane.

This would be accomplished by reducing the height of the tallest buildings within the Baylands and providing view corridors for the public to view scenic resources and open space/open areas between buildings within the Baylands.

Mitigation Measure MM AES-3 would mitigate impacts related to a lack of screening of infrastructure facilities along the north side of Geneva Avenue by providing landscaping along this important roadway entry to the City, thereby attaining a complementary visual relationship between the Specific Plan and surrounding development as well as the area's overall topography.

Impact AES-3 would therefore be less than significant with mitigation incorporated.

d. Impact AES-4: Night Lighting

Methodology for Determining Significance

The evaluation of nighttime lighting focuses on changes in nighttime illumination levels that would result from the Specific Plan and the extent to which such new sources of light would adversely affect nighttime views or activities. Analysis considers adverse effects of scenic vistas

of stars and distant lights against a dark night sky, as well as new lighting sources, which can cause light trespass onto adjacent properties that interferes with nighttime activities including vision, sleep, privacy, and the biological functions of habitat areas. Thus, two types of nighttime lighting are analyzed: light trespass and sky glow.

Light Trespass

Analysis is undertaken to determine whether the Specific Plan would permit night lighting to exceed the performance standards set forth in the first three bullet points of Threshold AES-4. Such nighttime lighting would interfere with activities such as vision, sleep, privacy, and general enjoyment of the natural nighttime condition. This includes evaluating the extent to which the Baylands Specific Plan implements Program EIR Mitigation Measure 4.A-4a, which defined and quantified "light trespass." Impacts on biological resources that could result from night lighting are addressed in threshold BIO-1.

Sky Glow

The determination of significance related to sky glow follows guidelines derived from Municipal Code Chapter 15.88, Brisbane's dark sky ordinance and the "Outdoor Lighting - Municipal Ordinance Template" developed by DarkSky International (formerly known as the International Dark Sky Association). Thus, the impact analysis evaluates the Specific Plan's effect on the community's dark night sky using the following standards.[126]

- Residential parcels: 1.75 lumens per square foot of developed lot area;
- Commercial, amenities, public facilities, and sustainable infrastructure parcels: 3.5 lumens per square foot of hardscape;
- Parks and open space areas: 0.35 lumens per square foot of trail or hardscape area;
- No exterior lighting to be emitted either directly or indirectly from a fixture above a horizontal plane from the bottom of the lamp;
- All fixtures to be fully shielded; and
- All exterior lighting to have a correlated color temperature less than 3,000 Kelvin unless otherwise exempted by the provisions of Municipal Code Chapter 15.88.

[126] Municipal Code Section 15.88.040 E2 exempts "construction or emergency lighting provided such lighting is temporary, necessary, and is discontinued immediately upon completion of the construction work or termination of the emergency; provided, however, construction or emergency lighting shall be deployed to comply with the ordinance to the greatest practical extent." Permitted hours for construction activities are also regulated by Municipal Code Section 8.28.050, which limits construction hours to between 7:00 a.m. and 7:00 p.m. on weekdays and 9:00 a.m. and 7:00 p.m. on weekends and holidays.

Nighttime lighting that would exceed these standards or otherwise be inconsistent with the provisions of Brisbane Municipal Code Chapter 15.88 would constitute a significant impact for which mitigation would be required.

Safety Hazards for Motorists

Analysis is undertaken to determine whether the Specific Plan would permit light sources to be directed beyond the ground surface intended to be lighted onto area roadways or the US 101 freeway. Should nighttime lighting within the Baylands, other than streetlights, be directed onto area roadways or the US 101 freeway such that light trespass standards for residential use are exceeded, a significant impact would result.

Impact Assessment

Construction Impacts

Baylands grading and construction activities associated with on- and off-site improvements would be required to comply with Section 8.28.060 of the Brisbane Municipal Code, which limits construction hours to between 7:00 a.m. and 7:00 p.m. on weekdays and 9:00 a.m. and 7:00 p.m. on weekends and holidays. Construction of off-site infrastructure (e.g., recycled water lines within the City of South San Francisco) would be required to comply with the construction hours and other requirements of the jurisdiction within which construction would occur.

Section 8.28.060 of the Brisbane Municipal Code would limit construction to daytime hours during summer months. However, during winter and other non-summer months, construction activities could occur between dusk and 7:00 p.m., which would employ temporary lighting to illuminate construction activities. Maintenance of construction vehicles, including fueling, cleaning, and minor repairs, could also occur prior to or after the completion of construction activities throughout the year, which would involve temporary lighting to illuminate maintenance work areas.

Outdoor lighting sources such as floodlights, spotlights, and/or headlights associated with construction equipment and trucks hauling materials and equipment before or after the workday typically accompany nighttime construction activities. Increased nighttime lighting effects would occur intermittently throughout the duration of Baylands construction activities and would cease upon completion of Baylands development.

Section 15.88.040 E2 of the City's Dark Sky ordinance exempts "construction or emergency lighting provided such lighting is temporary, necessary, and is discontinued immediately upon completion of the construction work or termination of the emergency; provided, however, construction or emergency lighting shall be deployed to comply with the ordinance to the greatest practical extent." Thus, lighting for nighttime construction, when permitted, would be

required to be fully shielded with no exterior lighting emitted either directly or indirectly from a fixture above a horizontal plane from the bottom of the lamp.

Because construction lighting, while bright, is highly focused on the particular area undergoing work, nighttime light from construction light sources would be intrusive for adjacent light-sensitive uses but would not be anticipated to affect light-sensitive uses located farther away, nor would construction activities occur at a time that sky glow would adversely affect the area's dark night sky. The greatest construction light impacts would be experienced within the residential portions of the Baylands following initial occupancy of dwelling units that would have a direct line of sight to construction of adjacent residential and commercial uses and construction maintenance activities occurring after dark during non-summer months.

In addition, construction light sources located at grade, including safety lighting, emergency lighting, or temporary supplemental lighting used for construction maintenance within the Baylands, may cause spill light beyond the construction site boundary onto residences both outside and within the Baylands.

Long-Term Post-Construction Impacts

Light Trespass

Development permitted by the Specific Plan would create substantial new nighttime lighting, including street lighting; building illumination; security lighting; parking lot lighting; and landscape, park, and trail lighting, as well as light emanating from building interiors passing through windows.

Proposed residential uses within the northwestern portion of the Baylands would be considered sensitive with respect to nighttime lighting, as would be the Little Hollywood neighborhood and future residential development in the Baylands North project within San Francisco. Habitat areas within and adjacent to the Baylands would also be considered a sensitive use.

Nighttime lighting of commercial buildings, including accent lighting and light displays, would largely occur away from existing sensitive residential uses in Brisbane and San Francisco. Nighttime lighting of the relocated fire station would occur within an industrial area away from residential uses. However, some future residential development within the Baylands and the immediately adjacent portions of San Francisco would be subject to nighttime lighting associated with Baylands commercial and residential development, as well as park and trail uses. Area roadways and habitat areas, including Visitacion Creek, Lagoon Park, the Ecological Park, and the lower portions of Icehouse Hill would also be subject to potential light trespass.

Nighttime lighting of residential, recreational, and habitat areas within the Baylands would be subject to the provisions of Baylands Specific Plan Section 3.8, which explicitly incorporates Program EIR Mitigation Measure 4.A-4a. Thus, nighttime lighting would be directed

downward, direct beam lighting would not be directed onto windows of nearby residential and hotel uses, and light trespass onto nearby properties and habitat areas would not exceed the performance standards contained in Significance Threshold AES-4.

Nighttime lighting associated with the Bayshore Mobility Plan would consist of standard street lighting that would be directed onto the roadway. Nighttime lighting associated with the relocated fire station would occur within an industrial area that would not be occupied at night.

Sky Glow

While the Specific Plan includes standards for outdoor lighting to reduce sky glow, these standards would nevertheless permit Baylands nighttime lighting to exceed the standards of Brisbane's dark sky ordinance, Municipal Code Chapter 15.88, and emit light to be projected above the horizontal plane from the bottom of the lamp.

- The Specific Plan requirement that nighttime lighting not be emitted above a 90-degree angle applies only to parking lots, recreational areas, walkways, and trails. Because it does not include explicit standards or requirements for other types of lighting within the Specific Plan area, nighttime lighting within the Baylands would permit decorative uplighting of signage, buildings, and landscaping within site-specific developments, as well other light sources to be emitted either directly or indirectly from a fixture above a horizontal plane from the bottom of the lamp.[127]
- The Specific Plan includes a requirement for light fixtures to be selected that "produce a warm light" but does not provide an explicit standard. Thus, Baylands lighting could exceed the requirement of Municipal Section 15.88.060 D that the "correlated color temperature of all outdoor lighting shall be three thousand (3,000) Kelvin or less except for seasonal lighting."
- The Specific Plan requires compliance with mandatory CALGreen light reduction standards as well as at least one the following measures:
    (i) Use of exterior light fixtures that prevent light trespass, and direct light downwards instead of up to the sky and avoid use of blue light.
    (ii) When interior or exterior lights must be left on at night, the operator of the buildings shall examine and adopt alternatives to bright, all-night, floor-wide lighting, which may include:
        - Installing motion-sensitive lighting.

[127] The Specific Plan requires entry monuments to be lighted with low-level lights with concealed fixtures but does not limit the brightness of such signs or prohibit uplighting of monument signs. In addition, the Specific Plan requires light fixtures that "focus the light downward onto the pedestrian zone" to be selected but does not explicitly prohibit light emitted above 90 degrees except for lighting of parking lots, recreational areas, walkways, and trail lighting.

- Using desk lamps and task lighting.
- Reprogramming timers.
- Use of lower-intensity lighting.
- Internal silvering of the globe or external opaque reflectors shall be provided to direct light away from preserved wetland or open water habitats.
- Private sources of illumination around homes shall also be directed and/or shaded to minimize glare into these habitats.

Effects on Nocturnal Species

Light spillage from nighttime lighting of development within the Baylands into habitat areas would have a negative effect on nocturnal species.

Plants and animals are typically attuned to the 24-hour seasonal cycle of light and dark. Mating behaviors, sleep, and predation are all determined by the length of nighttime darkness. Introducing artificial nighttime lighting into habitat areas can disrupt these activities. Artificial nighttime lighting can disrupt an animal's movements. Owls and bats, for example, can lose the advantage of specialized night vision that enables them to hunt without being seen. Nighttime lighting favors other predators, as the nocturnal animals that are their prey lose the cover of darkness to hide. This issue is analyzed in Draft EIR Section 4.5, *Biological Resources*.

Significance Conclusion for Impact AES-4

Light Trespass

The Baylands Specific Plan would generate nighttime lighting over a broad area that is currently largely dark at night and would not exceed the performance standards set forth in Significance Threshold AES-4. Street lighting that would be installed along Bayshore Boulevard would meet standard City requirements. Nighttime lighting of the relocated fire station would occur within an industrial area that would not be occupied at night. Therefore, light trespass impacts would be less than significant.

Sky Glow

Because Specific Plan Section 3.8 prohibits some but not all sources from having light emitted above 90 degrees, nighttime lighting would be permitted to be projected above the horizontal plane from the bottom of the lamp, which would be inconsistent with Municipal Code Chapter 15.88 and contribute to sky glow. In addition, the Specific Plan does not provide any limitations on the amount of outdoor lighting and would therefore contribute to sky glow by permitting:

- More than 1.75 lumens per square foot of developed lot area within a residential parcel;

- More than 3.5 lumens per square foot of hardscape area within commercial, amenities, public facilities, and sustainable infrastructure parcels; and
- More than 0.35 lumens per square foot of trail or hardscape area within a park or open space area.

In addition, while the Specific Plan requires light fixtures that "produce a warm light," Baylands lighting could exceed the requirement of Municipal Section 15.88.060 D that the "correlated color temperature of all outdoor lighting shall be three thousand (3,000) Kelvin or less except for seasonal lighting."

Thus, sky glow impacts are significant.

Program EIR Mitigation Measures

MM AES-4a: Outdoor Lighting Standards (Program EIR Mitigation Measure 4.A-4a). All development within the Baylands site shall comply with the following lighting design standards in order to minimize Baylands development lighting.

- A master plan for street and parking lot lighting shall be approved by the City prior to final approval of design plans for roadways within the Brisbane portion of the Specific Plan area.
    - All streets within the Specific Plan area shall have uniform lighting standards with regard to style, colors, and materials in order to ensure consistency with design.
    - Parking lot lighting shall be of the same source of illumination as street lighting so as to ensure uniformity of night lighting color.
    - Due to their high energy efficiency, long life, and spectral characteristics, Narrow-Spectrum Amber LEDs shall be the preferred illumination source throughout the Brisbane portion of the Specific Plan area.
- A photometric analysis and lighting plan shall be prepared for each development project to demonstrate compliance with applicable nighttime lighting standards, requirements, and mitigation measures. The photometric analysis shall include an assessment of potential lighting impacts based on the height, location, light fixtures, direction, illumination intensity, and hours of operation. The lighting plan shall be submitted to the Community Development Department and City Engineer for final approval prior to approval of a building permit.

When reviewing illumination plans, the City will review the following factors to determine the level of illumination required.

- **Purpose:** The function and activities for the planned area;
- **Safety:** The level of comfort and security needed to be provided;
- **Aesthetics:** The overall appearance of proposed lighting with respect to the Baylands and surrounding community; and
- **Impacts:** The extent to which proposed lighting minimizes impacts on adjacent land uses, maintains the area's dark night sky, and conserves energy.

Significance Conclusion with Implementation of Program EIR Mitigation Measures

The Specific Plan incorporates the light trespass provisions of Program EIR Mitigation Measure 4.A-4a but omits requirements for lighting master plans and photometric analyses of site-specific development projects. While the Specific Plan and the Program EIR mitigation measure would reduce light trespass to a less than significant level, the total amount of permitted nighttime lighting within the Baylands would be permit some sources of nighttime lighting not to be directed downward, which could adversely affect the area's dark night sky. Thus, sky glow impacts would remain significant.

Additional Mitigation Measures

MM AES-4b: Sky Glow Prevention. Baylands development shall comply with the provisions of Brisbane Municipal Code Chapter 15.88 and the following additional requirements.

1. No site-specific development project within the Specific Plan area may be permitted to provide nighttime lighting that exceeds:
   a. 1.75 lumens per square foot of developed lot area within a residential parcel;
   b. 3.5 lumens per square foot of hardscape area within a commercial, amenities, public facility, or sustainable infrastructure parcel; or
   c. 0.35 lumens per square foot of trail or hardscape area within a park or open space area.
2. Luminaires emitting more than 1,000 lumens shall be fully shielded and emit no more than 5 percent of their total lumen output above 80 degrees from the bottom of the lamp.

3. The maximum luminous or illuminated surface area of any individual sign shall not exceed 100 square feet.
4. External illumination of monument and other signage shall be mounted above the sign and directed downward.

Significance Conclusion with Implementation of All Mitigation Measures

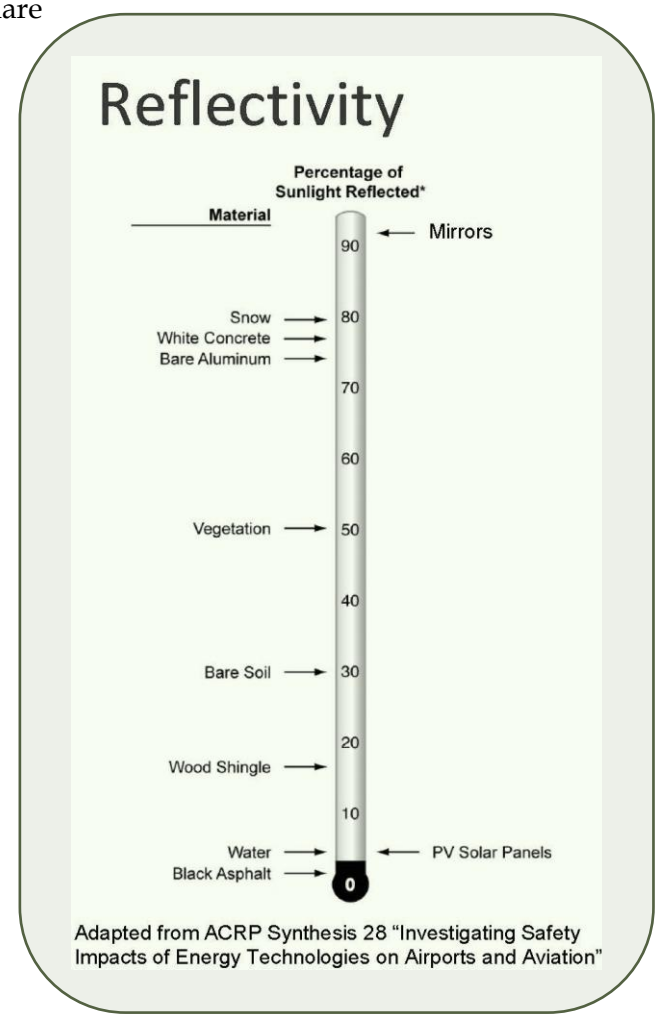
Mitigation Measure MM AES-4a requires that Baylands development comply with the dark night sky performance standards set forth in Threshold AES-4. Mitigation Measure MM AES-4b ensures compliance with Municipal Code Chapter 15.88, Dark Sky Ordinance, and additional requirements to reduce the adverse effects of nighttime lighting on the area's dark night sky. Together, these measures ensure compliance through a requirement for preparation and review of a photometric analysis and lighting plan for site-specific development projects prior to issuance of building permits.

Impacts would be reduced to less than significant with mitigation incorporated.

e. Impact AES-5: Daytime Glare

Methodology for Determining Significance

Daytime glare is caused by the reflection of sunlight or artificial light from highly polished surfaces, such as window glass or reflective materials, and, to a lesser degree, from broad expanses of light-colored surfaces. Daytime glare generation is common in urban areas and is typically associated with mid- to high-rise buildings with exterior façades largely or entirely made up of highly reflective glass or mirror-like materials from which the sun can reflect, particularly following sunrise and prior to sunset. Daytime glare can also be generated by metal and other reflective surfaces on above-ground infrastructure, signage, and public art installations. Concave surfaces have the potential to magnify sunlight, intensify glare, and create heat. Daytime glare generation is also related to sun angles, although glare resulting from reflected sunlight can occur regularly at certain times of the year. In some instances, reflected glare causes differential warming of adjacent uses.



The analysis of glare focuses on the extent to which the Baylands Specific Plan permits mid- to high-rise buildings, signage, or thematic elements with exterior façades largely or entirely consisting of highly reflective glass or mirror-like materials from which the sun could reflect light onto glare-sensitive uses (e.g., dwelling units, school classrooms, parks, plazas, trails, playgrounds, and major roadways and the US 101 freeway). The analysis also addresses the extent to which above-ground infrastructure would be constructed with highly reflective polished metal surfaces.

The analysis of construction impacts focuses on temporary construction impacts occurring during site grading, infrastructure installation, and building construction. Thus, impacts associated with long-term sources of glare such as building façades, signage, or thematic elements that incorporate substantial amounts of reflective building materials are evaluated as

part of long-term post-construction impacts, even though they would be first introduced to the Baylands during site construction.

To determine whether such impacts would occur, the analysis below evaluates the extent to which Specific Plan provisions would result in reflective surfaces on building façades and roofs, above-ground infrastructure, public art installations, and signage, and then determines whether reflected light from these surfaces (glare) would either (1) interfere with vision of sensitive users and thereby create a visual nuisance or hazard, or (2) result in differential warming of adjacent uses.

Impact Assessment

Construction Impacts

Daytime glare associated with construction activities would occur when reflective construction materials or equipment are positioned in highly visible locations where sunlight would be reflected. However, large, flat surfaces of reflective materials, like those needed to generate substantial glare, would not be associated with Baylands construction activities. Glare from construction activities would typically result from small reflective surfaces on construction equipment, such as window glass on earthmoving equipment, which move about the site through the workday. Moreover, glare produced by construction activities would be short term for individual construction activities. While various construction activities would be undertaken for the Specific Plan over a 20+ year period, the glare produced by these activities would be experienced as momentary flashes ("glint") at different locations rather than recurring glint or a longer phenomenon at any given location.

Long-Term Post-Construction Impacts

Glare from Buildings

Baylands development would replace existing older industrial buildings that are small and have generally low reflectivity with substantially larger buildings that could have large surfaces of building materials with high solar reflectivity such as exterior glass and metal and light-colored roofing materials. In addition, the relocated fire station would replace an existing two-story building and would not increase that building's solar reflectivity.

Highly reflective and specular (mirrorlike) building envelopes have become widely adopted not only for aesthetic reasons, but also to increase building energy efficiency and improve occupant comfort. Such buildings are sometimes designed with unique geometries that reflect a high percentage of sunlight toward the outdoor environment resulting in substantial glare from highly specular materials such as the glass or polished stainless steel on exterior building façades (Suk 2016).

While the Specific Plan prohibits the use of reflective glass in all residential building types, it does not prohibit use of reflective glass on commercial, amenity, or hospitality building types; however, it does require that reflective materials on Campus Mid-Rise and Campus Low-Rise buildings "be positioned to not reflect daytime glare onto the freeway." In addition, Specific Plan standards for all building types include the following design guideline to reduce rooftop heat gain (emphasis added):

> "Where solar panels or shade structures are not installed, cool roof design shall be employed for all non-occupiable flat roof surfaces through one or more of the following:
>
> - **Highly reflective roofing material or coating (minimum 70 percent solar reflectance)**
> - Green roof
> - Other systems or material with high thermal emittance (0.9 or higher) which provide reduction in solar heat gain"

Reflective concave surfaces have the potential to magnify sunlight, intensify glare at the focal point, and cause substantial heat gain in addition to nuisance glare (Whitely 2010). Because the Specific Plan does not provide guidelines that address glare from curved (particularly concave) building surfaces, the ultimate shape of Baylands buildings could exacerbate the amount of glare and cause heat gain.

Glare from Above-Ground Infrastructure

Portions of major above-ground infrastructure associated with the water recycling facility, water storage tanks, battery storage facilities, switching substation, and improvements at the existing Martin Substation (to connect to the Specific Plan's switching substation and utility-scale battery storage facility) could include outdoor/exterior stainless steel or other reflective metal piping or cladding. Polished stainless steel and other metal surfaces can be highly reflective and generate substantial glare depending on the amount that is used, the extent to which stainless steel and other metal surfaces are shaded, and the specific locations they are used. Improvements at the Martin Substation would be minor in relation to existing facilities and would not substantially increase solar reflectivity.

Glare from Solar Panels

A minimum of 85,000 megawatt hours (MWh) of electricity annually will be generated by on-site solar panels installed on building rooftops, in parking areas, and in a 55- acre solar farm to

be constructed within the southeast area of the site. Photovoltaic solar panels are typically designed to absorb visible light and would not be a substantial source of glare.[128]

Glare from Project Signage and Public Art

While street and directional signage does not typically generate daytime glare, the use of metal lettering on site and building identification signs, as well as use of metal or other reflective surfaces in outdoor public art installations, could generate glare depending on the amount that is used, the extent to which reflective surfaces are shaded, and the specific locations they are installed.

Significance Conclusion for Impact AES-5

Baylands development would create new sources of substantial daytime glare, particularly in the early morning and late afternoon hours by requiring reflective building materials on building roofs as well as permitting reflective materials on building façades, thematic elements, site and building identification signage, and public art installations. Glare generated by such reflective surfaces could be exacerbated if curved surfaces are provided.

Above-ground infrastructure could also include highly reflective stainless-steel and other metal piping and cladding on structures. Glare resulting from Baylands development could produce nuisance effects within residential areas; classrooms; and parks, trails, and playgrounds, as well as adversely affect motorists along US Highway 101, Geneva Avenue, and Bayshore Boulevard by impairing vision.

This impact would therefore be significant and require mitigation.

Program EIR Mitigation Measures

MM AES-5a: Prevent Daytime Glare (Program EIR Mitigation Measure 4.A-4b). All building exteriors within the Baylands Specific Plan area shall be composed of textured and other non-reflective materials, including high-performance tinted non-mirrored glass. Any reflective materials on building exteriors that have a light reflectivity factor greater than 30 percent shall be positioned so as to not reflect

[128] Solar panels are composed of numerous cells, which differ from a typical reflective surface in that they have a microscopically irregular surface designed to trap the rays of sunlight for the purposes of energy production. Moreover, the intent of solar technology is to increase efficiency by *absorbing* as much light as possible, which *reduces* reflectivity and glare (relative to regular dark or mirrored glass typically observed in common large-scaled residential and commercial development). Solar glass sheets (the glass layer that covers photovoltaic panels) are typically tempered glass that is treated with an anti-reflective or diffusion coating that further diffuses the intensity of glare produced. Solar panels without an anti-reflective coating have a solar reflectivity of approximately five percent; with an anti-reflective coating, the solar reflectivity is reduced to approximately three percent.

daytime glare onto the US 101 freeway or onto existing residential communities in Brisbane and Visitacion Valley. Mirrored glass shall be prohibited.

Significance Conclusion with Implementation of Program EIR Mitigation Measures

Although Mitigation Measure MM AES-5a (Program EIR Mitigation Measure 4.A-4b) would prohibit mirrored glass and ensure daytime glare from buildings would not be reflected onto the US 101 freeway or existing residential communities in Brisbane and Visitacion Valley, daytime glare could result from metal surfaces on above-ground infrastructure, signage, outdoor public art installations, concave surfaces that concentrate reflective light, and reflective façade materials sloping back from the ground surface at less than a 90° angle that reflect high-angle sunlight along the ground surface. As a result, a significant impact would occur even with implementation of MM AES-5a (Program EIR Mitigation Measure 4.A-4b), requiring additional mitigation.

Additional Mitigation Measures

MM AES-5b: Additional Daytime Glare Protection. In addition to the requirements of Mitigation Measure MM AES-5a, Specific Plan area development shall comply with the following design standards to minimize hazard and nuisance glare:

- Reflective materials on building exteriors, including roofs, that have a light reflectivity factor greater than 30 percent shall be limited to less than 25 percent of any given wall surface, and shall not be placed on roofs.
- Concave surfaces that can serve to concentrate reflective light shall be avoided.
- Reflective façade materials that slope back from the ground surface at less than a 90° angle and can reflect high angle sunlight along the ground surface shall be avoided.
- Stainless steel and other metal surfaces on buildings, above-ground infrastructure, signage, and outdoor public art installations shall use bare or non-polished metal or be shaded or screened to avoid the generation of glare.
- Auxiliary structures, such as but not limited to gazebos, external ticket booths, bus shelters, and other free-standing structures, shall limit avoid transparent or highly reflective surfaces (e.g., glass, plexiglass).

Significance Conclusion with Implementation of All Mitigation Measures

Implementation of Mitigation Measures MM AES-5a and MM AES-5b would minimize the reflectivity and area of reflective materials on building façades and other surfaces. Mitigation

Measures MM AES-5a and MM AES-5b would also prevent building designs and materials that generate excess glare and heat generation at ground level, as well as minimize glare from above-ground infrastructure, signage, and outdoor public art installations. This impact would therefore be less than significant with mitigation incorporated.

4.5.7 REFERENCES – AESTHETIC RESOURCES

Baylands Development, Inc. 2022. *The Brisbane Baylands Specific Plan*. August 2022.

Caltrans. 2016. California Scenic Highway Mapping System. 2016. Accessed June 13, 2024. http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/.

City of Brisbane. 1994. *General Plan*. As amended through GP-1-19.

City of London. 2017. *Planning Advice Note: Solar Glare: Guidelines and Best Practice for Assessing Solar Glare in the City of London*. July 2017. Accessed August 5, 2024. https://www.cityoflondon.gov.uk/assets/Services-Environment/solar-glare-planning-advice-note.pdf.

DarkSky International, *Outdoor Lighting - Municipal Ordinance Template and User Guide*, October 11, 2024. Accessed December 18, 2024. https://darksky.org/darksky-policy-templates/.

Environmental Science Associates. 2012. *Draft Environmental Impact Report: Pioneer Green Solar Project: Volume I*. Prepared for Kern County Planning and Community Development Department. November 2012.

Hollinger, David, et al. 2010. "Albedo estimates for land surface models and support for a new paradigm based on foliage nitrogen concentration." Global Change Biology, in *Global Change Biology* 16: 696–710. Accessed August 5, 2024. http://www.nrs.fs.fed.us/pubs/jrnl/2010/nrs_2010_hollinger_001.pdf.

Illuminating Engineering Society/International Dark Sky Association (IES/IDSA). 2001. *Joint IDA – IES Model Lighting Ordinance (MLO)*. June 15, 2011. Accessed August 5, 2024. https://www.darksky.org/wp-content/uploads/bsk-pdf-manager/16_MLO_FINAL_JUNE2011.PDF.

Pon, Brian. 1999. "Pavement Albedo." Heat Island Group, June 30, 1999. Accessed June 9, 2011. http://eetd.lbl.gov/HeatIsland/Pavements/Albedo/ (now available at http://web.archive.org/web/20070829153207/http://eetd.lbl.gov/HeatIsland/Pavements/Albedo, accessed August 5, 2024).

San Francisco Bay Conservation and Development Commission. 2008. *San Francisco Bay Plan*. January 2008.

Suk, Jae Yong, Marc Schiler, and Karen Kensek. 2016. Is Exterior Glare Problematic? Investigation on Visual Discomfort Caused by Reflected Sunlight on Specular Building Facades. July 2016. https://www.researchgate.net/publication/306108182_Is_Exterior_Glare_Problematic_Investigation_on_Visual_Discomfort_Caused_by_Reflected_Sunlight_on_Specular_Building_Facades.

United States Forest Service, Accessibility Guidebook for Outdoor Recreation and Trails, April 2006. Accessed December 18, 2024. https://fs.usda.gov/t-d/pubs/htmlpubs/htm06232801/page25.htm.

VanGeem, M. 2002. "Albedo of Concrete and Select Other Materials." September 10, 2002. Accessed June 11, 2012. www2.basf.us/functional_polymers/kaolin/pdfs/AlbedoCTL.pdf.

Whitely, J. 2010. Vdara visitor: 'Death ray' scorched hair. *Las Vegas Review-Journal*. http://www.lvrj.com/news/vdara-visitor---death-ray--scorched-hair-103777559.html.

Intentionally Blank

4.6 BIOLOGICAL RESOURCES

4.6.1 INTRODUCTION

This section of the environmental impact report (EIR) identifies existing biological resources in the Specific Plan area and vicinity and the physical changes that would result from the 2025 Specific Plan project, along with mitigation measures to avoid or reduce significant impacts. The description of biological resources includes plants; wildlife; protected species and their habitats; and jurisdictional resources subject to federal, state, and local laws, policies, or conservation plans that apply to some or a part of the proposed development footprint.

The likelihood of a species occurring was determined based on whether (1) the species was directly observed, (2) suitable habitat was found, or (3) there are documented occurrences within the vicinity of the Specific Plan area.

a. Definitions

Bed and bank refer to parts of a stream or drainage feature. A stream bed is the channel bottom that represents the physical confine of normal water flow. The lateral confines or channel margins are known as the stream bank or riverbank.

Canopy, in the context of this section of the EIR, refers to the layer of leaves, branches, and stems of trees that covers the ground when viewed from above.

Degradation is a decline in habitat quality due to physical changes to the environment that leads to reduced survival and/or reproductive success in a population. The decline is typically related to changes in food availability and/or presence and quality of vegetation needed for roosting or nesting or during migration.

Emergent wetland refers to a wetland type characterized by erect, rooted, herbaceous, hydrophytic (water-dependent) plants, excluding mosses and lichens. Such wetlands are usually dominated by perennial plants with vegetation present for most of the growing season in most years.

Ephemeral wetlands are depressional wetlands that temporarily hold water, usually in the spring and early summer or after heavy rains.

Habitat refers to the physical environment in which a plant or animal species could occur for all or a portion of its life stages.

Habitat restoration refers to the practice of renewing and restoring degraded, damaged, or destroyed ecosystems and habitats in the environment by active human intervention and action.

In-kind replacement occurs when the conservation value of replacement habitat must be consistent with the conservation values of the habitat being lost or requiring replacement to meet the "no net loss of sensitive habitats" performance standard established in this EIR.

Jurisdictional area refers to areas subject to the regulatory authority of the U.S. Army Corps of Engineers (USACE), the Regional Water Quality Control Board (RWQCB), and the California Department of Fish and Wildlife (CDFW) pertaining to drainage features and adjacent habitat areas within the Specific Plan area.

Monitoring refers to regular observation of a habitat over time, resulting in a collection of data that is used to verify compliance with conservation agreement goals and objectives and can also be used to identify when adaptive management may be required as a corrective measure to improve the quality or quantity of conservation habitats.

Nesting habitat includes trees and shrubs that are used by bird species during the breeding season.

Perennial describes a plant or animal that can be observed during all times of the year, and also to a water course that carries water year-round.

A **riparian zone** or **riparian area** is the interface between land and a river or stream. Plant habitats and communities along the river margins and banks that depend on water in the river or stream, or groundwater associated with the river or stream are called riparian vegetation.

Roosting habitat encompasses areas where individual birds or bats use trees for resting and cover during the non-breeding season.

Seasonal wetlands are a type of wetland characterized by standing water or saturated soil during the October through March growing season.

Special-status habitat refers to plant communities or physical features that have the potential to support plant or wildlife species listed or proposed for listing under either the California Endangered Species Act (CESA) or the federal Endangered Species Act (FESA).

Special-status species are plant and animal species that are listed, proposed for listing, or candidates for future listing as threatened or endangered under the FESA; species identified as California Species of Special Concern or listed or proposed for listing as threatened or endangered under the CESA; plants designated with a California Rare Plant Ranking (CRPR) by the California Native Plant Society (CNPS); species that are on the United States Watchlist of Birds of Conservation Concern; or species that are fully protected in California under the California Fish and Game Code.

Substrate refers to the surface or material on or from which an organism lives, grows, or obtains its nourishment.

Upland refers to land that is at a higher elevation than the adjacent alluvial plain, stream, or water course and are not sufficiently wet to support the development of vegetation, soils, and/or hydrologic qualities associated with wetlands.

Waters of the United States are defined in the Code of Federal Regulations (CFR) (33 CFR 328.3(a); 40 CFR 230.3(s)) as:

1. Waters which are:
    a. Currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
    b. The territorial seas; or
    c. Interstate waters;
2. Impoundments of waters otherwise defined as waters of the United States under this definition, other than impoundments of waters identified under paragraph (a)(5) of this section;
3. Tributaries of waters identified in paragraph (a)(1) or (2) of this section that are relatively permanent, standing or continuously flowing bodies of water;
4. Wetlands adjacent to the following waters:
    a. Waters identified in paragraph (a)(1) of this section; or
    b. Relatively permanent, standing or continuously flowing bodies of water identified in paragraph (a)(2) or (a)(3) of this section and with a continuous surface connection to those waters;
5. Intrastate lakes and ponds, streams, or wetlands not identified in paragraphs (a)(1) through (4) of this section that are relatively permanent, standing or continuously flowing bodies of water with a continuous surface connection to the waters identified in paragraph (a)(1) or (a)(3) of this section.

Waters of the United States do not include prior converted cropland (40 C.F.R., § 120.2[b][2]). Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with the United States Environmental Protection Agency (USEPA).

4.6.2 PHYSICAL ENVIRONMENTAL SETTING

a. Baseline

Existing conditions observed during the recirculated Notice of Preparation review period (Spring 2023) and previous habitat surveys of the Baylands Specific Plan area conducted during the spring seasons of 2019, 2020, 2021, and 2022, which is the appropriate time of year for surveying sensitive habitat areas within Visitacion Creek and along the north shore of the Brisbane Lagoon, as well as other riparian areas within the Baylands, were collectively used to provide the baseline for the biological resources analysis.

To determine current baseline conditions within the Specific Plan area, and in advance of additional site reconnaissance surveys, database searches of the California Natural Diversity Database (CNDDB), CNPS Electronic Inventory, and the U.S. Fish and Wildlife Service (USFWS) species list were conducted to inform the likelihood of special-status species presence.

In September 2022 and February 2023, additional site reconnaissance surveys were conducted to assess the potential for the Specific Plan area to support special-status species; sensitive natural communities, such as waters of the United States, including wetlands and non-wetland waters; wildlife movement corridors; protected trees; and habitat conservation plans. A complete assessment of Callippe silverspot, Mission blue, Bay checkerspot, and San Bruno elfin butterfly habitat at Icehouse Hill was conducted, including four surveys in April and June of 2023 to identify habitat types, butterfly host plants, butterfly nectar plants, and invasive species.

b. Existing On-Site Biological Resources

To create what is now the Baylands Specific Plan area, a portion of San Francisco Bay was filled east of the historic shoreline (see **Figures 2-3** and **2-4**). Thus, most of the on-site upland habitats occur on fill that overlies Bay Mud. Icehouse Hill is the only remaining native substrate in the Baylands. Grading on the east side of Icehouse Hill occurred during railroad construction in the early 1900s, and the western slope was later cut to build Bayshore Boulevard. Substrate in the Icehouse Hill portion of the Baylands is consistent with nearby San Bruno Mountain and supports habitats similar to those found in the San Bruno Mountain Habitat Conservation Plan (HCP) area.

Drainages within the Baylands include Guadalupe Valley Creek and the engineered Visitacion Creek, while open water occurs within the Brisbane Lagoon, as well as in several small locations along Visitacion Creek. These drainages and open water habitat, including wetlands and marsh habitats, are remnants of extensive wetland and tidal lands that once fringed San Francisco Bay in the Brisbane area (Metis 2022).

Because of historical, intensive land uses, including a former railyard and landfill and the related absence of native substrate from such areas, rare plants are not expected across most of the Baylands. However, annual grasslands and coastal scrub habitats on Icehouse Hill provide potential habitat for non-listed special-status plants, including bent-flowered fiddleneck, San Francisco collinsia, Choris's popcorn flower, and San Francisco campion.

In September 2022 and February 2023, ESA conducted site reconnaissance surveys to assess the potential for the Specific Plan area to support and/or adversely affect special-status species; sensitive natural communities, such as waters of the United States, including wetlands and non-wetland waters; wildlife movement corridors; protected trees; and habitat conservation plans. ESA also retained the services of Coast Ridge Ecology, LLC (Coast Ridge), to complete an assessment of Callippe silverspot, Mission blue, Bay checkerspot, and San Bruno elfin butterfly habitat at Icehouse Hill. This effort included four surveys conducted in April and June of 2023 to identify habitat types, butterfly host plants, butterfly nectar plants, and invasive species. Coast Ridge's report, titled *Butterfly Habitat Mapping and Restoration Opportunities at Icehouse Hill, Brisbane Baylands, Brisbane, CA*, is provided as an appendix to the Biological Resources Technical Report (EIR Appendix D).

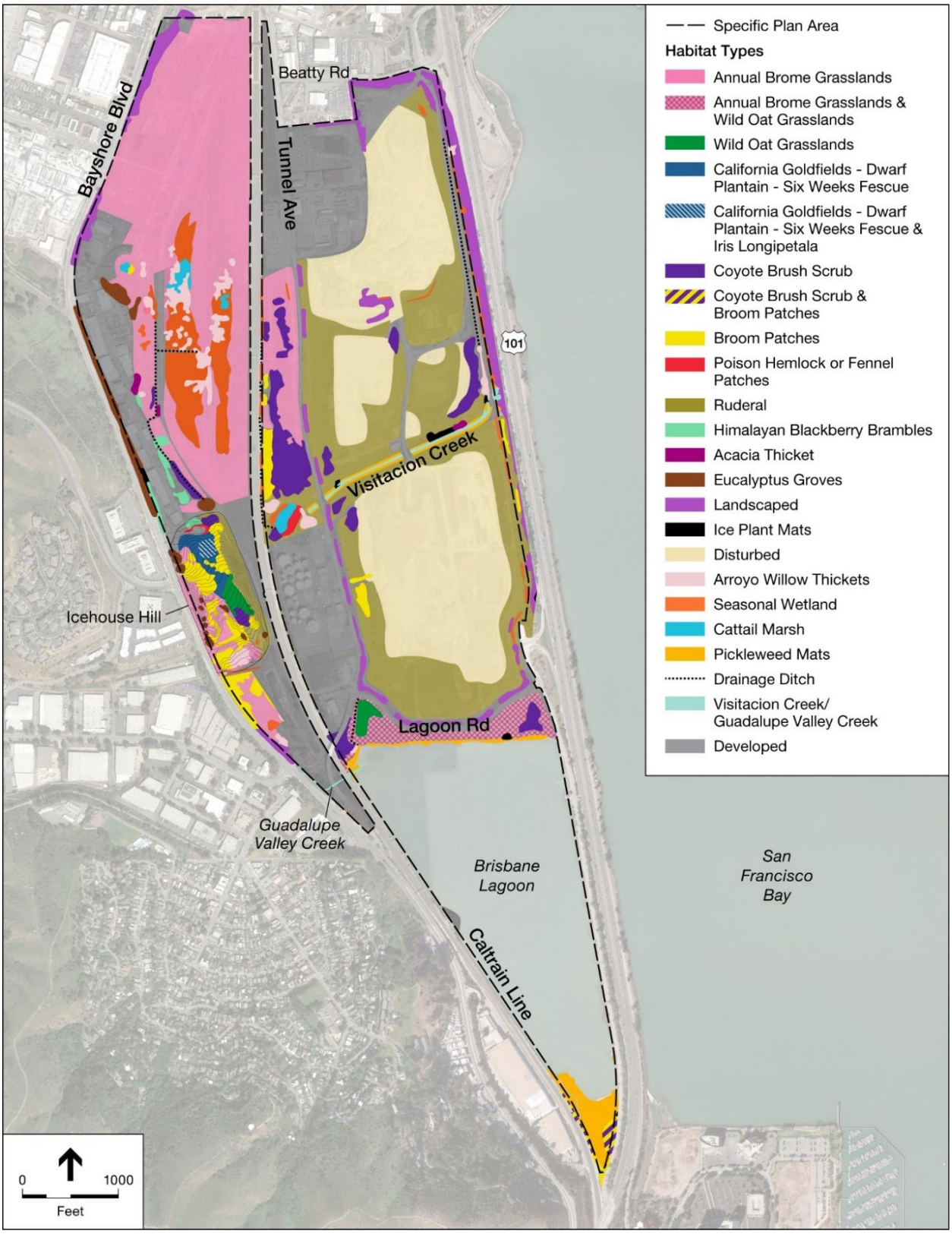
Terrestrial Vegetation Communities

The distribution of terrestrial vegetation communities in the Specific Plan area is shown on **Figure 4.6-1** and communities are summarized below.

*California Goldfields-Dwarf Plantain Flower Fields (*Lasthenia californica – Plantago erecta – Vulpia microstachys – *Herbaceous Alliance)*

With a well-mixed assemblage of grasses and forbs, the California Goldfields – Dwarf Plantain Flower Fields (CGDP) habitat on Icehouse Hill supports a high density of native species. The native plants on Icehouse Hill include purple needlegrass (*Nassella pulchra*), California melic grass (*Melica californica*), tomcat clover (*Trifolium willdenvii*), variegated clover (*Trifolium varigatum*), buttercup (*Ranunculus californicus*), suncup (*Taraxia ovata*), California goldfields (*Lasthenia californica*), miniature and sky lupine (*Lupinus bicolor* and *L. nanus*), coast iris (*Iris longipetala*), yarrow (*Achillea millefolium*), yellow mats (*Sanicula arctopoides*), California checkerbloom (*Sidalcea malviflora*), toad rush (*Juncus bufonius*), blue wild rye (*Elymus glaucus*), western blue-eyed grass (*Sisyrinchium bellum*), soap plant (*Chlorogalum pomeridianum*), Coast Range mule's ears (*Wyethia glabra*), California poppy (*Eschscholzia californica*), buckwheat (*Eriogonum nudum*), goldenback fern (*Pentagramma triangularis*), and California plantain (*Plantago erecta*). Johnny jump-up (*Viola pedunculata*) occurs in abundance in the early spring across the top and northern slope of Icehouse Hill. As the growing season progresses, annual grasses become more dominant, with rattlesnake grass (*Briza maxima*), little quaking grass (*Briza minor*), wild oat (*Avena* spp.), and brome (*Bromus* spp.) all blooming across this habitat. This habitat type is considered sensitive by the CDFW California Natural Communities List (CDFW 2022).

Figure 4.6-1: Baylands Terrestrial Habitats



SOURCE: Metis, 2022

*Annual Brome Grasslands (*Bromus *[*diandrus, hordeaceous*]* – Brachypodium distachyon *– Semi-Natural Herbaceous Stands)*

Grasslands dominated by brome species such as rip-gut brome (*Bromus diandrus*), soft chess (*Bromus hordeaceus*), and false brome (*Brachypodium distachyon*) occur across the northern portions of the former railyard, on the western side of Icehouse Hill, and at various other locations across the Specific Plan area. Other species commonly found within the annual brome grasslands include hop clover (*Trifolium campestre*), Bermuda buttercup (*Oxalis pes-caprae*), Italian thistle (*Carduus pycnocephalus*), black mustard (*Brassica nigra*), wild radish (*Raphanus sativus*), Mediterranean barley (*Hordeum marinum* ssp. *gussoneanum*), yellow starthistle (*Centaurea solstitialis*), wild fennel (*Foeniculum vulgare*), pampas grass (*Cordateria jubata*), bristly ox-tongue (*Helminthotheca echioides*), English plantain (*Plantago lanceolata*), and Italian ryegrass (*Festuca perennis*). Within the western portion of the Baylands, piles of pampas grass were observed throughout the northern portion of the former railyard as a result of an apparent effort to clear this invasive species from the area. Between spring and fall, the annual grasses fall over and sweetclover (*Melilotus alba*), wild fennel, horsetail weed (*Conyza canadensis*), and stinkwort (*Dittrichia graveolens*) bloom and reach their largest size. On the west side, north of the former railyard buildings, populations of common tarweed (*Centromadia pungens*) were also found blooming. On Icehouse Hill, it was observed that Bermuda buttercup is an early-season co-dominant with false brome associated with the soil cut where the western slope was graded to construct Bayshore Boulevard. This area was distinctive with the proliferation of Bermuda buttercup prior to annual grass species bloom (Metis 2022).

*Wild Oat Grasslands (*Avena *[*barbata, fatua*]* *– Semi-Natural Herbaceous Stands)*

Wild oat grasslands occur along the south side of Lagoon Way and on the south slope of Icehouse Hill. These habitats are dominated by wild oat (*Avena fatua*, *A. barbata*) in the early spring and transition to grasslands dominated by rattlesnake grass (*Briza maxima*) and little quaking grass (*Briza minor*) as the blooming season moves into summer. *Avena* spp. and *Briza* spp. consist of greater than 50 percent cover within the grasslands. Associated grass species with less than 50 percent coverage include Italian ryegrass and velvet grass (*Holcus lanatus*). Ruderal herbaceous species (i.e., plants that rapidly colonize disturbed areas) found throughout include many of the same associates as found within brome grassland (discussed above), including Italian thistle, black mustard, wild radish, bristly ox-tongue, and English plantain. Ruderal plants that bloom in the late season between July and October become more prominent as the annual grasses finish their life cycle and species such as wild fennel, horsetail weed, and yellow starthistle appear dominant over flattened grasses (Metis 2022). The area south of Lagoon Way supports a mixture of wild oats and brome.

*Perennial Rye Grass Field (*Festuca perennis – *Natural Herbaceous Stands)*

Large patches of Italian rye grass dominate some slopes, presumably due to re-seeding during erosion management. This vegetation pattern changes depending on where soils have been deposited or grading has occurred and been followed by hydroseeding. Due to the highly variable location of these areas, they are not mapped in **Figure 4.6-1**.

*Coyote Brush Scrub (*Baccharis pilularis – *Shrub Alliance)*

Stands of coyote brush (80 to 100 percent cover) form habitat nearing a monoculture through the flat lands of the abandoned railyard between the interior roads on either side of the Caltrain tracks and extending east to Tunnel Avenue. The coyote brush vegetation varies between 5 and 10 feet tall, forming thick bands of shrubland habitat. Associates within the scrub consist of low-growing herbaceous species including rip-gut brome, Italian rye, mustards, and other invasive weedy forbs generally occupying less than 10 percent of the ground cover. At the northeastern corner of Icehouse Hill, this habitat is formed by varying percentages of coyote brush (dominant), and lower percentages of toyon (*Heteromeles arbutifolia*), poison oak (*Toxicodendron diversilobum*), yerba santa (*Eriodictyon californicum*), sticky monkey flower (*Diplacus aurantiacus*), buckeye (*Aesculus californica*), and elderberry (*Sambucus nigra* ssp. *caerulea*). California polypody (*Polypodium californicum*) grows profusely along the northeast-facing slope of Icehouse Hill during the late winter and spring. In addition, beyond the fern-dominated substrates, the understory at this location supports forb species such as goldenback fern, soap plant, elegant brodiaea (*Brodiaea elegans*), two-tone everlasting (*Pseudognaphalium biolettii*), yarrow, and Ithuriel's spear (*Triteleia laxa*). Native perennial bunchgrasses including purple needlegrass, California melic grass and blue wild rye (*Elymus glaucus*) occur in association with non-native annuals such as little quaking grass and velvet grass among the understory vegetation.

A coyote brush-toyon-yerba santa (*Baccharis pilularis – Heteromeles arbutifolia – Eriodictyon californicum*) association (mapped as coyote brush scrub) occurs on the southern-facing slope of Icehouse Hill, with approximately 40 percent cover. The herbaceous vegetation between the shrubs is dominated by wild oats, little quaking grass, and rattlesnake grass (Metis 2022).

*Poison Hemlock or Fennel Patches (*Conium maculatum – Foeniculum vulgare – *Herbaceous Semi-Natural Alliance)*

Poison hemlock and fennel are common and widely distributed across the Specific Plan area and can be found in strips in some locations and more generally dispersed throughout the various grasslands. In limited areas, the amount of fennel or poison hemlock was greater than 50 percent and was mapped as conforming to this habitat alliance designation. Other areas where the fennel or hemlock was less than 50 percent, as most often observed, was identified as ruderal, described below (Metis 2022).

Ruderal Communities

Ruderal communities are defined by a dominance of non-native herbs and forbs, which can give this habitat a shrubby appearance, with vegetation sometimes up to 4 feet or more in height. In contrast, annual brome grassland and wild oat grasslands, for example, are generally shorter. Some of the grass species found in brome or wild oat grassland habitats may also be found as lesser components of the ruderal habitat type. Vegetation overlap between plant species among the non-native habitat types is common in California. The vegetative composition of ruderal communities demonstrates a prevalence of dicots over grass species.

The vast majority of the ruderal habitat communities within the Specific Plan area consists of lands that are vegetated with a mosaic of invasive forbs where one species does not have a greater than 50 percent dominance. Non-native broadleaves commonly observed include fennel, poison hemlock, various mustard species (*Brassica* spp., *Raphanus* spp.), Italian thistle, yellow starthistle, bristly ox-tongue, red valerian, crown daisy (*Glebionis coronaria*), and pride of madeira (*Echium candicans*). Shrubs such as French broom (*Genista monspessulana*), cotoneaster (*Cotoneaster* sp.), and pyracantha (*Pyracantha crenato-serrata*) are common constituents as well; along with pampas grass. The native pioneer shrub species coyote brush and toyon can also be found interspersed among the non-native forbs but generally consist of less than 10 percent cover. A few sapling gum trees (*Eucalyptus* sp.) are also found growing in some ruderal areas (Metis 2022).

The Specific Plan area supports large areas of ruderal vegetation to the north and south of Visitacion Creek in the former soils processing areas. On the eastern side of Icehouse Hill, the steep, rocky slope supports sparse wild oat and fennel vegetation at the upper half of the slope, while the southern slope near the toe of the escarpment is found with thick valerian (*Centranthus ruber*) and only a scattering of grasses and forbs. In the steepest locations, the slopes may be only thinly vegetated with annual grasses and can contain large swaths of bare ground. This area is best categorized as ruderal habitat due to the dominance of valerian and fennel where vegetation is present (Metis 2022).

*Broom Patches (*Cytisus scoparius *and Others – Semi-Natural Shrubland Stands)*

French broom forms a distinct monoculture on several slopes of Icehouse Hill, where it grows to a height of 6 to 10 feet, forming a wall of vegetation. The herbaceous vegetation beneath the broom is limited due to lack of sunlight and the toxic nature of French broom foliage and seeds. Infestations of broom degrade the quality of habitat for wildlife by displacing native vegetation that are preferred forage species and by changing the microclimate conditions at the soil level (California Invasive Plant Council 2022). The acreage of broom has grown within the Specific Plan area as the shrubs have spread across a greater surface area compared to 2013 (Metis 2022).

*Pampas Grass Patches (*Cortaderia *[*jubata, selloana*] – Semi-Natural Herbaceous Stands)*

Pampas grass patches were common across the northern portion of the Baylands in 2019. In 2022, pampas grass was sprouting from the piles that were created during earlier bulldozer clearing activity (Metis 2022).

Acacia Thicket

Wattle (*Acacia* spp.) along with scattered escaped ornamental fruit trees (*Prunus* spp.) are also a component of the former invasive scrub habitat. Species of acacia in the thicket included *Acacia dealbata*, *A. longifolia*, *A. melanoxylon*, and *A. pycnantha*. The clusters of wattle have been called acacia thickets on the habitat map, **Figure 4.6-1**. Ornamental fruit trees are found sporadically within the acacia thickets, especially near Bayshore Boulevard. Broom, pampas grass, and acacia are found growing on uplands surrounding the Brisbane Lagoon, adjacent to the eastern side of Bayshore Boulevard, in various locations on Icehouse Hill, and within the interior of the Specific Plan area (Metis 2022).

*Himalayan Blackberry Brambles (*Rubus armeniacus *– Semi-Natural Shrubland Stands)*

Himalayan blackberry (*Rubus armeniacus*) exists to the north of Icehouse Hill, east of the industrial complex along Bayshore Boulevard. Thick swaths of Himalayan blackberry occur, forming impenetrable brambles and spreading to the north from this region. Himalayan blackberry is an invasive weed identified by the California Invasive Plant Council; it has aggressive growth patterns that limit other native vegetative growth and overtakes pastures and riparian corridors (Metis 2022).

*Eucalyptus Groves (*Eucalyptus [globulus, camaldulensis] *– Semi-Natural Woodland Stands)*

Several groves of blue gum trees (*Eucalyptus globulus* and *Eucalyptus* spp.) were observed to form a contiguous habitat type along Bayshore Boulevard. Gum trees occur along the Bayshore Boulevard right-of-way, forming eucalyptus groves. Several locations to the east also support eucalyptus trees. Eucalyptus species are identified by the California Invasive Plant Council as reducing the biodiversity beneath their canopy. Below the canopy of eucalyptus trees, the shedding tree bark deposits heavy debris and the leaves release allelopathic chemicals, creating inhospitable soils that do not allow for the growth of many annual or perennial native or weed species (Metis 2022).

Landscaped Habitat

Landscaped habitat includes minor landscaped areas associated with some buildings and the plantings of trees as street borders with lollipop tree (*Myoporum laetum*), pine (*Pinus* ssp.), red and white bottlebrush (*Callistemon viridiflorus* and *Callistemon salignus*), wattle (*Acacia* spp.), and other non-native ornamental species. Landscaped habitat occurs between the former soils

processing operations area and the adjacent roadways that surround the Specific Plan area, including the north side of Lagoon Way, the east side of Tunnel Avenue, the north side of Beatty Avenue, and west side of US Highway 101 between the highway and the former soils processing area. A dense row of landscape vegetation lines the Bay along US Highway 101, with many ornamental trees and shrubs that self-propagate along the highway shoulder. The understory vegetation and gaps between the trees in the landscaped areas support English ivy (*Hedera helix*) and white ramping fumitory (*Fumaria capreolata*) (Metis 2022).

*Ice Plant Mat (*Carpobrotus edulis *or Other Ice Plants – Semi-Natural Herbaceous Stands)*

Ice plant (*Carpobrotus* spp.) is known to spread horizontally across the ground or soil surface and smother other vegetative species that could potentially occur. It changes the soil chemistry, making it inhospitable to many other native herbs after it is established, and causes residual effects to vegetation growth once it is removed. Several locations within the Specific Plan area have been observed with ice plant mats. Ice plant is identified by the California Invasive Plant Council as responsible for decreasing vegetative diversity. The mats in the Specific Plan area occur adjacent to native pickleweed mats and likely reduce surface areas over which the pickleweed could potentially grow (Metis 2022).

Disturbed Areas

The areas within the soils processing site on the east side of the Specific Plan area have been continually disturbed through earth moving, earth and debris dumping, and tractor operation for many years. These areas do not support vegetation. They contain bare earth and debris such as concrete, asphalt, and/or variously sized rocks. There are no habitat values relating to vegetation associated with these disturbed areas (Metis 2022).

Waters of the United States and Wetlands

Waters of the United States are defined in CFR § 120.2, which states that "the term waters of the United States means: (1) All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide; (2) All interstate waters including interstate wetlands; (3) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters." For purposes of this analysis, "waters of the United States" includes both jurisdictional wetlands and non-wetland waters (e.g., estuarine intertidal rocky shore, open water, and constructed waters). In this analysis, the terms *wetland* and *non-wetland waters* are used to describe jurisdictional aquatic areas subject to the regulatory authority of the USACE, the RWQCB, and the CDFW.

Two types of jurisdictional wetlands are present on-site: seasonally saturated (rain-dependent freshwater) wetlands, which accumulate precipitation in shallow depressions; and estuarine intertidal (tidal marsh) wetlands, formed as a result of tidal action through culverts into the man-made channel of Visitacion Creek and along the shore of the Brisbane Lagoon where fringe marsh has developed (Biohabitats 2023b). The extent of wetlands and non-wetland waters within the Specific Plan area, as described in *The Baylands Wetland Delineation Report*, which was verified by the USACE in the July 2021 Preliminary Jurisdictional Determination (PJD) (Biohabitats 2023b, Appendix 4), is shown in **Figure 4.6-2a** through **Figure 4.6-2c**. Existing wetlands and non-wetland waters are identified in **Table 4.6-1**.

Table 4.6-1: Wetlands and Non-Wetland Waters within the Baylands Specific Plan Area

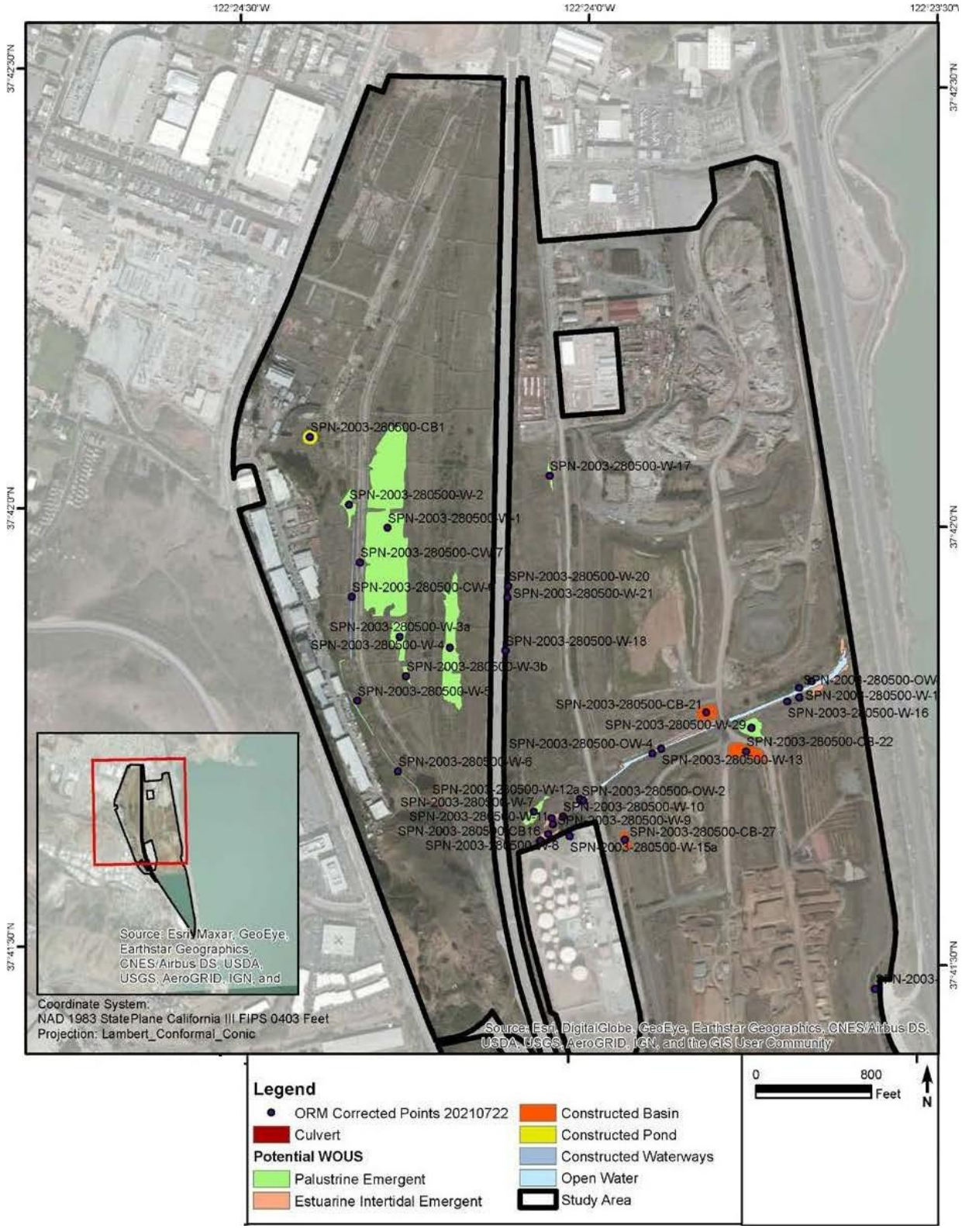
	Type	Hydrology	Existing Amount
Wetlands			
Wetland	Palustrine Emergent	Freshwater	11.72 acres
Wetland	Estuarine Emergent	Intertidal Marsh	6.43 acres
Wetland	Constructed Basin	Seasonal	1.73 acres
SUBTOTAL WETLANDS			*19.88 acres*
Non-Wetland Waters			
Non-wetland waters	Open Water	Open Water	116.07 acres
Non-wetland waters	Estuarine Rocky Shore	Intertidal	1.32 acres
Non-wetland waters	Constructed Waterway	Seasonal	0.26 acres
SUBTOTAL NON-WETLAND WATERS			*117.65 acres*
TOTAL WETLANDS AND NON-WETLAND WATERS			**137.53 acres**

SOURCE: Environmental Science Associates (ESA), September 2023, based on Biohabitats Wetland Delineation, representing the acreages accepted by the verified Preliminary Jurisdictional Delineation, July 2021.

NOTE: Following the Supreme Court's 2023 *Sackett v. EPA* ruling, some federal wetlands identified in the verified delineation and shown in Table 4.6-1 may not qualify as "adjacent" features per revised USACE regulations and guidance; hence, the acreage of waters of the U.S. within the Specific Plan area is likely lower than shown here. All of the identified waters and wetlands continue to qualify as waters of the state.

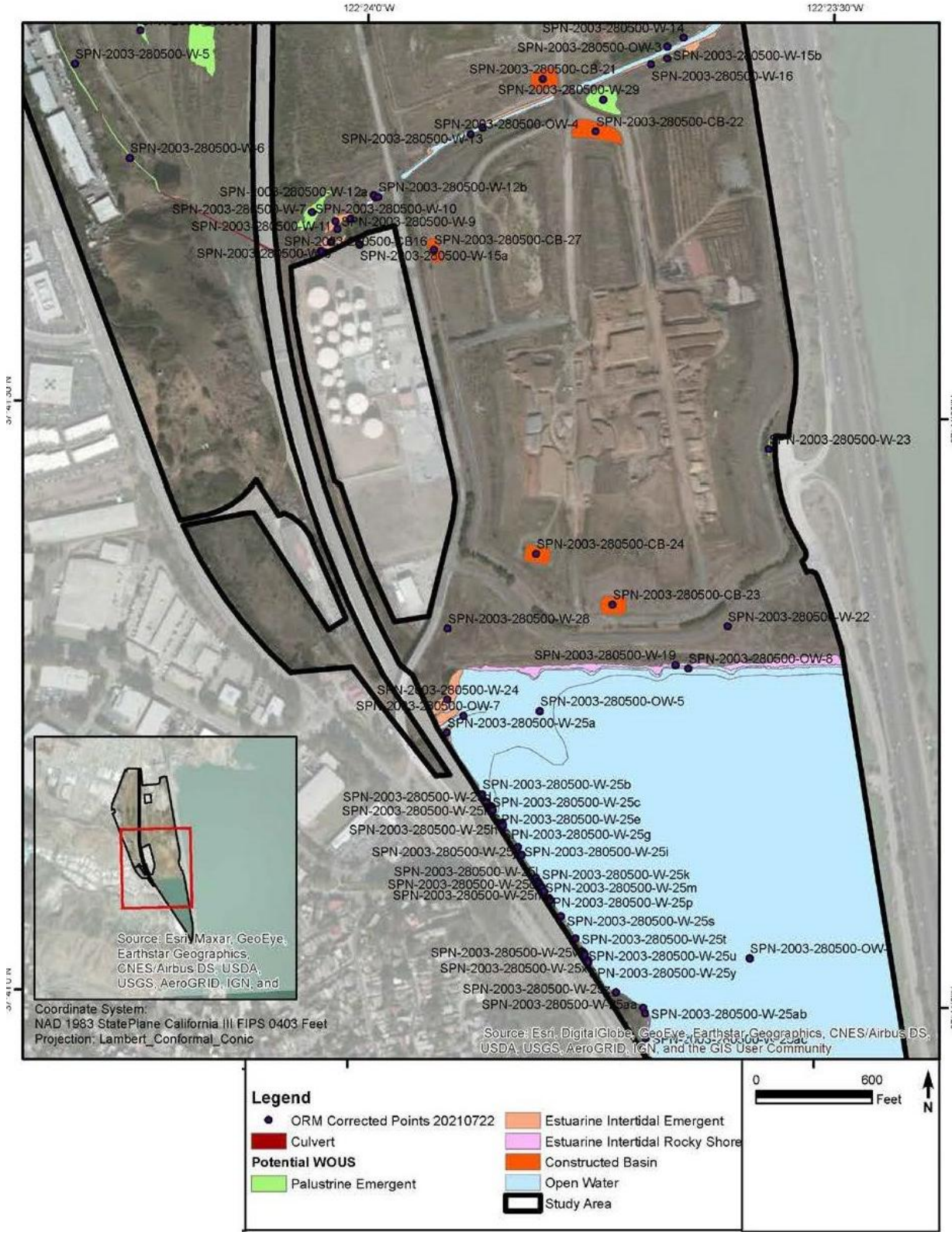
There are two primary surface water features located within the Specific Plan area: Visitacion Creek and the Brisbane Lagoon. Visitacion Creek is an engineered channel located in the central portion of the Baylands. Water runoff from the Bayshore Heights area west of the Baylands flows through an old brick culvert into a timber box that emerges from under the Caltrain rail embankment and flows into the open channel. Visitacion Creek (about 2,340 feet of open water) is separated into three sections by four culverts before ultimately discharging into San Francisco Bay. The tide is the dominant hydrologic influence on the marsh fringe of Visitacion Creek.

Figure 4.6-2a: Delineated Potential Baylands Wetlands and Non-Wetlands Waters of the United States within the Northern Portion of the Specific Plan Area



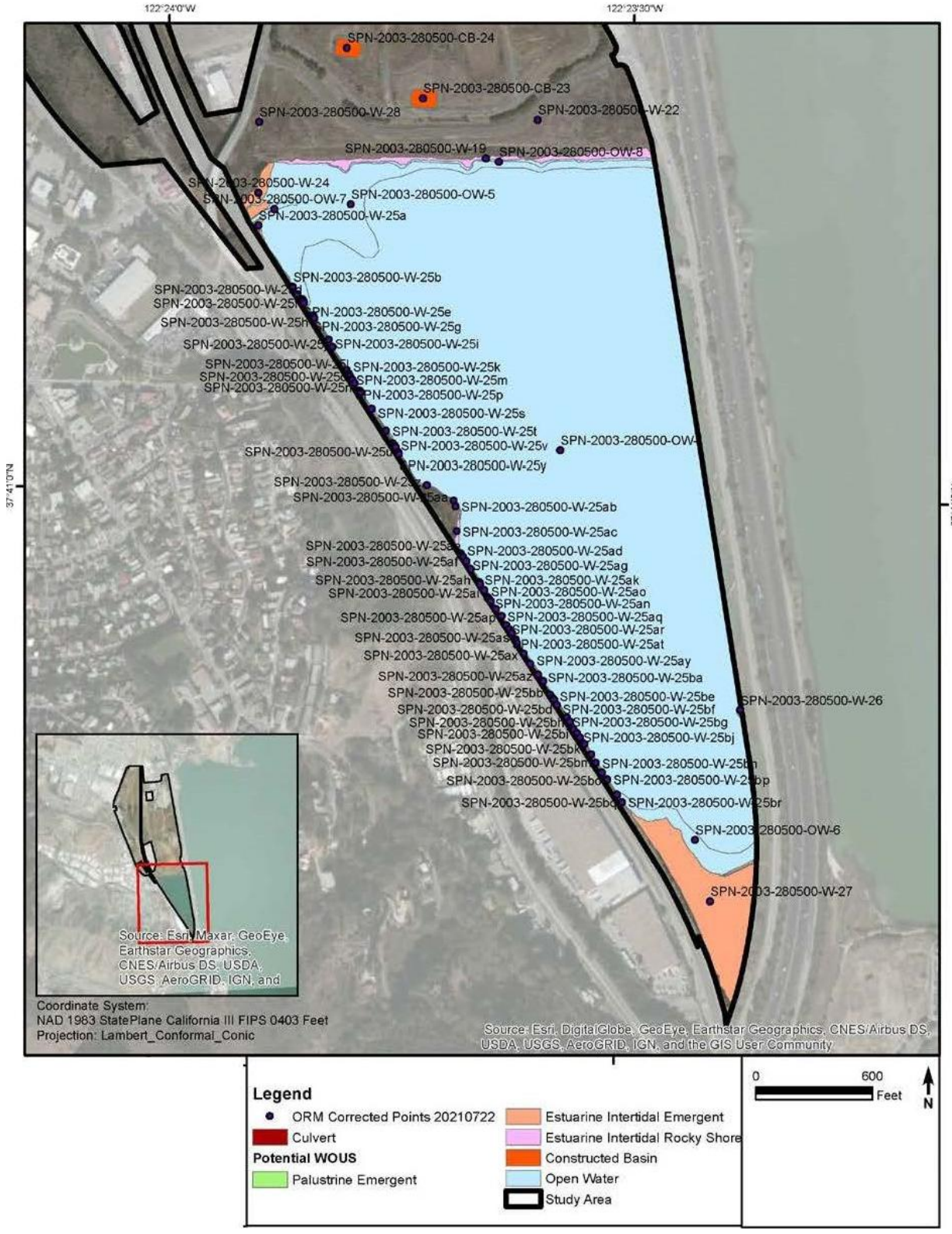
SOURCE: Metis 2022

Figure 4.6-2b: Delineated Potential Baylands Wetlands and Non-Wetlands Waters of the United States within the Central Portion of the Specific Plan Area



SOURCE: Metis 2022

Figure 4.6-2c: Delineated Potential Baylands Wetlands and Non-Wetlands Waters of the United States within the Southern Portion of the Specific Plan Area



SOURCE: Metis 2022

The Brisbane Lagoon is a vestige of the Bay that was not filled following construction of US Highway 101. It has limited marsh on its riprapped north and west shorelines (1.10 acres) and well-established tidal marsh on its northwest corner and south areas (0.40 and 4.90 acres, respectively). The tidal marsh fringe along the shoreline of the Brisbane Lagoon formed in response to the muted tidal exchange between the Bay and the lagoon through two box culverts. The lagoon also receives freshwater inflow from the Guadalupe outlet in the northwest corner; however, the tide from the Bay is the dominant hydrologic influence (Biohabitats 2023b).

*Arroyo Willow Thickets (*Salix lasiolepis *Shrubland Alliance)*

Arroyo willow thickets in the study area are composed of multi-trunked or multi-stemmed arroyo willow trees forming dense clusters of vegetation. This habitat occurs in association with wetland hydrology where wetlands have formed in the former railyard, to the north of the Kinder Morgan tank farm adjacent to the western leg of Visitacion Creek, along the drainage ditch on the west side of US Highway 101, on a narrow drainage ditch inlet to Visitacion Creek, at the northwestern corner of the Brisbane Lagoon, and at the southern toe of Icehouse Hill. The arroyo willow shrubland alliance is considered sensitive by the CDFW California Natural Communities List (CDFW 2022).

Seasonal Wetlands

Seasonal wetlands on-site support water from the onset of the rainy season in winter and are saturated through late spring, then typically dry up during the summer months. Seasonal wetlands generally occur in association with shallow topographic low points where drainage outlets are lacking or can occur adjacent to drainage ditches and creeks. Rainwater, or water from sheet flow originating on-site, fills local depressions for many continuous weeks during the rainy season, allowing for the germination of hydrophytic plants. In some cases, the extended period of inundation prevents the germination of any vegetation, and the basins are bare. Alternately, vegetation can be abundant and the seasonally inundated wetlands support annual and perennial vegetation such as rabbit's foot grass, nut-sedge (*Cyperus eragrostis*), bird's foot trefoil (*Lotus corniculatus*), bristly ox-tongue (*Helminthotheca echioides*), spikerush (*Eleocharis macrostachya*), Mediterranean barley, cattails (*Typha latifolia*), river bulrush (*Shoenoplectus fluviatilis*), brownhead rush (*Juncus phaeocephalus*), fat-hen (*Atriplex prostrata*), Bermuda grass (*Cynodon dactylon*), Bolander's rush (*Juncus bolanderi*), loosestrife (*Lythrum hyssopifolia*), and cutleaf plantain (*Plantago coronopus*).

Several small seasonal wetlands were identified in the central portion of the Specific Plan area (**Figure 4.6-2a** through **Figure 4.6-2c**). The former railyard supports large areas of seasonal wetlands in association with arroyo willow thickets. A mosaic has formed among the willows, with the aforementioned herbaceous species distributed by inundation within the shallow basins formed in the area. Several small seasonal wetlands are also found at the southern toe and slope of Icehouse Hill (Metis 2022).

*Cattail Marshes (*Typha angustifolia, domingensis, latifolia*] Herbaceous Alliance)*

Narrow leaf and broadleaf cattail (*Typha angustifolia* and *T. latifolia*) were recorded at the Specific Plan area in a monoculture emerging from depressions inundated with water. Cattail marsh habitat is found in the center of the former railyard and at the center of the Roundhouse structure where the turntable once operated. Cattail marsh also proliferates east of the Caltrain tracks in the central portion of the Specific Plan area along drainage ditches. The lands to the north of the Kinder Morgan Tank Farm similarly support cattail marsh (Metis 2022).

*Pickleweed Mats (*Sarcocornia pacifica *[*Salicornia depressa*] Herbaceous Alliance)*

Pickleweed mats are dominated by the species pickleweed (*Salicornia pacifica*), which forms a dense mat across the silty and/or muddy substrates that have a saline influence due to Bay connections. The soils within the Brisbane Lagoon and Visitacion Creek combined with the influx of brackish water from San Francisco Bay promote the growth of halophytes (salt-loving species) such as pickleweed along the edges of these water bodies. Pickleweed mats can be as narrow as a few feet in some areas and extend to a width of 200 feet in other locations, such as at the south end of the Brisbane Lagoon. Pickleweed habitat can support other common tidal salt marsh species such as saltgrass (*Distichlis spicata*), alkali heath (*Frankenia grandiflora*), fat-hen (*Atriplex prostrata*), and marsh gumplant (*Grindelia stricta* var. *angustifolia*) which are found commonly along Visitacion Creek and the edges of the Brisbane Lagoon. Several shrubs of quail brush (*Atriplex lentiformis*) were observed to occur along the western edge of the Brisbane Lagoon at the high tide line above the pickleweed mats in February 2022 (Metis 2022). The pickleweed mat alliance is considered sensitive by the California Department of Fish and Wildlife (CDFW) California Natural Communities List (CFDW 2022).

Pickleweed mats occur within the Specific Plan area along the north and south channel edges of Visitacion Creek and at its east end and bordering the northern shore and southern end of the Brisbane Lagoon. Pickleweed mats occur at the northwest corner of the lagoon in conjunction with a drainage fan of Guadelupe Valley Creek. The southernmost tip of the Brisbane Lagoon supports the largest contiguous acreage of pickleweed mat within the Baylands. Large stretches of the shore are covered with riprap that is currently unvegetated (Metis 2022).

Freshwater Drainage

Freshwater drainage ditches occur in the northern portion of the Baylands. The ditches consist of both artificially created and naturally developed drainage channels that support herbaceous wetland vegetation. Vegetation within the drainage habitat can consist of seasonal wetland species, but in some areas where they are lined with concrete or plastic, freshwater drainages do not support vegetation. The channels generally are linear in configuration and move water across the Specific Plan area (north to south) to receiving bodies downstream (Visitacion Creek) or to the Brisbane Lagoon (Metis 2022).

Tidal Wetland Drainage (Visitacion Creek)

Visitacion Creek is a tidal wetland drainage where pickleweed mats line either side of the bank, forming an average 7-foot-wide band of vegetation beginning at the ordinary high-water line extending up the bank. Visitacion Creek is connected directly to San Francisco Bay through a concrete box culvert beneath US Highway 101 and thus is tidally influenced. Throughout the day, the water elevation along the creek varies from the top edge of the pickleweed at high tide to exposed mud flat on either bank during low tide levels. Fresh water enters Visitacion Creek from the west and the north, and the creek is a main channel for local drainage (Metis 2022).

Mudflat

Mudflats are present adjacent to the low tide line along Visitacion Creek and at the creek's box culvert leading to the outfall to San Francisco Bay. Mudflats occur within the boundary of the Brisbane Lagoon at the northwestern corner and the southern tip in association with pickleweed mats. The mudflats have formed as a result of fine sedimentation (accretion) and the brackish water and long duration of inundation limits the vegetation growth. The very limited surface area of mudflats was not mapped along the Visitacion Creek channel edges but is visible along the Brisbane Lagoon (Metis 2022).

Special-Status Species

As stated above, most of the Specific Plan area is covered by ruderal and invasive vegetation species, reflecting its history of disturbance, development, and infill. Also present are native shrubs, saltgrass, riprap, tidal marsh, and the open waters of Visitacion Creek and Brisbane Lagoon. These habitats host small mammals, reptiles and amphibians, fish, aquatic invertebrates, songbirds, waterbirds, shorebirds, and common species of butterflies.

Special-status species are plants and animals legally protected under FESA, CESA, or other regulations or policies such as the California Fish and Game Code, the Migratory Bird Treaty Act, California Species of Special Concern, or plants identified as rare by the CDFW or the California Native Plant Society (CNPS). Database searches of the California Natural Diversity Database (CNDDB), the CNPS Electronic Inventory, and the USFWS Information for Planning and Conservation (IPaC) species list were used to identify an initial list of special-status species and designated critical habitats[129] that may occur at the Baylands. Following the completion of biological surveys and review of available technical reports, a qualified Environmental Science

[129] "Critical habitat" is habitat designated by the USFWS as defined in Section 7 of the federal Endangered Species Act. Critical habitat includes the specific areas occupied by a federally listed threatened or endangered species at the time it was listed that contain the physical or biological features that are essential to the species and that may need special management or protection. Critical habitat may also include areas that were not occupied by the species at the time of listing but are essential to its conservation. In contrast, "suitable habitat" is habitat featuring ecological characteristics that may provide for the breeding, feeding, resting, or sheltering of any endangered and/or threatened wildlife species.

Associates biologist evaluated the likelihood for special-status species to occur within the Baylands. The results of this assessment are shown in **Table 4.6-2**. Of the species analyzed in **Table 4.6-2**, four special-status plants (Bent-flowered fiddleneck [*Amsinckia lunaris*], San Francisco collinsia [*Collinsia multicolor*], Choris's popcorn-flower [*Plagiobothrys chorisianus* var. *chorisianus*], and San Francisco campion [*Silene verecunda* ssp. *verecunda*]), Callippe silverspot butterfly, Bay checkerspot butterfly, monarch butterfly, and Alameda song sparrow were determined to have suitable habitat within the Baylands and, therefore, a potential to occur. In addition, three special-status fish were determined to have a moderate likelihood of occurring in Bay waters near the Baylands site: steelhead trout, green sturgeon, and longfin smelt. The Biological Resources Technical Report (EIR Appendix D) provides a more thorough review of plants and wildlife from the region and their habitat requirements.

Sensitive Butterfly Species

Icehouse Hill is the only area within the Baylands with habitat potential for listed butterfly species. In addition, common mustards and wild radish that grow on portions of Icehouse Hill and on disturbed lands within the Baylands provide habitat for the large marble butterfly (*Euchloe ausonides ausonides*) (Coast Ridge Ecology 2024). This butterfly is not a special-status species but was petitioned for listing as a federal endangered species in 2023 and is therefore described in this EIR.

The northern flanks and top of Icehouse Hill have been grazed by between 8 to 13 horses since 1996. For the most part, the southern, eastern, and western portions of Icehouse Hill are too steep for horse grazing. Such grazing can have both positive and negative impacts on a grassland ecosystem. The positive effects of grazing can include removing thatch build-up, reducing non-native grasses, preventing shrub encroachment, and creating openings for low-growing native vegetation to germinate and spread. Negative effects can include soil compaction, erosion, and degradation of native butterfly host and nectar plants through overgrazing of plants and trampling of butterfly larvae and pupae.

Nearby San Bruno Mountain has an operating Habitat Conservation Plan and is considered a potential source population for the Callippe silverspot, Bay checkerspot, Mission blue, and San Bruno elfin butterfly (San Mateo County Parks Department 2008).

Table 4.6-2: Special-Status Species with the Potential to Occur within the Specific Plan Area

Common Name	Scientific Name	Listing Status: Federal/State/ Other	Habitat	Potential to Occur within the Specific Plan Area
Plants				
Franciscan manzanita	*Arctostaphylos franciscana*	FE/—/1B.1	The original natural setting for this species is presumed to be bluffs and hills surrounding San Francisco Bay.	**Absent.** The five known individual Franciscan manzanita plants all occur in the Presidio of San Francisco and are under cultivation. This species was not observed during surveys and is not expected on the Baylands.
San Bruno Mountain manzanita	*Arctostaphylos imbricata*	—/CE/1B.1	Restricted to chaparral and coastal scrub habitats on San Bruno Mountain.	**Absent.** No chaparral present on the Baylands. No manzanita observed in coastal scrub on the Baylands.
Bent-flowered fiddleneck	*Amsinckia lunaris*	—/—/1B.2	Coastal bluff scrub, valley, and foothill grassland.	**Moderate.** Potential habitat exists on Icehouse Hill. Documented from San Bruno Mountain.
San Francisco collinsia	*Collinsia multicolor*	—/—/1B.2	Sometimes on serpentine soils in coastal scrub.	**Moderate.** May occur in coastal scrub habitat on Icehouse Hill. Occurs on nearby Bayview Hill and on San Bruno Mountain (Wood 1996). No serpentine soils occur on the Baylands.
Dark-eyed gilia	*Gilia millefoliata*	—/—/1B.2	Stabilized coastal dunes.	**Low.** Dune habitat does not occur on the Baylands.
Choris's popcorn-flower	*Plagiobothrys chorisianus* var. *chorisianus*	—/—/1B.2	Mesic areas in coastal prairie, coastal scrub, and chaparral.	**Moderate.** Potential habitat exists on Icehouse Hill. Recorded from Visitacion Valley historically (1961).
San Francisco campion	*Silene verecunda* ssp. *verecunda*	—/—/1B.2	Sandy soils in valley and foothill grassland, coastal scrub, and chaparral.	**Moderate.** Suitable habitat exists on Icehouse Hill. Occurs on San Bruno Mountain.
Invertebrates				
Western bumble bee[130]	*Bombus occidentalis*	—/SC/—	Found in high elevation meadows, forests, riparian areas in the Sierra Nevada and Cascade Mountain ranges, and in coastal grasslands of northern California. Historical habitat included shrublands, chaparral, gardens, and urban parks from sea level to over 8,000 feet.	**Low.** Suitable flowering nectar plants are present within the Baylands; however, the site is highly disturbed as a result of historic fill, grading, and development. Last observed at San Bruno Mountain in 1968 with no recent sightings.

[130] Since the Baylands site is primarily composed of unconsolidated fill, there have been no sightings of sensitive bee species within the Baylands, and the last local sighting of the western bumble bee was in 1968, bee surveys and further analysis were not warranted.

Common Name	Scientific Name	Listing Status: Federal/State/ Other	Habitat	Potential to Occur within the Specific Plan Area
Crotch's bumble bee	*Bombus crotchii*	—/SC/—	Inhabits open grassland and scrub habitats. Nests are often located underground in abandoned rodent nests, or above ground in tufts of grass, old bird nests, rock piles, or cavities in dead trees. Food plants include the following families of native plants: *Asclepias*, *Chaenactis*, *Lupinus*, *Medicago*, *Phacelia*, and *Salvia.*	**Low.** Suitable flowering nectar plants have limited distribution in the Baylands as a result of historic fill, grading, and development. No nearby sightings are reported.
San Bruno elfin butterfly	*Callophrys mossii bayensis*	FE/—/—	Coastal scrub and bunchgrass grassland habitats and rocky outcrops and cliffs, with larval foodplant, *Sedum spathulifolium*; adults nectar on *Lomatium utriculatum*, *Achillea millefolium*, *Arabis blepharophylla*, *Erysimum franciscanum*, *Ranunculus californicus*, and *Fragaria californica*. All known locations are restricted to San Mateo County where several populations are known from San Bruno Mountain, Milagra Ridge, the San Francisco Peninsula Watershed, and Montara Mountain.	**Absent.** May fly over the Baylands but suitable scrub and bunchgrass habitat is not present.
Monarch butterfly	*Danaus plexippus, pop. 1*	FC/—/—	Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby.	**Moderate.** No known roost sites at the Baylands but suitable overwintering (eucalyptus) trees are present.
Large marble butterfly	*Euchloe ausonides ausonides*	PL/—/—	Occur in a variety of open habitats, including grasslands, meadows, and disturbed and weedy areas. Associated with common mustards found throughout the Sacramento Valley and San Francisco Bay areas.	**High.** Weedy mustards such as wild radish, field mustard, and black mustard provide potential caterpillar habitat on much of the site. An on-site occurrence is reported from June 2022 in the vicinity of Icehouse Hill (iNaturalist 2024).
Bay checkerspot butterfly	*Euphydryas editha bayensis*	FT/—/—	Found in serpentine grasslands. Host plants for the butterfly are *Plantago erecta*, *Castilleja densiflora*, and *C. exserta*.	**Moderate.** *Plantago* host plants identified on Icehouse Hill. Known to be present on San Bruno Mountain.
Mission blue butterfly	*Icaricia icarioides missionensis*	FE/—/—	Inhabits grasslands of the San Francisco Peninsula. Has three larval host plants: *Lupinus albifrons*, *Lupinus variicolor*, and *Lupinus formosus*.	**Low.** Present on San Bruno Mountain, within 0.25-mile of Icehouse Hill. Host plants not identified on the Baylands.
Callippe silverspot butterfly	*Speyeria callippe callippe*	FE/—/—	Found in native grasslands with *Viola pedunculata* as larval food plant.	**Moderate.** Host plant widespread on Icehouse Hill; species known to occur on San Bruno Mountain.
Myrtle's silverspot butterfly	*Speyeria zerene myrtleae*	FE/—/—	Restricted to the foggy, coastal dunes/hills of the Point Reyes peninsula; extirpated from coastal San Mateo County. Larval food plant thought to be *Viola adunca*.	**Absent.** The Baylands is out of the species' known range.

Common Name	Scientific Name	Listing Status: Federal/State/ Other	Habitat	Potential to Occur within the Specific Plan Area
Fish				
Chinook salmon (winter-run ESU)	*Oncorhynchus tshawytscha*	FE/SE/—	Ocean waters, Sacramento, and San Joaquin Rivers; Migrates from ocean through San Francisco Bay-Delta to freshwater spawning grounds. Aquatic portions of the Action Area are designated as Critical Habitat.	**Low.** Chinook salmon typically enter the Sacramento River from November to June and spawn from late-April to mid-August, with a peak from May to June. They inhabit nearshore coastal waters of Central California throughout the year, but especially during migration periods.
Chinook salmon (spring-run ESU)	*Oncorhynchus tshawytscha*	FT/ST/—	Ocean waters, Sacramento, and San Joaquin Rivers; Migrates from ocean through San Francisco Bay-Delta to freshwater spawning grounds.	**Low.** Chinook salmon typically enter the Sacramento River from November to June and spawn December to April. They inhabit nearshore coastal waters of Central California throughout the year, but especially during migration periods.
Steelhead Trout (Central California Coast Distinct Population Segment)	*Oncorhynchus mykiss*	FT	Requires cold, freshwater streams with suitable gravel for spawning. Rears in rivers and tributaries to the San Francisco Bay. San Francisco Bay is designated as Critical Habitat.	**Moderate.** Foraging and movement habitat is present near the Baylands in the Bay and Brisbane Lagoon; however, habitat is not present on-site.
Steelhead Trout (Central Valley Distinct Population Segment)	*Oncorhynchus mykiss*	FT	Ocean waters, Sacramento, and San Joaquin Rivers; Migrates from ocean through San Francisco Bay-Delta to freshwater spawning grounds. Aquatic portions of the Action Area are designated as Critical Habitat.	**Low.** Limited foraging habitat for this species within the Baylands. No streams supporting spawning runs are present within or in the vicinity of the Baylands. There is a moderate potential for occurrence during migration between the Sacramento River watershed and the Pacific Ocean.
North American green sturgeon, Southern Distinct Population Segment	*Acipenser medirostris*	FT/—/—	Within the marine environment, the Southern Distinct Population Segment occupies coastal bays and estuaries from Monterey Bay to Puget Sound in Washington. All of San Francisco Bay is designated Critical Habitat for green sturgeon.	**Moderate.** This species migrates from the Pacific Ocean to spawning habitat in the Sacramento River watershed but may forage in Bay waters near the Baylands.
Hardhead	*Mylopharodon conocephalus*	—/CSC/—	Found in relatively undisturbed habitats of larger streams with cool, clear water, slow velocities, and containing sand, gravel, and boulder substrates.	**Absent.** Suitable habitat is not present at the Baylands. Historical presence documented in Alameda and Coyote Creeks, tributaries of the San Francisco Bay, though current status is unknown.
Longfin smelt	*Spirinchus thaleichthys*	FC/ST/—	Found throughout the nearshore coastal waters and open waters of San Francisco Bay-Delta including the river channels and sloughs of the Delta. Spawns in the Delta.	**Moderate.** This species is documented consistently within open water habitat of Central San Francisco Bay, including the waters near the Baylands.

Common Name	Scientific Name	Listing Status: Federal/State/ Other	Habitat	Potential to Occur within the Specific Plan Area
Pacific herring	*Clupea pallasii*	SMCCF/—/—	San Francisco Bay is a major spawning ground for species. Preferred spawning substrate is eelgrass and algae but will also use pier pilings, riprap, and other rigid, smooth structures within Bay waters.	**Low.** This species spawns in San Francisco Bay and occurs throughout the San Francisco waterfront. However, no suitable habitat occurs in the vicinity of the Baylands.
Delta smelt	*Hypomesus transpacificus*	FT/SE/—	Open surface waters in the Sacramento–San Joaquin Delta. Seasonally in Suisun Bay, Carquinez Strait, and San Pablo Bay. Found in Delta estuaries with dense aquatic vegetation and low occurrence of predators.	**Absent.** Historically abundant throughout the Bay-Delta, now extremely rare. At present, primarily confined to Suisun Bay and a few tidal channels and flooded islands within Suisun Marsh and the Delta.
Tidewater goby	*Eucyclogobius newberryi*	FE/—/—	Brackish water habitats along the California coast from Agua Hedionda Lagoon, San Diego County, to the mouth of the Smith River. Found in shallow lagoons and lower stream reaches.	**Absent.** Historically abundant. At present, no population exists in San Francisco Bay.
Reptiles and Amphibians				
Western pond turtle	*Emys marmorata*	—/CSC/—	An aquatic turtle of freshwater ponds, marshes, rivers, streams, and irrigation ditches with aquatic vegetation. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 kilometers from water for egg-laying.	**Absent.** Tidal aquatic habitat in Brisbane Lagoon and Visitacion Creek is considered limiting for this species. There are also no nearby source populations for turtles to colonize the site. In addition, upland habitat is limited by roads and riprap.
California red-legged frog	*Rana draytonii*	FT/CSC/—	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby, or emergent riparian vegetation. Requires 11–20 weeks of permanent water for larval development. Must have access to aestivation habitat.	**Absent.** No suitable habitat present. Nearest occurrence located approximately 6 miles from the Baylands in Golden Gate Park, San Francisco County.
San Francisco garter snake	*Thamnophis sirtalis tetrataenia*	FE/SE/FP	Densely vegetated ponds and wetlands near open hillsides with small mammal burrows.	**Absent.** No suitable freshwater wetland habitat present. Species is extremely rare and exists in scattered populations on the San Francisco Peninsula.
California tiger salamander	*Ambystoma californiense*	—/ST/—	Lives in underground refuges, especially ground squirrel burrows throughout most of the year; in grassland, savanna, or open woodland habitats. Requires vernal pools or other seasonal water sources for breeding.	**Absent.** The Baylands is out of species' known range.
Birds				
Burrowing owl	*Athene cunicularia*	—/CSC, SC	Found in short grasslands with gentle slopes, such as pastures, fallow fields, and vacant lots with adequate small mammal burrows.	**Low (nesting).** Suitable open grasslands with short vegetation are scarce in the Baylands, and human disturbance is widespread. Due to the prior site management, ground squirrel host burrows are also lacking on-site. Non-nesting owls could pass through the site during winter but are not expected to take residency on the site.

Common Name	Scientific Name	Listing Status: Federal/State/ Other	Habitat	Potential to Occur within the Specific Plan Area
Marbled murrelet	*Brachyramphus marmoratus*	FT/SE/—	Feeds near-shore; nests inland along coast from Eureka to Oregon border and from Half Moon Bay to Santa Cruz. Nests in old-growth redwood-dominated forests, up to 6 miles inland, often in Douglas-fir.	**Absent.** Suitable habitat is not present at the Baylands.
Western snowy plover	*Charadrius nivosus nivosus*	FT/—/—	Sandy beaches, salt pond levees, and shores of large alkali lakes. Needs sandy, gravelly, or friable soils for nesting.	**Absent.** Suitable habitat is not present at the Baylands
Saltmarsh common yellowthroat	*Geothlypis trichas sinuosa*	—/CSC/—	Resident of the San Francisco Bay region, in fresh and saltwater marshes. Requires thick, continuous cover down to water surface for foraging; tall grasses, tule patches, willows for nesting.	**Low.** Known breeding range in coastal areas of San Francisco, but tidal marsh habitat at the Baylands is sparse and insufficiently dense to suit this species.
California black rail	*Laterallus jamaicensis coturniculus*	—/ST/FP	Inhabits freshwater marshes, wet meadows, and shallow margins of saltwater marshes bordering larger bays. Needs water depths of about 1 inch that do not fluctuate during the year and dense vegetation for nesting habitat.	**Low.** Freshwater and brackish marsh habitat is sparse and fragmented within the Baylands and species is rare in San Francisco Bay.
Alameda song sparrow	*Melospiza melodia pusillula*	—/CSC/—	Resident of salt marshes bordering south arm of San Francisco Bay. Inhabits *Salicornia* marshes; nests low in *Grindelia* bushes (high enough to escape high tides) and in *Salicornia*.	**Moderate.** Suitable foraging and nesting habitat are present along Visitacion Creek and areas of the Lagoon.
Short-tailed albatross	*Phoebastria (Diomedea) albatrus*	FE/CSC/—	Pelagic seabird that typically nests on remote islands in the Pacific Ocean. An individual was observed off the San Francisco coast in 2009.	**Absent.** Not expected near the San Francisco Bay.
California Ridgway's rail	*Rallus obsoletus*	FE/CE/—	Salt water and brackish marshes traversed by tidal sloughs in the vicinity of San Francisco Bay. Associated with abundant growths of pickleweed but feeds away from cover on invertebrates from mud-bottomed sloughs.	**Low.** Protocol surveys at the site were negative (Edelstein 2020). Tidal marsh habitat at the site is limited and highly disturbed, and not expected to support this species. Nearest documented occurrence of this species is 8.5 miles to the south in Redwood City.
Bank swallow	*Riparia riparia*	—/ST/—	Colonial nester; nests primarily in riparian and other lowland habitats west of the desert. Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, ocean to dig nesting hole.	**Absent.** Suitable habitat is not present at the Baylands.
California least tern	*Sterna antillarum browni*	FE/SE/FP	Nests along the coast from San Francisco Bay south to northern Baja California. Colonial breeder on bare or sparsely vegetated, flat substrates: sand beaches, alkali flats, landfills, or paved areas.	**Absent.** No nesting habitat is available at the Baylands, which is highly disturbed. The nearest nesting colony occurs in Alameda.

Common Name	Scientific Name	Listing Status: Federal/State/ Other	Habitat	Potential to Occur within the Specific Plan Area
Northern spotted owl	*Strix occidentalis caurina*	FT/ST/—	Old-growth forests or mixed stands of old-growth and mature trees. Occasionally in younger forests with patches of big trees. High, multistory canopy dominated by big trees, many trees with cavities or broken tops, woody debris, and space under canopy.	**Absent.** Suitable habitat is not present at the Baylands.
Mammals				
Townsend's big-eared bat	*Corynorhinus townsendii*	—/CSC/WBWG – H	Throughout California in a wide variety of habitats. Most common to mesic sites. Roosts in caves and in the open, hanging from walls and ceilings. Very sensitive to human disturbance.	**Low.** The Baylands has potential roosting habitat in disused structures; suitable foraging habitat is present overwater, but species is highly sensitive to disturbance.
Hoary bat	*Lasiurus cinereus*	—/—/WBWG-M	Prefers open habitats or habitat mosaics, with access to trees for cover and open areas or habitat edges for feeding. Roosts in dense foliage of medium to large trees. Feeds primarily on moths.	**Moderate.** Suitable open habitat with access to trees and habitat edges is provided at the Baylands.
Salt marsh harvest mouse	*Reithrodontomys raviventris*	FE/SE/FP	Only found in the saline emergent wetlands of San Francisco Bay and its tributaries. Pickleweed is primary habitat but may occur in other marsh vegetation types and in adjacent upland areas. Does not burrow; builds loosely organized nests. Requires higher areas for flood escape.	**Absent.** Tidal marsh habitat at the Baylands is limited and fragmented. Nearest occurrence of this species is approximately 8.5 miles south of the Baylands in Redwood City.
Marine Mammals				
California sea lion	*Zalophus californianus*	P/—/—	California sea lions reside in the Eastern North Pacific Ocean in shallow coastal and estuarine waters.	**Low.** California sea lions occur within the Bay-Delta while migrating to and from their primary breeding areas on the Farallon and California Channel Islands, and when high numbers of Pacific herring and salmon inhabit Bay-Delta waters. No breeding, pupping, or haul-out sites occur within the Baylands. However, a single individual was observed in the lagoon in 2020 (Biohabitats 2023a).
Harbor seal	*Phoca vitulina richardsii*	P/—/—	Near-shore Pacific species with up to 500 haul-out sites for the harbor seal distributed along their Pacific coast range.	**Low.** The harbor seal is a permanent resident in San Francisco Bay. Harbor seals have established haul out sites at Castro Rocks in San Pablo Bay, Yerba Buena Island in the Central Bay, and Mowry Slough in the South Bay.
Harbor porpoise	*Phocoena phocoena*	P/—/—	Near-shore species that inhabit northern temperate and subarctic coastal and offshore waters. In the North Pacific, they are found from Japan north to the Chukchi Sea and from Monterey Bay, CA, to the Beaufort Sea. They are most often observed in Bays, estuaries, harbors, and fjords less than 650 feet (200 meters) deep, like the San Francisco Bay-Delta.	**Absent.** Common in the vicinity of the Golden Gate Bridge and Richardson's Bay, rare south of the Bay Bridge and not expected in Visitacion Creek or Brisbane Lagoon.

Common Name	Scientific Name	Listing Status: Federal/State/ Other	Habitat	Potential to Occur within the Specific Plan Area
Bottlenose dolphin	*Tursiops truncatus*	P/—/—	The California coastal stock of bottlenose dolphin is relatively small. They spend most of the time in nearshore waters and thus can be frequently seen. Bottlenose dolphins are most often observed just east of the Golden Gate Bridge and within the Golden Gate; their presence may depend on the tides.	**Absent.** Common in the vicinity of the Golden Gate Bridge and Richardson's Bay, rare south of the Bay Bridge and not expected in Visitacion Creek or Brisbane Lagoon.
Gray whale	*Eschrichtus robustus*	P/—/—	Occurs in coastal California waters during late fall-winter southward migration and again late winter to early summer during their northward migration.	**Absent.** Seasonally present within San Francisco Bay during migration periods. This species could not pass through culverts into site waters.
Humpback whale	*Megaptera noveangli*	FE/—/—	The central California population of humpback whales migrates from their winter calving and mating areas off Mexico to their summer and fall feeding areas off coastal California. Humpback whales occur in San Francisco Bay from late April to November.	**Absent.** Seasonally present within San Francisco Bay between April and July. This species could not pass through culverts into site waters.

SOURCE: Environmental Science Associates

POTENTIAL FOR SPECIES OCCURRENCE RANKINGS:

Absent – The species was historically present but is either extirpated or has not been documented to be present or, if present, the presence is extremely rare.
Low – Suitable foraging or spawning habitat is present, but the species has either not been documented to be present or if present, the presence is infrequent.
Moderate – Suitable foraging or spawning habitat is present, and the species has been documented to be present for part of the year.
High – Suitable foraging or spawning habitat is present, and the species has been documented to be present throughout the year and/or in substantial numbers.

STATUS CODES:

Federal: National Oceanographic and Atmospheric Administration (NOAA); Marine Mammal Protection Act

P = Federally Protected

Western Bat Working Group (WBWG)

WBWG-H = High priority; species that are imperiled or at a high risk of imperilment
WBWG-M = Medium priority; species that warrant a closer evaluation due to potential imperilment

CNPS

1B.1 Plants rare, threatened, or endangered in California and elsewhere

Federal: NMFS; USFWS; FESA

FE = Listed as "endangered" (in danger of extinction) under FESA
FT = Listed as "threatened" (likely to become endangered within the foreseeable future) under FESA
FC = Candidate for federal listing
SMCCF = State-Managed California Commercial Fishery
PL = Petitioned for federal listing; no protected status

State: CDFW; CESA

SE = Listed as "endangered" under CESA
ST = Listed as "threatened" under CESA
SC = Candidate for state listing
CSC = California Species of Special Concern
FP = Fully Protected

Mission Blue Butterfly (*Icaricia icarioides missionensis*)

The Mission blue is a small, delicate blue and lavender butterfly with a wingspan of about 2.5 to 3.6 centimeters (1.0 to 1.5 inches). The Mission blue is restricted to grassland areas in which the preferred host species grow, including silver lupine (*Lupine albifrons*) and summer lupine (*Lupine formosus*). Varied lupine (*Lupine variicolor*) can host larvae only when it is associated with the previous two preferred host species. These plant species are present on the northeast ridge of the San Bruno Mountain State & County Park. This habitat is currently present and protected at San Bruno Mountain (San Mateo County Parks Department 2008).

As reported by Coast Ridge Ecology (2023), 180 Mission blue butterflies were recorded during transect surveys on San Bruno Mountain in 2021 (San Mateo County Parks Department 2022). Although Icehouse Hill is separated from San Bruno Mountain by roads and commercial development, the distance between Icehouse Hill and San Bruno Mountain is within the dispersal range of the Mission blue butterfly, which has been found to move up to approximately 0.25 miles between habitat patches. The species is likely to move further during multiple movements between habitat areas.

None of the Mission blue butterfly larval host plants (*Lupinus albifrons*, *L. variicolor*, and *L. formosus*) were detected during surveys of the Specific Plan area and this species is thus unlikely to occur on Icehouse Hill or other portions of the Baylands.

San Bruno Elfin Butterfly (*Callophrys mossii bayensis*)

The San Bruno elfin is a small brownish butterfly with a 1-inch wingspan. The host plant is the succulent stonecrop (*Sedum spathulifolium*), which grows between 900- and 1,075-feet elevation. On San Bruno Mountain, the host plant and the butterfly occur in the fog belt at the higher areas of the main ridge. Due to this altitude range and the absence of suitable scrub and bunchgrass habitat, the San Bruno elfin is unlikely to occur on Icehouse Hill or other portions of the Specific Plan area (San Mateo County Parks Department 2008).

Bay Checkerspot Butterfly (*Euphydryas editha bayensis*)

The Bay checkerspot is a medium-sized butterfly with a wingspan of 2 inches with black bands along wing veins that contrast with red, yellow, and white spots. The primary larval host plant is dwarf plantain (*Plantago erecta*), and the larvae use purple owl's clover (*Castilleja densiflora* or *Castilleja exserta*) as a second host plant.

This species was extirpated from San Bruno Mountain in the 1980s; however, the species was reintroduced to San Bruno Mountain beginning in 2017. Since then, several thousand Bay checkerspot larvae have been translocated to San Bruno Mountain from Coyote Ridge in Santa Clara County by Creekside Science biologists (San Mateo County Parks Department 2022). In

2021, there was estimated to be over 6,000 Bay checkerspot larvae on the mountain, and the larvae have been observed feeding on native host plants (Coast Ridge Ecology 2023).

Small numbers of *Plantago* host plants are present on Icehouse Hill (Coast Ridge Ecology 2023). However, the host plants for the Bay checkerspot are much more widespread than the butterfly, and, although host plants for the species were detected at Icehouse Hill, it is unlikely that Bay checkerspots are present due to the large distance (over 1 mile) between Icehouse Hill and the areas where the species is present on San Bruno Mountain.

Callippe Silverspot Butterfly (*Speyeria callippe callippe*)

The Callippe silverspot is large in comparison to the Mission blue or San Bruno elfin, with 2.5 inches of wingspan and an orange-brown pattern on both sides of its wings. The Johnny jump-up is the only host plant used by the Callippe silverspot to feed in their larval stages. This host plant is present in large numbers on Icehouse Hill (Coast Ridge Ecology 2023) and is also present at the adjacent San Bruno Mountain State & County Park. Johnny jump-up is found in mesic to dry open grasslands on both north and south-facing slopes. It can grow on disturbed road cuts and gopher mounds, under partial shade, and in transition areas between grasslands and scrub. Some of the surrounding Habitat Conservation Plan areas, such as the Carter/Martin management unit, have lost substantial amounts of Callippe silverspot habitat due to invasive weed infestations and brush succession over the past several decades (San Mateo County Parks Department 2008).

As reported by Coast Ridge Ecology (2023), Icehouse Hill is located within approximately 1000 feet of the San Bruno Mountain Habitat Conservation Plan area, which supports an extensive population of Callippe silverspots. In 2022, the San Mateo County Parks Department reported 266 Callippe silverspots seen during their biannual transect surveys (San Mateo County Parks Department 2022). Although Icehouse Hill is separated from San Bruno Mountain by roads and commercial development, the distance between Icehouse Hill and San Bruno Mountain is well within the flight range of the Callippe silverspot, which has been found to move up to approximately 0.75 miles between habitat patches (Thomas Reid Associates 1982) and can fly several hundred feet in a single traveling flight.

While Callippe silverspot was not observed in either the 2020 or 2023 surveys, San Bruno Mountain offers a potential source population for habitat patches within Icehouse Hill. The distance between Icehouse Hill and the easternmost point of San Bruno Mountain (the Carter-Martin management unit) is 0.23 miles. This is less than the reported 0.75-mile dispersal distance for Callippe silverspot.

Large Marble Butterfly (*Euchloe ausonides ausonides*)

The large marble is a medium-sized butterfly with characteristic white spots and yellow veining. In October 2023, the Xerces Society petitioned the USFWS to list the type subspecies of

the large marble butterfly as an endangered species (Xerces Society 2023). As of this publication, this subspecies is not regulated as a "special-status species" under CEQA and receives no legal protection under the California or Federal Endangered Species Acts. Several common noxious weeds that occur within natural, developed, and ruderal portions of the Baylands and Icehouse Hill provide potential large marble caterpillar food sources. Potential host plants for this species on the Brisbane Bay Lands property (wild radish and field mustard) are ubiquitous invasive species found throughout the San Francisco Bay Area and California (Coast Ridge Ecology, 2024). There is one reported observation of large marble within the Specific Plan area; an unverified occurrence from 2021 reported near the base of Icehouse Hill (Coast Ridge Ecology, 2024; iNaturalist 2024). This species may be encountered in association with disturbed and ruderal habitats at Icehouse Hill and elsewhere within the Baylands.

Sensitive Bird Species

California Ridgway's Rail (*Rallus obsoletus obsoletus*)

California Ridgway's rail, also known as California clapper rail, was listed as endangered on October 13, 1970. An updated recovery plan was finalized in August 2013 for this species (along with four other endangered species) in the *Recovery Plan for Tidal Marsh Ecosystems of Northern and Central California* (Recovery Plan) (USFWS 2013).

Ridgway's rail prefers larger marshes with high tide refugia and mudflats for foraging, and high density of channels and variety of marsh vegetation from cordgrass (*Spartina foliosa*) to high marsh gumplant (*Grindelia* sp.). Ridgway's rails are restricted almost entirely to the marshes of San Francisco estuary, where they inhabit a range of salt and brackish marshes. In south and central San Francisco Bay and along the perimeter of San Pablo Bay, rails typically inhabit salt marshes dominated by pickleweed (*Salicornia virginica*) and Pacific cordgrass. Pacific cordgrass dominates the middle marsh zone throughout the south and central Bay. Protocol-level surveys for the Ridgway's rail were conducted at Brisbane Lagoon February to March 2020 (Edelstein 2020) and did not find the species to be present. In addition, a reconnaissance survey in February 2023 found the tidal marsh habitat too small, disturbed, and fragmentary to support this species (ESA 2023).

Burrowing Owl (*Athene cunicularia*)

Western burrowing owl is a CDFW Species of Special Concern and state candidate for listing under the California Endangered Species Act. Potential impacts to burrowing owls and their nests fall under the jurisdiction of the Migratory Bird Treaty Act, CEQA, California Fish and Game Code Sections 3500, 3503.5, and 3800, and the California Endangered Species Act.

The burrowing owl is a small, predominantly diurnal ground-nesting bird. Burrowing owls are year-round residents in much of their range, including California (Shuford and Gardali 2008) and are found in a variety of annual grasslands and open areas with small mammal burrows.

Burrowing owls require low vegetative cover for vantage and adequate perch sites. Burrowing owls prefer level to gently sloping areas (Haug et al. 1993), such as annual grasslands, shortgrass prairie, pastures, hayfields, and fallow fields (Dechant et al. 2002). Burrowing owls also occur in urban and agricultural habitats adjacent to roads and railroads, irrigation ditches, and vacant lots where grasses are mowed (Dechant et al. 2002). Throughout California, western burrowing owls primarily use California ground squirrel (*Otospermophilus beecheyi*) burrows. Recent reconnaissance surveys did not observe suitable burrow habitat for this species; grasses and vegetation were too long for owl vantage, and open areas were prone to human and vehicle disturbance. Non-nesting owls are expected to sporadically pass through the site, but they are not expected to take residency on the site.

Wildlife Movement

Wildlife movement corridors are considered an important ecological resource by the CDFW and the USFWS. Movement corridors may provide favorable locations for wildlife to travel between different habitat areas such as foraging sites, breeding sites, cover areas, and preferred summer and winter range locations. They may also function as dispersal corridors, allowing animals to move between various locations within their range. Topography and other natural factors, in combination with human disturbance or urban development, can fragment or separate large open-space areas and wildlife habitats, thus impeding wildlife movement between areas of suitable habitat. This fragmentation creates isolated "islands" of habitat that are separated from other natural habitats. When available, wildlife movement corridors mitigate the effects of this fragmentation by allowing animals to move between remaining habitats, which in turn allows depleted populations to be replenished and promotes genetic exchange between separate populations.

The Brisbane Baylands site is not part of an established terrestrial wildlife movement corridor because it does not provide a connection between different habitat areas; rather, the site is isolated, and site conditions demonstrate the site history of industrial use areas. The site is physically separated from similar habitats that occur locally, such as those at San Bruno Mountain.

Terrestrial and Marine Species

Currently, there is little potential for regional movement of terrestrial wildlife species onto or through the Baylands site. Existing physical barriers to wildlife movement include major roads and highways, industry, railroad tracks, above-ground electrical utility lines, pipelines, and fences. Wildlife may move along Visitacion Creek and within the freshwater marshes in the western portion of the site, but such use would be limited.

Fish and other aquatic species may enter Brisbane Lagoon and Visitacion Creek through culverts under US Highway 101, but waters do not provide or connect to fish spawning habitat

for any species. Marine mammals occasionally stray into Brisbane Lagoon or visit while foraging, as noted when a sea lion entered Brisbane Lagoon in 2020 (Biohabitats 2023a). Such use is not, however, typical.

Butterflies

Although none of the four sensitive butterfly species has been observed, Icehouse Hill provides habitat patches for certain species with a potential wildlife connection to habitat on San Bruno Mountain. The distance between Icehouse Hill and the easternmost point of San Bruno Mountain is within the potential dispersal distance for Mission blue and Callippe silverspot butterflies. However, while host plants for the Callippe silverspot are present on Icehouse Hill, host plants for the Mission blue have not been identified. One small patch of the host plant for the Bay checkerspot, *Plantago erecta*, was detected at the southeastern corner of Icehouse Hill; however, although the host plant for the species was detected at Icehouse Hill, it is unlikely that Bay checkerspots have dispersed to Icehouse Hill as a result of the large distance (over 1 mile) between Icehouse Hill and the areas where the species is present on San Bruno Mountain.

Avian Species

The San Francisco Peninsula and Bay are a key link in the Pacific Flyway for migratory birds during spring and fall. Exposed bay mud along the shoreline provides important feeding and resting habitat for shorebirds. Migrating birds that forage in intertidal and marine environments may use San Francisco Bay during migration and may use the existing small pockets of habitat in Brisbane Lagoon to move between larger, contiguous habitat that is present on the Bay shoreline; however, because the terrestrial study area and shoreline are developed or highly disturbed, these areas do not offer high-quality habitat for migrating birds.

Fish Movement

Numerous fish species use open bay habitat and are expected to forage within Brisbane Lagoon, entering and leaving the lagoon with fluctuating tides. Such species may include the bat ray (*Myliobatis californica*), leopard shark (*Triakis semifasciata*), striped bass (*Morone saxatilis*), shiner surfperch (*Cymatogaster aggregata*), white croaker (*Genyonemus lineatus*), and jacksmelt (*Atherinopsis californiensis*); as well as smaller fish such as bay pipefish (*Syngnathus leptorhynchus*), three-spined stickleback (*Gasterosteus aculeatus*), northern anchovy (*Engraulis mordax*), topsmelt silverside (*Atherinops affinis*), Pacific staghorn sculpin (*Leptocottus armatus*), starry flounder (*Platichthys stellatus*), and yellowfin goby (*Acanthogobius flavimanus*), among many others.

c. Existing Off-Site Biological Resources

Offsite lands, including the relocation site for Fire Station No. 81, the existing Bayshore School, and the Martin Substation, have been fully urbanized and do not contain sensitive biological

resources. Offsite utility lines (potable and recycled water lines) would be installed underneath Bayshore Boulevard. Lands along the Bayshore Boulevard corridor include introduced vegetation along most of its length. Biological resources along the east side of Bayshore Boulevard adjacent to the Specific Plan were described above as part of the Specific Plan area.

4.6.3 REGULATORY CONTEXT FOR BAYLANDS DEVELOPMENT

a. Federal Laws, Plans, Programs, and Regulations

Federal Endangered Species Act of 1973, as amended (16 U.S.C. §§1531–1543)

The Federal Endangered Species Act (FESA) (16 United States Code [USC] § 1531 et seq.) and subsequent amendments provide guidance for the protection of plants and animals listed as endangered or threatened by the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS). In addition, FESA defines species as threatened or endangered and provides regulatory protection for listed species. FESA also provides a program for the conservation and recovery of threatened and endangered species as well as the conservation of designated critical habitat that the USFWS determines is required for the survival and recovery of these listed species.

Protection of Species not on a Federal or State List of Protected Species California Environmental Quality Act Guidelines Section 15380

Although threatened and endangered species are protected by specific federal and state statutes, CEQA Guidelines Section 15380(b) provides that a species not listed on the federal or state list of protected species may be considered rare or endangered if the species can be shown to meet certain specified criteria. Pursuant to its rarity status, any impacts to rare species could be considered a significant effect on the environment (CEQA Guidelines Section 15382). This section relates to situations where a project may have a significant effect on, for example, a candidate species that has not been listed by either the USFWS or the CDFW. CEQA also calls for the protection of other locally or regionally significant resources, including natural communities.

Applicable sections of the Federal Endangered Species Act include:

- Section 7, which requires federal agencies to consult with the USFWS, as appropriate, to ensure that the actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of threatened or endangered fish, wildlife, or plant species or result in the destruction or adverse modification of designated critical habitat for any such species. As part of the consultation, the USFWS and NMFS will issue a Biological Opinion and may include an incidental take statement for wildlife species to exempt the Section 9 take prohibition. A nexus for Section 7 consultation at the Specific Plan area would occur as a result of initiation of a federal permitting process such as pursuit of a permit from the USACE.

- Section 9 and its implementing regulations identify prohibited actions, including the "take"[131] of any fish or wildlife species listed under FESA as endangered or threatened, unless otherwise authorized by federal regulations. Although unauthorized take of a listed species is prohibited, take may be allowed when it is incidental to an otherwise legal activity. Section 9 prohibits the take of listed species of fish, wildlife, and plants without special exemption.
- Section 10, which provides a process by which non-federal entities may obtain an Incidental Take Permit from the USFWS or the NMFS for otherwise lawful activities that might incidentally result in "take" of endangered or threatened species, subject to specific conditions.

FESA requires the federal government to designate critical habitat for any species listed under FESA but also allows areas to be excluded from critical habitat (16 U.S.C., § 1533(b)(2)). Critical habitat is a specific area occupied by the species that is "essential for the conservation" of a threatened or endangered species and that "may require special management considerations or protection" (16 U.S.C., § 1532(5)(A)(i)). Critical habitat may also include specific areas outside the geographical area occupied by the species if the agency determines that the area itself is essential for conservation (16 U.S.C., § 1532(5)(B)). Critical habitat includes areas identified under Section 4 of the FESA (16 USC § 1532(5)(A)). Designated critical habitats are described in 50 CFR Parts 17 and 226.

Migratory Bird Treaty Act (16 USC §§ 703–712)

The federal Migratory Bird Treaty Act of 1918 (MBTA) is the domestic law that affirms and implements a commitment by the U.S. to four international conventions (with Canada, Mexico, Japan, and Russia) for the protection of a shared migratory bird resource. The Act provides that it shall be unlawful, except as permitted by regulations, to pursue, take, or kill any migratory bird, or any part, nest, or egg of any such bird (listed at 50 CFR Part 10.13 as modified by 75 Federal Register 9281). *Take* is defined broadly under the MBTA to include actions to pursue, hunt, capture, kill, collect, possess, sell, barter, and/or transport migratory birds, or to attempt such activities (16 U.S.C., § 703(a)). *Take* refers to both live and deceased birds and their parts, including feathers, nests, and eggs. The list of migratory bird species protected by the law is published by the USFWS and was most recently updated in 2020 (50 C.F.R., § 10.13). The Act

[131] The term "take" includes actions to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. "Harm" includes significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns related to breeding, feeding, or shelter. "Harass" includes actions that create the likelihood of injury to listed species by disrupting normal behavioral patterns related to breeding, feeding, and shelter significantly. The definition of "harm" includes significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns related to breeding, feeding, or shelter. "Harass" is defined as actions that create the likelihood of injury to listed species by disrupting normal behavioral patterns related to breeding, feeding, and shelter significantly.

also applies to disturbance and removal of nests occupied by migratory birds or their eggs during the breeding season, whether intentional or incidental.

The Migratory Bird Treaty Reform Act of 2004 amends Sections 703 to 712 such that 94 non-native bird species that have been introduced by humans to the United States or its territories are excluded from protection. Thus, only species considered that were native to the United States in 1918 are included.

The U.S. Department of the Interior's Office of the Solicitor issued a legal, revised interpretation (Opinion M-37050) of the Migratory Bird Treaty Act's prohibition on the take of migratory bird species. Opinion M-37050 concludes that "consistent with the text, history, and purpose of the MBTA, the statute's prohibitions on pursuing, hunting, taking, capturing, killing, or attempting to do the same apply only to affirmative actions that have as their purpose the taking or killing of migratory birds, their nests, or their eggs." According to Opinion M-37050, take of a migratory bird, its nest, or eggs that is incidental to another lawful activity does not violate the MBTA, and the MBTA's criminal provisions do not apply to those activities. Opinion M-37050 affects how the MBTA is interpreted regarding incidental take (i.e., take that is incidental to otherwise lawful activities), but it does not legally change the regulation itself.

The Ninth Circuit Court of Appeals, the controlling federal appellate court for California, has also held that habitat modification that harms migratory birds "does not 'take' them within the meaning of the MBTA" (Seattle Audubon Soc. v. Evans, (1981) 952 F.2d 297, 303). The current list of species protected by the MBTA can be found in Title 50 of the CFR, Section 10.13. The list includes nearly all birds that are native to the U.S.

Marine Mammal Protection Act

The Marine Mammal Protection Act (50 CFR 216) prohibits, with certain exceptions, the take of marine mammals in U.S. waters and by U.S. citizens on the high seas, and the importation of marine mammals and marine mammal products into the United States. This Act defines "take" as hunting, harassing, capturing, or killing any marine mammal or attempting to do so. "Harassment" is defined as any act of "pursuit, torment, or annoyance" that has the potential to injure a marine mammal or cause disruption of essential behavioral patterns, including feeding, sheltering, migration, breeding, nursing, or breathing. Most of the Act's provisions are related to commercial fishing and subsistence hunting. The Act also outlines procedures for obtaining permits for the take of small numbers of marine mammals, incidental to otherwise legal activities.

b. State Laws, Plans, Programs, and Regulations

California Endangered Species Act (California Fish and Game Code §§ 2050 et seq.)

The California Endangered Species Act (CESA) establishes the policy of the state to conserve, protect, restore, and enhance rare, threatened, or endangered species and their habitats. CESA mandates that state agencies do not approve projects that would jeopardize the continued existence of threatened or endangered species if reasonable and prudent alternatives are available that would avoid jeopardy. The state definition of *take* means "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill" and is similar to the federal definition, except that Section 2080 does not prohibit indirect harm to listed species by way of habitat modification (Cal. Fish & G. Code, § 86). Proponents of a project affecting a state-listed species must consult with the CDFW and enter into a management agreement and take permit under Section 2080. For projects that would affect a listed species under both the state and federal Endangered Species Acts, compliance with the FESA would satisfy the state requirements if the California Department of Fish and Wildlife determines that the federal incidental take authorization is "consistent" with the CESA under California Fish and Game Code Section 2080.1. Comparable to the FESA process, the CESA contains a procedure for the CDFW to issue a Section 2081 Incidental Take Permit authorizing the take of listed and candidate species incidental to an otherwise lawful activity, subject to specified conditions, including that the take impacts are fully mitigated, and the permit is consistent with any regulations adopted pursuant to any recovery plan for the species.

California Fish and Game Code Sections 2080 and 2081

Section 2080 of the California Fish and Game Code states, "No person shall import into this state [California], export out of this state, or take, possess, purchase, or sell within this state, any species, or any part or product thereof, that the [State Fish and Game] Commission determines to be an endangered species or threatened species, or attempt any of those acts, except as otherwise provided in this chapter, or the Native Plant Protection Act, or the California Desert Native Plants Act." Pursuant to Section 2081, the CDFW may authorize individuals or public agencies to import, export, take, or possess state-listed endangered, threatened, or candidate species. These otherwise prohibited acts may be authorized through permits or Memoranda of Understanding, if the take is incidental to an otherwise lawful activity, impacts of the authorized take are minimized and fully mitigated, the permit is consistent with any regulations adopted pursuant to any recovery plan for the species, and the project operator ensures adequate funding to implement the measures required by the CDFW. The CDFW makes this determination based on available scientific information and considers the ability of the species to survive and reproduce.

Migratory Birds and Raptors - California Fish and Game Code Sections 3503, 3503.5, 3513, and 3800

California Fish and Game Code Sections 3503, 3503.5, 3513, and 3800 prohibit a project operator from conducting activities that would result in the taking, possessing, or destroying of any birds of prey; the taking or possessing of any migratory nongame bird; the taking, possessing, or needlessly destroying of the nest or eggs of any raptors or nongame birds; or the taking of any nongame bird pursuant to Fish and Game Code Section 3800, whether intentional or incidental.

Lake and Streambed Alteration Agreements - California Fish and Game Code Sections 1600–1616

California Fish and Game Code Sections 1600 through 1616 regulates habitats potentially under the regulatory jurisdiction of the CDFW. If a project includes alteration of the bed, banks, or channel of a stream or of the adjacent riparian vegetation, then a Lake and Streambed Alteration Agreement (LSAA) may be required from the CDFW. Fish and Game Code Section 1602 requires an entity to notify the CDFW prior to commencing any activity that may (1) substantially divert or obstruct the natural flow of any river, stream, or lake; (2) substantially change or use any material from the bed, channel, or bank of any river, stream, or lake; or (3) deposit debris, waste, or other materials that could pass into any river, stream, or lake. A Lake and Streambed Alteration Agreement covers activities that would result in the modification of the bed, bank, or channel of a stream, river, or lake, including water diversion and damming and removal of vegetation from the floodplain to the landward extent of the riparian zone (the top-of-bank). It governs both activities that modify the physical characteristics of the stream and activities that may affect fish and wildlife resources that use the stream and surrounding habitat (i.e., the riparian vegetation or wetlands). A Section 1602 Lake and Streambed Alteration Agreement will often require mitigation, such as revegetation or replanting of riparian trees or other compensatory mitigation for impacts to these resources.

Native Plant Protection Act (California Fish and Game Code §§ 1900 et seq.)

California's Native Plant Protection Act requires all state agencies to use their authority to carry out programs to conserve endangered and rare native plants. Provisions of the Act prohibit the taking of endangered or rare plants from the wild and require notification of the CDFW at least 10 days in advance of any change in land use in areas that support listed plants.

Vascular plants that are identified as "rare" by the CDFW, but that may have no designated status or protection under federal or state endangered species legislation, are protected under Fish and Code, Section 1900 et seq. Additionally, plants identified as California Rare Plant Rank (CRPR) 1A, 1B, or 2 meet the definition of Section 1901, Chapter 10 (NPPA) and Sections 2062

and 2067 (CESA) of the California Fish and Game Code. California rare plant ranks are defined as follows:

- **Rank 1A:** Plants Presumed Extinct.
- **Rank 1B:** Plants Rare, Threatened, or Endangered in California and elsewhere.
- **Rank 2:** Plants Rare, Threatened, or Endangered in California, but more numerous elsewhere.
- **Rank 3:** Plants about Which More Information is Needed – A Review List.
- **Rank 4:** Plants of Limited Distribution – A Watch List.

In general, plants tracked by the CDFW California Natural Diversity Database (CNDDB) as California Rare Plant Ranking 1A, 1B, or 2 are considered to meet the criteria of California Environmental Quality Act (CEQA) Guidelines Section 15380 and effects on these species are considered "significant." These also meet the criteria for protection under Section 1901, Chapter 10 (Native Plant Protection Act) and Sections 2062 and 2067 (CESA) of the California Fish and Game Code. CRPR 3 and 4 plant taxa do not automatically meet CEQA standards and thresholds for impact considerations, but some species still may warrant protection under CEQA Guidelines Section 15380(b) based on declining trends, recent taxonomic information, or other factors. Such taxa were considered in the evaluation of potential impacts to rare plants.

c. Regional Plans, Programs, and Regulations

San Bruno Mountain Habitat Conservation Plan

The San Bruno Mountain Habitat Conservation Plan (SBMHCP) was adopted in 1983 to protect and improve habitat for several species of endangered butterflies. The SBMHCP is an effort to address the problem of potential extinction of these endangered butterflies while providing for development of privately owned land.

While the Baylands site is not directly subject to the provisions of the SBMHCP, Icehouse Hill, which provides potential habitat for the Mission blue and Callippe silverspot butterflies, is directly adjacent to the eastern boundary of the SBMHCP planning area.

Management recommendations are presented by the SBMHCP by parcel, three of which are adjacent to Bayshore Boulevard and in close proximity to Icehouse Hill and the Baylands. SBMHCP recommendations for these parcels include the following:

1. Assessment of freshwater seep wetland habitats for San Francisco garter snake;
2. Consideration of parcels for upgrade of habitat quality;

3. Enhancement of habitat corridors with butterfly host plant species to attract butterflies and facilitate movement to larger habitat areas;
4. Elimination of dense patches of exotic plants and brush to expand usable habitat area for butterflies;
5. Creation of a reclamation plan to prevent erosion after development; and
6. Monitoring of habitat characteristics.

d. City of Brisbane Plans, Ordinance, and Regulations

General Plan

Chapter VII: Open Space Element

The General Plan Open Space Element presents the following biological-resources-related policies and programs:

Policy 81: The City shall conduct an ongoing effort to identify sites or portions of sites having particular value as open space, wildlife habitat, wetlands, or other environmental qualities that should be preserved and protected. In such cases, the City shall explore the feasibility of acquisition of these areas by the City or by other public or private agencies that are engaged in the ownership and preservation of open space, and, when legally possible, imposing a requirement that such areas be dedicated by the owner to the public for open space purposes.

Policy 81.1: Work to preserve open space lands to protect the natural environment and to provide outdoor educational and recreational opportunities consistent with the sensitivity of the resource.

Policy 82: Encourage the preservation, conservation and restoration of open space to retain existing biotic communities, including rare and endangered species habitat, wetlands, watercourses and woodlands.

Policy 85: Encourage the preservation and conservation of aquatic resources in Brisbane: the Lagoon, the Bayfront and the Marsh.

Program 85a: Seek opportunities to utilize aquatic areas for recreational and educational activities consistent with the sensitivity of the resource.

Program 85b: Develop provisions in the Zoning Ordinance, including setback requirements, to protect the natural ecology of aquatic resources.

Program 85c: Provide information to citizens on the eco-systems of the Bay, the Lagoon and the Wetland Marsh and how citizens can participate in respecting and conserving these resources.

Program 85d: Work with responsible agencies, property owners and environmental and conservation groups to ensure preservation of aquatic eco-systems.

Chapter IX: Conservation Element

The General Plan Conservation Element presents the following biological-resources-related policies and programs:

Policy 118: Preserve areas containing rare and endangered species habitat to the extent allowed by law and available resources.

Policy 120: Cooperate with local, State and Federal agencies in conservation efforts for biological resources.

Policy 122: Cooperate with other agencies in conservation efforts.

Program 122a: Work with the Habitat Conservation Plan Operator, the State Department of Fish and Game, the U. S Fish and Wildlife Service, and other agencies as appropriate regarding plans and programs that may affect biological resources in the planning area.

Program 122b: Consult the maps in the technical background reports and information supplied by responsible agencies to determine potential for environmental impacts to biological resources and take appropriate action.

Program 122c: Consult with local, State and Federal agencies to determine when field studies are required to supplement or update existing data.

Program 122e: Encourage applicants to initiate early CEQA consultation on conservation issues.

Policy 123: Conserve important biological communities through sensitive project design.

Program 123a: In land use development applications, consider the siting of structures and utilities so as to conserve identified biological communities.

Policy 127: Encourage the use of plants that are compatible with the natural flora in landscape programs.

Policy 128: Encourage the use of native plants in landscape programs that provide food and shelter to indigenous wildlife.

Program 128a: Encourage conservation groups to provide public information on plant materials.

Policy 130.1: The City requires restoration of wetland losses. The determination of which land areas are wetlands will be done by those Federal and State agencies having jurisdiction. The City, however, is especially concerned with those wetlands surrounding the perimeter of the Brisbane Lagoon, the Bay shoreline, the Levinson Marsh and the Quarry sediment ponds. The ratios of restoration may exceed the regulatory agencies' mitigation minimums.

Policy 130.4: Wetland and mitigation areas that are mitigations for project impacts must be protected by recorded deed restrictions.

Policy 130.5: It is Brisbane's desire that mitigation for Brisbane's wetland losses occur somewhere within the jurisdictional boundaries or sphere of influence of the City of Brisbane, if feasible.

Policy 131: Emphasize the conservation of water quality and of riparian and other water-related vegetation, especially that which provides habitat for native species, in planning and maintenance efforts.

Policy 132: Recognize the importance of the Brisbane Lagoon and the Levinson Marsh as wildlife habitats, valuable community resources and drainage basins, and cooperate with responsible agencies in their conservation.

Chapter XII: Policies and Programs by Subarea

This chapter of the General Plan presents the following relevant biological-resources-related policies specific to the Baylands:

Policy BL.1 H: Key habitat areas, including Icehouse Hill and Brisbane Lagoon and adjacent habitat as identified in the 2001 City Open Space Master Plan shall be preserved, enhanced, and protected.

Policy BL.16: Enhance the natural landform and biotic values of Icehouse Hill and preserve its ability to visually screen the Tank Farm.

Policy BL.19: Establish a buffer zone between the Lagoon and adjacent uses.

Policy BL.20: Dedicate land area for open space, recreational uses and wetlands restoration, especially around the Lagoon.

Policy BL.23: Investigate methods to improve water quality in the Lagoon without adversely impacting waterfowl and fish.

Policy BL.24: Seek opportunities to enhance and restore wetlands in consultation with responsible agencies.

e. Open Space Plan for the City of Brisbane

To aid in the implementation of selected programs and policies of Brisbane's General Plan, an Open Space Plan for the City of Brisbane has been approved which contains open space inventory, analysis, and policy recommendations. The Open Space Plan was approved by the City Council in August 2001, and "offers a vision for a comprehensive and integrated open space system for the city and is intended to be a flexible, working tool to guide the City Council in implementing specific environmental policies and programs from the 1994 Brisbane General Plan," including Program 93h of the General Plan, which states, "for reference and assistance in establishing open space priorities, prepare a comprehensive map of vacant lands on the planning area and update the map annually." The recommendations within this plan reflect the most significant natural and open space resources in the city and establish overall guidelines and/or criteria for decision making. The Open Space Plan addresses the possibility of land acquisition or preservation based on identification and evaluation of natural resources and amenities within the jurisdictional boundaries of the City of Brisbane.

Open Space Resources Evaluation and Priorities

The Open Space Plan includes open space and resource protection recommendations for the Baylands. The area north of Visitacion Creek is envisioned for new development with "substantial" open space (minimum or 25 percent of developed areas to be devoted to open space). The area east of the tank farm between Visitacion Creek and Brisbane Lagoon is envisioned for "maximized open areas" (recreational or other use with open character), while the lagoon area is envisioned as open space to be dedicated to a public agency for permanent preservation. **Figure ~~3-45~~ 3-30** in Draft EIR Chapter 3, *Project Description*, also shows the proposed Bay Trail extension, as well as other local trails within the Baylands that are identified in the Open Space Plan.

The Brisbane Lagoon occupies the southern portion of the Specific Plan area and is a valuable aquatic resource that contains tidal wetlands. There is a fishing area, locally known as Fisherman's Park, located on the lagoon's northeastern perimeter. The Open Space Plan recommends that the lagoon and its environs be conserved as open space, and that a public pathway be developed around the lagoon perimeter, linking with the future Bay Trail and Tunnel Avenue trail. Additionally, the Open Space Plan recommends that the area along the entire shoreline at the northern end of the lagoon, between the lagoon and Lagoon Way, be

preserved as open space as it provides significant recreational opportunities, noting that this "would be a very high priority open space area."

Open Space Preservation Strategies

The Open Space Plan identified specific open space preservation strategies for each General Plan Subarea. The following preservation strategies apply to the Northeast Bayshore, Baylands, and Beatty Subareas:

a. Refer to this Open Space Plan and use it as a guide in reviewing development proposals and city-sponsored plans for use of the land in these subareas;

d. Pursue the dedication of easements, where applicable, for trails and the Wetland River Park; and;

e. Incorporate open space dedication and open area planning as part of the specific planning portion of the planned development process, when applications are made to the City, utilizing this Plan as the guiding principles.

Use and Management Policies

The Open Space Plan contains the following relevant policies:

General Management Policies

a. Open space is to be maintained in a natural condition as much as possible, except in redeveloped areas where trail corridors and open space may be tied into the overall development landscape theme.

b. New open space acquisitions, major open space restoration or management, trail construction or any significant trail alterations or improvements should be consistent with this plan. The City Council, Planning and Park and Recreation Commissions and City staff may refer these matters to the Open Space and Ecology Committee for review and recommendation.

d. Native habitat restoration efforts should be undertaken where practical, in conjunction with the HCP operators, and consistent with other City policies.

f. The City will take responsibility for monitoring open space or trail easements and conditions of approval on private open areas.

h. No plants, animals, or other resources are to be collected or disturbed except in conjunction with a city approved and coordinated resource management project.

i. The city recognizes that restoration, maintenance and management of natural or improved open space areas can be a significant initial and ongoing expense.

j. Public and private open spaces and open areas have been demonstrated to add significant direct and indirect value to properties adjacent and in the region.

Baylands and Beatty Subareas Open Space and Trails

a. Open space land may be acquired or dedicated in these subareas in conjunction with future commercial development. Planning and implementation of resource protection and restoration will be part of the scope of the development projects.

b. New trails may be planned and constructed in these subareas in conjunction with future commercial development, including portions of the San Francisco Bay Trail. Planning and construction of these trails and related improvements will be part of the scope of the development projects.

c. The design and use and management arrangements for trails in these areas will be determined in conjunction with future planning for commercial development.

d. Assessments will be placed on future developments to help pay for ongoing maintenance and management of the open space in these areas that will provide benefit to the properties subject to assessment.

e. This land includes areas with toxic contamination. Reclamation of natural landscapes will require planning and implementation of cleanup and restoration by qualified scientists and contractors.

f. City of Brisbane Tree Ordinance

Brisbane Municipal Code Title 12, Chapter 12.12 requires a permit for removal of protected trees, or any other tree having a trunk that is greater than 30 inches in diameter at a height of 24 inches above grade. Pursuant to the provisions of Municipal Code Section 12.12.040 B, the following do not require tree removal permits:

1. **Emergencies.** If the condition of a protected tree presents an immediate hazard to life or property, it may be removed without a permit on order of the city manager, the city engineer, the planning director, the chief of police, or the fire chief.
2. **City Employees.** This chapter shall not apply to the removal of any trees on city-owned property by city employees or any person retained by the city for the purpose of removing such trees.
3. **Public Utilities.** Public utilities subject to the jurisdiction of the State Public Utilities Commission may without a permit take such action as may be necessary to comply with the safety regulations of the commission and as may be necessary to remove a direct and immediate hazard to their facilities within the public utility lands or easement areas in which the same may be located.

4. **Project Approval.** Where removal of a protected tree has been authorized as part of a development approval granted by the city, no permit shall be required under this chapter for removal of such tree.

A tree, as defined by the Municipal Code Section 12.12.040, is "a woody perennial plant characterized by having a main stem or trunk, or a multi-stemmed trunk system with a more or less definitely formed crown, and [that] is usually over ten (10) feet high at maturity." Protected trees, as defined by the Municipal Code, are any of the following:

1. Any California bay (*Umbellularia californica*), coast live oak (*Quercus agrifolia*), or California buckeye (*Aesculus californica*) having a main stem or trunk that measures 30 inches or greater in circumference at a height of 24 inches above natural grade.
2. Any species of native or non-native tree, in addition to those identified in subsection (1) above, designated as a protected tree on recommendation of the Parks, Beaches and Recreation Commission as adopted by resolution of the City Council, based upon its finding and determination that such species uniquely contributes to the scenic beauty of the city or provides special benefits to the natural environment or wildlife.
3. Any tree designated as a protected tree by resolution of the City Council.
4. Any tree, regardless of size, originally required by the City to be planted as a condition for the granting of a permit, license, or other approval, or any tree that existed at the time of the granting of such permit, license, or other approval and required by the City to be preserved as part of such approval.
5. Any tree, regardless of size, required by the City to be planted as a replacement for an unlawfully removed tree.
6. Any tree, regardless of size, planted or maintained by the City.
7. Any street tree that is not otherwise described in subsections (1) through (6) above, having a main stem or trunk that measures 30 inches or greater in circumference at a height of 24 inches above natural grade.

The Municipal Code further provides that, where three or more trees of any one or more species, each having a main stem or trunk that measures 30 inches or greater in circumference at a height of 24 inches above natural grade, are proposed to be removed at the same time from the same property or from contiguous properties under common ownership, such trees shall collectively be regarded as a protected tree (Section 12.12.040).

The Municipal Code requires that an application for a tree removal permit be made to the city manager and contain the number and location of each tree to be removed, the type and approximate size of each tree, the reason for removal, and additional information that the City Manager may require. Removal permits may be granted subject to conditions including, but not limited to, requiring planting of one or more replacement trees (Section 12.12.050).

4.6.4 RELEVANT SPECIFIC PLAN PROVISIONS

The Specific Plan provides for preservation and enhancement of on-site habitat areas, site drainage and water quality treatment functions, and public access to recreation within natural settings within three primary areas (Icehouse Hill, Visitacion Creek, and Lagoon Park) and other locations within the site. Icehouse Hill's ecological functions are to be improved through protection, enhancement, and restoration of native grasslands, coastal scrub, and small pockets of seasonal wetlands (see **Figure 3-24** in Draft EIR Chapter 3, *Project Description*). Planting of native butterfly host species is proposed to increase butterfly habitat extent and quality. Invasive species management would be undertaken due to the presence of Eucalyptus sp., fennel, and other non-native species.

The Specific Plan's Conservation and Open Space Plan proposes the creation of tidally influenced marsh/wetlands, freshwater marsh/wetlands, subtidal mudflats, and re-construction of Visitacion Creek itself. Proposed freshwater marsh restoration would include seasonally depressed freshwater wetlands above the proposed ecotone slope, on shelves extending from either side of the tidal marsh, to be sustained by runoff generated from designed drainage areas. In addition, water from the freshwater wetlands would be designed to seep into the ecotone slope during periods with higher water levels. Revegetation would include locally native species appropriate to freshwater and tidal wetlands. Proposed restoration areas and plans are illustrated in the following figures:

- **Figure 3-13**, Proposed Baylands Open Space Network
- Visitacion Creek
    - **Figure** ~~3-22~~ **3-36a**, Visitacion Creek Illustrative Concept Diagram
    - **Figure** ~~3-22a~~ **3-36b**, Visitacion Creek Section A-A'
    - **Figure** ~~3-22b~~ **3-36c**, Visitacion Creek Section B-B'
    - **Figure** ~~3-22c~~ **3-36d**, Visitacion Creek Section C-C'
    - **Figure** ~~3-22d~~ **3-36e**, Visitacion Creek Section D-D'
- North Shore of the Brisbane Lagoon (Lagoon Park)
    - **Figure** ~~3-19~~ **3-33**, Lagoon Park Illustrative Concept Diagram
    - **Figure** ~~3-20~~ **3-34**, Biotic Habitat Zones within and adjacent to the Brisbane Lagoon
    - **Figure** ~~3-21a~~ **3-35a**, ~~Proposed~~ Existing Lagoon Edge ~~Enhancement (Existing) and~~
    - **Figure** ~~3-21b~~ **3-35b**, and Proposed Lagoon Edge Enhancement ~~(Proposed)~~

a. Visitacion Creek Restoration

The illustrative concept diagrams cited above show that Visitacion Creek is proposed to be reconstructed, expanded, and vegetated with riparian vegetation in approximately the same location, with adjacent overflow basins, habitat islands, and adjacent tidal marsh with gentler slopes, transitioning to an ecotone slope that includes restored and enhanced adjacent tidal flats, tidal marsh wetlands, and freshwater wetlands. The existing culverted service road crossing that drains to Visitacion Creek would be improved by replacement of the western Tunnel Avenue culvert with either a bridge or new culvert and by the replacement of an eastern culvert to a wider-spanning bridge at Sierra Point Parkway. Upland buffers would be located outside the freshwater wetlands to allow for migration of landcover due to sea level rise and to provide protection from human and animal disturbance.

b. Restoration along the North Shore of the Brisbane Lagoon

The illustrative concept diagrams cited above designate the tidal flats area located along the north shore of the Lagoon as "Open Area Protection." Ground disturbance north of the tidal flats up to the relocated Lagoon Road is required for restoration and enhancement of existing habitat and stormwater features. Enhancements to tidal flats, tidal marsh wetlands, and freshwater wetlands would be provided along with recreational amenities along the north shore of Brisbane Lagoon within Lagoon Park. Also proposed is modifying the existing riprap along the north edge of the lagoon to create a gentler slope and habitat area by covering the rip rap with soil and vegetating the area.

Overall, physical improvements in this area will remain largely naturalized, but also include amenities that provide educational/recreational community spaces and means for accessibility. Park amenities include at-grade walks and bikeways, an elevated walk, wildlife observation areas, gardens, play spaces, picnic areas, and limited parking.

c. Human/Pet Interference within Restored Wetlands and Sensitive Habitats on Icehouse Hill

The Specific Plan further (Sections 5.4.3 and 5.4.4) requires the following to control visitor and/or pet disturbance to sensitive species or habitats:

- Adjacent upland areas will be designed to serve as habitat buffers.
- Where needed, physical barriers, such as chain-link fencing[132] or equivalent screening, will be maintained. Barriers will be at least three feet high with native vegetation planted on either side to keep dogs, cats, and other household pets out of water-related habitats.

[132] Split rail fencing may be adequate to prevent entry into rare plant areas.

- Educational/interpretive signage will be provided, which typically includes information about the sensitivity of the habitats, and signage requiring visitors to remain on trail pathways and pets, if allowed, to be kept on leash.

With respect to litter or debris, Section 8.16.060 of the City of Brisbane's Municipal Code requires that "The owner or person in control of any private property shall at all times maintain the premises free of litter; provided, however, that this section shall not prohibit the storage of litter in authorized private receptacles for collection." Therefore, the Baylands would be required (by the City's Municipal Code) to be kept free of litter or debris that could potentially impact sensitive or common biological resources.

d. Bird Strike Protection

The Specific Plan's Development Standards require that buildings taller than 100 feet employ the following bird-friendly design strategies:

- Consult a qualified biologist experienced with urban building bird-strike design issues to identify measures related to the external appearance of the building to minimize the risk of bird strike; and
- Use a bird-friendly glazing treatment on the façades of any floor within 12 feet of the level from a green roof if the façade has 50 percent or more glazed surface.

4.6.5 SIGNIFICANCE CRITERIA

The following criteria were used to determine the significance of biological resources impacts.

Threshold BIO-1: The Baylands Specific Plan would cause a significant impact if:

- **Any candidate, sensitive, or special-status plant or animal would be killed, removed, or harmed;**
- **Habitat for any special-status plant or animal would be directly removed; or**
- **A special-status habitat would be indirectly degraded because of increased human encroachment, off-leash pets, debris, and litter, or nighttime lighting that causes a decrease in habitat area or quality.**

Threshold BIO-2: The Baylands Specific Plan would cause a significant impact if it would result in the net loss of existing wetland or non-wetland waters acreage, functions, or values.

Threshold BIO-3: The Baylands Specific Plan would cause a significant impact if it would substantially inhibit the movement of any native resident or migratory fish or wildlife species or would impede the use of native wildlife nursery sites.

Threshold BIO-4: The Baylands Specific Plan would cause a significant impact if it would severely trim or result in the loss of protected trees protected by Brisbane Municipal Code Chapter 12.12, Private Tree Regulations, and City administrative regulations.

Threshold BIO-5: The Baylands Specific Plan would cause a significant impact if it would hinder implementation of the San Bruno Mountain Habitat Conservation Plan.

4.6.6 IMPACTS AND MITIGATION MEASURES

a. Impact BIO-1: Special Status Plants, Animals, and Habitats

Methodology for Determining Significance

Building on environmental baseline conditions documented in the Brisbane Baylands Final Program EIR, a subsequent habitat assessment was undertaken by Metis in 2023 documenting existing conditions within the Baylands over a period of several years. Surveys conducted by Biohabitats between 2020 and 2022, including habitat assessments, biological resource plans, and a USACE-approved wetland delineation for the Baylands, were reviewed and independently verified by Environmental Science Associates (ESA), which prepared a Biological Resources Technical Report for the City of Brisbane.

To determine current baseline conditions within the Specific Plan area, and in advance of site reconnaissance surveys, ESA completed 2023 database searches of the CNDDB, the CNPS Electronic Inventory, and the USFWS species list to inform the likelihood of special-status species presence (CDFW 2023; CNPS 2023; USFWS 2023); and reviewed aerial photographs of the Specific Plan area.

The analysis of impacts on special-status plants, animals, and habitats evaluates the physical environmental changes that would result from implementation of the Baylands Specific Plan in the context of the existing site conditions and applicable regulations. The impact analysis considers the impacts on sensitive species potentially present within the Specific Plan area based on the findings of the resource review, references, and data collection described above. The analysis recognizes that impacts on biological resources may vary in duration (i.e., temporary, short term, or long term).

The analysis is focused on impacts that implementation of the Specific Plan would have on sensitive biological resources that have a potential to be present on-site including, but not limited to, federally endangered butterflies that may occasionally use habitat on Icehouse Hill, fish or marine mammals that may be present in the lagoon, nesting birds protected by the Migratory Bird Treaty Act, and bats protected under the California Fish and Game Code. The analysis also responds to previously submitted wildlife agency concerns and comments as part of the 2015 Brisbane Baylands Final Program EIR, as well as the City's environmental requirements.

Because site grading would occur over the entirety of the former landfill and former railyard areas, evaluation of construction impacts in those areas assumes removal of all vegetation and features. Where restoration programs are provided by the Specific Plan, the biological resources analysis compares the extent and quality of existing habitat to that provided by the Specific Plan. Should the extent and quality of habitat provided for by the Specific Plan be equal to or greater than existing conditions, impacts are identified as being less than significant.

In relation to development of trails, recreational improvements, and habitat restoration proposed for Icehouse Hill, impacts were determined to be significant if such activities would directly remove or indirectly damage larval host plants for sensitive butterfly species regardless of whether sensitive butterfly species are actually present within Icehouse Hill.

Nesting birds protected by the Migratory Bird Treaty Act and California Fish and Game Code may be seasonally present through much of the Baylands site. Bat roosting habitat, also protected by Fish and Game Code, is intermittently present on the site. The potential to harm active bird nests or bat roosts during construction activities, including grading and vegetation removal, or while moving vehicles and equipment, was determined to be a significant impact.

Because plants and animals are typically attuned to the 24-hour seasonal cycle of light and dark, artificial nighttime lighting within habitat areas can disrupt mating behaviors, sleep, and predation. To determine whether a significant impact would result, analysis of the potential for light trespass from the Specific Plan's residential, commercial, and other development into habitat areas is analyzed. If the Specific Plan would permit nighttime lighting to extend beyond development areas specifically intended to be lighted into habitat conservation areas. Should nighttime lighting exceed the thresholds set forth for Impact AES-4, Nighttime Lighting, a significant impact would result.

Impact Assessment

Specific Plan-related construction activities would affect some special-status species. Through compliance with existing city codes, operation of Baylands residential, commercial, and recreational uses could also affect special-status or common species, via human encroachment, off-leash pets, and the generation of debris and litter. Section 8.16.060 of the Brisbane Municipal Code requires that, "The owner or person in control of any private property shall at all times maintain the premises free of litter; provided, however, that this section shall not prohibit the

storage of litter in authorized private receptacles for collection." Therefore, the Specific Plan area is expected to be kept free of litter (or debris) that could potentially adversely affect biological resources, whether considered sensitive or common. Impacts of trails proposed to be constructed and maintained within Visitacion Creek and Lagoon Park are addressed in the analysis of Threshold BIO-2, which discusses freshwater habitat, tidally influenced habitats, and waters of the U.S and waters of the state.

The following addresses the physical environmental effects the Baylands Specific Plan would have on those special status species with the potential to occur within the Specific Plan area (i.e., not identified as "absent" in **Table 4.6-2**, *Special-Status Species with the Potential to Occur within the Specific Plan Area*).

Special-Status Plants

Due to historical land uses within the Specific Plan area, and in particular the importation of fill materials and past industrial uses, most of the site does not provide potential habitat for special-status plant species. Icehouse Hill is the only undisturbed portion of the site with native soils that potentially support rare plants. While Icehouse Hill would be retained as open space for passive recreational use following site development, recreational trails constructed there would traverse annual grassland and coastal scrub habitats that may support four special-status plant species. The western edge of Icehouse Hill provides suitable habitat for four CNPS Range 1B.2 species: bent-flowered fiddleneck, San Francisco collinsia, Choris's popcorn flower, and San Francisco campion. Bent-flowered fiddleneck occurs in a variety of habitats, including valley and foothill grassland and coastal scrub. It is known from San Bruno Mountain and may occur in coastal scrub or grassland habitat on Icehouse Hill. San Francisco collinsia is an herbaceous annual that favors coastal scrub and moist, shady woodlands with serpentine soils. Known to occur on Bayview Hill, approximately 0.5 mile north of the Specific Plan area, and also on San Bruno Mountain southwest of the site, potential habitat is available within coastal scrub habitat on Icehouse Hill. Choris's popcorn flower is an herbaceous annual found in moist, grassy areas in coastal scrub and chaparral. Habitat is present in scrub communities on Icehouse Hill. Finally, San Francisco campion is a perennial species that prefers sandy or rocky soils within grassland and scrub communities. Known from fewer than 20 occurrences, this species is known from San Bruno Mountain and may occur on Icehouse Hill. While potential habitat is present for these species at Icehouse Hill, their presence or absence has not been confirmed through focused surveys.

If special-status plants are present within the recreational improvement areas on Icehouse Hill, individual plants or plant populations would be directly lost during the construction of trails and recreational amenities including educational areas, and relocation of the Mission Blue Nursery (discussed below). If present within work areas, rare plants on Icehouse Hill would also be indirectly impacted during operations due to increased post-construction recreation-related activities and equestrian uses.

Fish

As a component of site restoration activities, aquatic and marsh habitat along the northern shoreline of the Brisbane Lagoon would be removed by the proposed realignment of Lagoon Road and development of Lagoon Park, including grading, shoreline habitat restoration, and development of recreational amenities. Installation of shoreline features, as described in Section 3.3.2, *Baylands Specific Plan and Proposed Development*, including **Figure ~~3-19~~ 3-33** through **Figure ~~3-21b~~ 3-35b**, in Draft EIR Chapter 3, *Project Description*, would result in increased turbidity in lagoon water during removal of existing habitat, grading and construction, and habitat restoration.

Visitacion Creek, originally part of the open Bay waters, was transformed into an engineered channel between 1946 and 1956 to facilitate drainage across the filled sections of the former Brisbane Landfill within the Baylands (see **Figure 3-4** and **Figure 3-5** in Draft EIR Chapter 3, *Project Description*). The creek exists upon and is surrounded by introduced municipal waste and fill materials. As an enhancement action, fill materials within the lower tidally influenced portion of Visitacion Creek would be removed and the area would be restored as described in Section 3.3.2, *Baylands Specific Plan and Proposed Development*, including **Figure 3-22**, in Draft EIR Chapter 3, *Project Description*. Fish within Visitacion Creek would be temporarily displaced during the removal of fill materials, grading and construction, and habitat restoration.

While San Francisco Bay and attached waters, including the Brisbane Lagoon and Visitacion Creek, are identified as National Oceanographic and Atmospheric Administration (NOAA) essential fish habitat for Pacific salmon species (e.g., chinook salmon) (NOAA Fisheries, no date), the Biological Resources Technical Report determined that on-site waters provide poor habitat for special-status fish species with a low or moderate potential to occur within the Baylands, including Chinook salmon, steelhead trout, green sturgeon, and longfin smelt, with no spawning or rearing habitat on-site or in Brisbane Lagoon. Stray individuals of listed fish species may, however, be present in the Lagoon during migration. Foraging individuals would be able to move away from construction disturbance and would be nominally affected by the energetic expense of avoiding work areas in the lagoon area during construction. Further, no critical habitat for any listed species was documented within the Baylands.

Invertebrates

As noted in Section 4.6.3, *Physical Environmental Setting*, Icehouse Hill is the only area within the Baylands that provides potential habitat for listed butterfly species. In addition, the large marble butterfly may occur in association with weedy mustard species found on and near Icehouse Hill, and throughout the Specific Plan area in areas subject to historic disturbance and degradation. Although not identified on Icehouse Hill during Coast Ridge Ecology surveys, host plants were identified for the Bay checkerspot and Callippe silverspot. Because Icehouse Hill is within the latter butterfly's 0.75-mile flight range from habitat on San Bruno Mountain, the species may be

present or may colonize the site at a later time. Host plants for the Mission blue butterfly and San Bruno elfin butterfly were not identified and these species are not expected on-site.

Ground disturbance associated the construction of trails and recreational facilities within butterfly host and nectar plant areas on Icehouse Hill (**Figure 4.6-3**) could result in the direct removal or indirect adverse effects on Callippe silverspot or Bay checkerspot or their host plants. As an example, the Illustrative Concept Diagram for Icehouse Hill (Specific Plan Figure 5.3.37; **Figure 3-24** in Draft EIR Chapter 3, *Project Description*) proposes a trail leading to an overlook that traverses through grasslands containing the Callippe silverspot host plant, and may also require a permit from the USFWS if a listed butterfly species is present.

Trails placed along the boundaries of, but not within, the grassland areas that support host plants would avoid adverse effects and would also allow trail users a view of the butterflies and/or their habitat with minimal impact. Trails could also be placed through shrublands currently dominated by French broom, a non-native invasive species. Once the French broom is cleared, restoration of native plants could provide trail users with opportunities to view butterflies, assuming that enough habitat can be restored, enhanced, and/or created that would provide sufficient habitat to attract and support the butterfly species (see **Figure 4.6-3**).

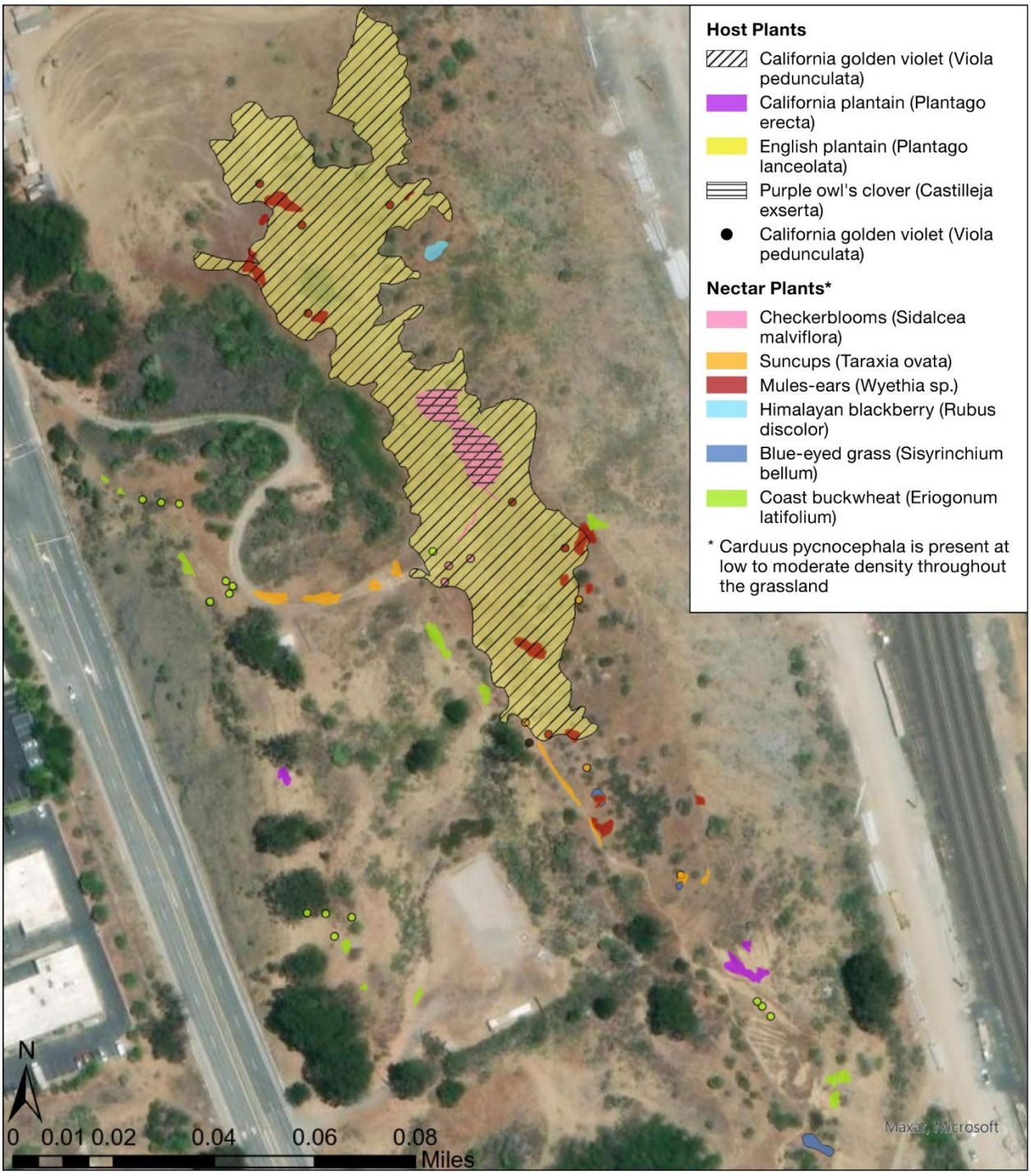
In addition to trails and recreational improvements within Icehouse Hill, the Specific Plan proposes removal and management of invasive species along with planting of native butterfly host species to increase butterfly habitat extent and quality. Such activities are intended to enhance existing habitat within Icehouse Hill but will result in short-term impacts to grassland habitat.

Special-Status Birds

Ridgway's rail (*Rallus obsoletus obsoletus*). Protocol-level surveys for the Ridgway's rail were conducted at Brisbane Lagoon in February to March 2020 (Edelstein 2020) and the species was not found within the Baylands. In addition, a reconnaissance survey in February 2023 found the tidal marsh habitat too small, disturbed, and fragmentary to support this species (ESA 2023).

Burrowing owl (*Athene cunicularia*). Recent reconnaissance surveys did not observe suitable habitat for this species; grasses and vegetation were too long for owl vantage, and open areas were prone to human and vehicle disturbance. Nesting or resident owls are not expected in or near the Specific Plan area; however, burrowing owls are expected to occasionally transit the site and may be present in a non-nesting capacity.

Figure 4.6-3: Existing Butterfly Host and Nectar Plants at Icehouse Hill



SOURCE Coast Ridge Ecology, 2023

Nesting Birds

Common birds protected by the Migratory Bird Treaty Act, including all native bird species that may be present at the Baylands, are at risk of direct and indirect impacts during site construction activities, such as grading, vegetation removal, and vehicle traffic near active nests. Nesting migratory birds may use woodland, marsh, and grassland habitats for nesting in trees, shrubs, or tall grasses, including ornamental vegetation. Within the Baylands, the only special-status bird with a moderate or higher potential to occur is the Alameda song sparrow, a California Species of Special Concern; however, as previously mentioned, the Migratory Bird Treaty Act protects most resident bird species at the Baylands.

Nesting birds may be injured or killed if trees or shrubs are removed during nesting season, or may abandon nests with eggs or young, if noise and human disturbance occur in close proximity. For nesting birds, the CDFW generally recommends a 250-foot construction exclusion zone around the nests of active passerine songbirds during the breeding season and a 500-foot buffer for nesting raptors.[133] The general raptor and passerine bird nesting period cited by the CDFW is from February 1 to August 31. Thus, removal or disturbance to trees and shrubs (i.e., tree removal, tree trimming) occurring between February 1 and August 31 has the potential to injure or kill nesting birds.

Amphibians and Reptiles

No special-status amphibians or reptiles are expected within or near the Specific Plan area.

Mammals

Special-status bats (Townsend's big-eared bat and the hoary bat) are the only identified special-status terrestrial mammals expected to occur on-site.[134] Bats may roost in large trees or in disused buildings and may be injured or killed during demolition and deconstruction of on-site buildings or during vegetation removal.

Marine mammal species are not expected within or near the Specific Plan area.

[133] These buffer distances are considered initial starting distances once a nest has been identified and are commonly revised downward to as low as 25 to 50 feet and 250 feet, based on site conditions and the nature of the work being performed. For example, distances are often reduced if obstacles such as buildings or trees obscure the construction area from active bird nests, or existing disturbances create an ambient background disturbance similar to the proposed disturbance.

[134] As indicated by **Table 4.6-2**, these bat species are identified by the Western Bat Working Group as high priority (species that are imperiled or at a high risk of imperilment) or medium priority (species that warrant a closer evaluation due to potential imperilment) or are identified as a California Species of Special Concern.

Ongoing Impacts from Specific Plan Operations

Human Encroachment

Presuming that new residents will comply with local ordinances pertaining to off-leash pets and littering, operational impacts of Baylands residential, commercial, and recreational purposes would not damage or result in loss of special-status or common species via human encroachment, off-leash pets, and debris and litter. Section 8.16.060 of the City of Brisbane's Municipal Code requires that, "The owner or person in control of any private property shall at all times maintain the premises free of litter; provided, however, that this section shall not prohibit the storage of litter in authorized private receptacles for collection." Therefore, the Specific Plan area is expected to be kept free of litter (or debris) that would adversely affect biological resources, whether considered sensitive or common. Impacts of trails proposed to be constructed and maintained within Visitacion Creek and Lagoon Park are addressed in the analysis of Threshold BIO-2, which discusses Freshwater Habitat, Tidally Influenced Habitats, and waters of the United States and the state.

Specific Plan provisions to control visitor access and prevent pet disturbance to sensitive species or habitat (Sections 5.4.3 and 5.4.4) would be applied to provide specific standards for implementation of habitat buffers and/or physical barriers from sensitive habitat areas. Although the improvement plans contained in the Baylands Specific Plan are illustrative, the final design will exclude humans and their pets from sensitive habitats, such as mitigation areas, butterfly habitat, riparian and aquatic areas, and/or sensitive natural communities. With exclusion of the public from the above-defined sensitive areas through the use of though buffers, barriers, and/or signage, human encroachment will have a less-than-significant impact or no impact.

Nighttime Lighting

Because native animals are typically attuned to the 24-hour seasonal cycle of light and dark. Mating behaviors, sleep, and predation are all determined by the length of nighttime darkness. Introducing artificial nighttime lighting into habitat areas can disrupt these activities. Artificial nighttime lighting can disrupt an animal's movements. Owls and bats, for example, can lose the advantage of specialized night vision that enables them to hunt without being seen. Nighttime lighting can also favor other predators, as the nocturnal animals that are their prey lose the cover of darkness to hide.

As noted above, the Specific Plan incorporates performance standards from Threshold AES-4 as requirements for Baylands development and explicitly incorporates Program EIR Mitigation Measure 4.A-4a. Nighttime lighting would therefore be directed downward, and light trespass into habitat areas would not exceed the brightness of a full moon.

Offsite Lands

The relocation site for Fire Station No. 81, the existing Bayshore School, and the Martin Substation have been fully urbanized. In addition, construction of offsite utility lines would occur within fully urbanized rights-of-way (utility connections to the Martin Substation) or underneath existing streets (potable and recycled water lines). Thus, offsite improvements would not affect sensitive biological resources.

Significance Conclusion for Impact BIO-1

The Specific Plan acknowledged that development would occur in or adjacent to habitats where special-status plant and wildlife species may be encountered. Significance conclusions are provided below for special-status species that may be encountered on-site.

Rare Plants. Special-status plants are assumed to occur in areas with suitable conditions on Icehouse Hill. The construction of trails on Icehouse Hill and an anticipated post-construction increase in recreation-related activities including equestrian uses would result in a significant impact.

Butterflies. The construction of trails and recreational facilities at Icehouse Hill and planned management activities in this area have the potential to cause direct or indirect adverse effects on Callippe silverspot butterfly or Bay checkerspot butterfly host plants, a significant impact requiring mitigation.

Project activities, including general site clearing and grubbing in preparation for construction, have the potential to encounter large marble butterfly adults or larvae on weedy mustard plants that grow sporadically throughout the Specific Plan area. The butterfly does not have protected status. If the recent petition to federally list the large marble butterfly is adopted, a significant impact would result.

Nesting Birds. Grading or ground disturbance activities associated with site development have the potential to encounter protected nesting birds, including raptors, passerines, and other birds, particularly between February 1 to August 31. Construction activities within the Specific Plan area have the potential to impact nesting birds, which constitutes a significant impact requiring mitigation. Night lighting would not exceed the performance standards established in Section 4.5, *Aesthetic and Visual Resources*, and therefore would not have a significant direct or indirect impact on wildlife resources.

Mammals. Sensitive bats may be encountered during the demolition and deconstruction of on-site buildings or during tree and vegetation removal, particularly during the maternity season (February 15 to October 15) and winter hibernacula season (August 15 to April 15). The injury of sensitive bats or destruction of active maternity roosts would constitute a significant impact.

Program EIR Mitigation Measures

MM BIO-1a: Special Status Plant Surveys at Icehouse Hill (Program EIR Mitigation Measure 4.C-1a). Prior to construction, or any other Baylands development-related ground disturbance activities on Icehouse Hill, the applicant shall conduct pre-construction presence/absence surveys for special-status plants. All biological surveys must be performed by a qualified biologist or botanist with demonstrated expertise in the subject matter and whose work is subject to City staff and/or city-contracted peer review. Survey results shall be submitted to the City for review and approval prior to the commencement of any ground-disturbing activities. The Baylands developer shall pay or reimburse the City for all costs associated with survey results and city-contracted peer review.

Initial surveys at Icehouse Hill shall be carried out in conjunction with surveys for endangered butterfly host plants described in EIR Appendix D, *Biological Resources Technical Report*. Surveys would be implemented to determine if a special-status plant species has colonized the site in the interim between the determination of baseline conditions for this EIR, and project initiation, as well as to provide site-specific direction for final trail routing and design to avoid sensitive plant species (see MM BIO-1b, Special-Status Plant Avoidance at Icehouse Hill, and MM BIO-1c, Rare Butterfly Surveys and Habitat Protection at Icehouse Hill.

Surveys shall be conducted in accordance with CNPS and CDFW rare plant survey guidelines and shall be conducted during the flowering period when each species is most readily identifiable.

In order to capture variability of special-status plant species distribution, three special-status plant surveys shall be conducted at two-week intervals during the appropriate flowering period (April to June), before commencement of any development activities on Icehouse Hill.

Any special-status plant populations shall be mapped in the field. If the presence of any special-status plant species is confirmed, a copy of the survey results shall be forwarded to the CDFW, and Mitigation Measure BIO-1b shall be implemented.

Whether or not special-status plants are identified during surveys, the additional mitigation identified in MM BIO-1c, Rare Butterfly Surveys and Habitat Protection at Icehouse Hill, shall be implemented to avoid special-status plants and butterfly host plants. Any special-status species plant or wildlife species detected during surveys shall be reported to the California Natural Diversity

Database at the following link:
https://www.wildlife.ca.gov/Data/CNDDB/Submitting-Data.

MM BIO-1b: Special-Status Plant Avoidance at Icehouse Hill (Program EIR Mitigation Measure 4.C-1b). Documented plant occurrences on Icehouse Hill shall be avoided by establishing a buffer zone of no less than 25 feet prior to Specific Plan trail construction, or other ground-disturbing activities having the potential to disturb or result in mortality of special-status plant populations. This buffer zone, whose specific width shall be determined based on site-specific analysis of proposed construction techniques and their potential for dust creation, shall be demarcated using flagging, orange fencing, or any other visual barrier between plant populations and the active disturbance footprint. Buffer distances may be increased if hydrology features would be altered as a result of trail construction.

If the City determines that disturbance or mortality is unavoidable, special-status plants shall be restored onsite in either the annual grassland or coastal scrub habitat located on Icehouse Hill. Restoration would be at a 1:1 ratio consistent with typical CDFW requirements in areas that are to remain as post-development open space, as is Icehouse Hill. The 1:1 replacement ratio shall be met at the end of five years and may therefore require initial plantings at a greater than 1:1 ratio, as determined by a qualified botanist with demonstrated expertise in the subject matter and whose work is subject to City staff and/or city-contracted peer review. If feasible, special-status plants and/or seeds shall be salvaged from on-site plants and used for any replacement plantings.

To reduce impacts from off-trail use, and increased horse use, trail head signage shall be required to educate the public regarding sensitive resources and restoration that would be affected by off-trail use. Mitigation areas shall be fenced or marked for three years. Trail use rules shall be developed prior to construction, and in addition to limiting use to identified trails, may include other requirements to limit the possibility that sensitive species would be impacted.

The project would comply with the NPDES Construction General Permit to avoid indirect impacts to special status plant species that could occur if slope drainage or surface hydrology is modified as a result of trail construction ~~Mitigation Measure 4.C1-g shall also be applied~~.

Prior to issuance of project approvals, and in coordination with state and federal permitting requirements, a five-year restoration mitigation and monitoring program shall be developed and implemented for any planting areas established

to mitigate impacts to special-status species plants. Restoration success criteria shall include:

1) Establishment of mitigation site(s) at or near the location of impacts where plant restoration will occur.
2) A qualified botanist shall identify an appropriate plant palette and restoration methodology compatible with the specific impacted special status species. Mitigation sites could include existing annual grassland or coastal scrub habitat areas on Icehouse Hill, depending on site conditions and locations of special status plants found.
3) No loss in total number of individual plants in a special status plant population found on Project Site shall be verified at the end of the five-year monitoring period established in coordination with state and federal agencies with jurisdiction over these resources.

The Baylands developer shall pay or reimburse the City for all costs associated with the restoration documentation and five-year monitoring report and city-contracted peer review.

MM BIO-1c: Rare Butterfly Surveys and Habitat Protection at Icehouse Hill (Program EIR Mitigation Measure 4.C-1c). Prior to any trail-related construction, vegetation management, development, or any other ground disturbing activities taking place on Icehouse Hill, pre-construction surveys for butterfly larval host plants (*Plantago erecta*, *Viola pedunculata*, *Lupinus albifrons*, *L. formosus*, and *L. versicolor*) shall be conducted by a qualified invertebrate biologist with demonstrated experience working with the species to ensure avoidance of such host plants whose work is subject to City staff and/or city-contracted peer review. Required surveys may be conducted in conjunction with the rare plant surveys required under MM BIO-1a, Special-Status Plant Surveys at Icehouse Hill. The timing for these preconstruction surveys is further specified below. Survey results shall be submitted to the City for review and approval prior to the commencement of any ground-disturbing activities. The Baylands developer shall pay or reimburse the City for all costs associated with survey results and city-contracted peer review.

All populations of butterfly host plants located on Icehouse Hill shall be mapped and trails shall be designed to avoid them, whether or not they are being used by butterflies at the time of the initial surveys.

All populations of butterfly host plants located on Icehouse Hill shall be inspected by a qualified invertebrate biologist, at an appropriate time of year, to determine whether or not they are being used by endangered butterflies for reproduction. If it is determined that they are being used for reproductive

purposes by endangered butterflies, the specific project applicant shall contact the USFWS to identify the appropriate consultation process prior to proceeding further with any activities on Icehouse Hill. Consultation may indicate that an Incidental Take Permit is required pursuant to the FESA.

If populations of Callippe silverspot or Mission blue butterflies are determined to be reproducing on Icehouse Hill, the property owner shall prepare and implement a Butterfly Protection Plan in coordination with the USFWS and the habitat managers for the San Bruno Mountain Habitat Conservation Plan prior to any ground-disturbing activities on or adjacent to Icehouse Hill. The plan shall include, but not be limited to, the following elements:

i. Pre-construction surveys shall be conducted during the period of identification for larval host plants and butterfly larvae in the flowering and/or breeding season immediately prior to trail construction or any other work scheduled to occur on Icehouse Hill.

ii. Trail construction on Icehouse Hill shall avoid populations of larval butterfly host plants.

iii. All trails, or alternately, sensitive habitats, shall be fenced to minimize the establishment of "informal" trails through habitats supporting special-status plants.

iv. Dogs shall be allowed on Icehouse Hill trails on leash only.

v. Interpretative signage shall be posted at trailheads explaining the presence of endangered butterflies and/or their habitat and the importance of preserving Icehouse Hill as habitat for endangered species.

Grassland habitat on Icehouse Hill shall be restored and enhanced to maintain and expand healthy populations of butterfly host plants according to the following performance standards:

- No net loss of existing butterfly host plants or damage to existing butterfly habitat or host plants from the trail and other recreational improvements, with habitat monitoring provided in years 1, 3, and 5.
- Reintroduced nectar and host plants for the Callippe silverspot, Bay checkerspot, and Mission blue butterflies achieve 50 percent cover in designated Habitat Management Areas within five years.
- Non-native invasive species such as French broom and fennel shall kept to a minimum within management areas.

MM BIO-1d: Nesting Bird Protection (Program EIR Mitigation Measure 4.C-1d). The following steps shall be taken to avoid direct losses of nests, eggs, and nestlings and indirect impacts to common and special–status avian species.

- Vegetation removal including removal of trees and shrubs as part of site development shall be confined to the nonbreeding season, except as provided for below. Grading or ground disturbance activities associated with site development including site remediation activities shall occur after pre-construction protocol burrowing owl surveys are conducted as described below and in the 2012 CDFW Staff Report on Burrowing Owls. Surveys shall be performed by a qualified biologist with demonstrated expertise performing nesting bird surveys whose work is subject to City staff and/or city-contracted peer review. Survey results shall be submitted to the City for review and approval prior to the commencement of any ground-disturbing activities. The Baylands developer shall pay or reimburse the City for all costs associated with survey reports and city-contracted peer review.

- *General Bird Surveys and Monitoring*. If removal of trees and shrubs or disturbance to trees and shrubs (i.e., tree removal, tree trimming) or grading is proposed to occur between January 1 and September 15, a qualified avian biologist shall survey any habitat proposed to be modified during the nesting season (i.e., January 1 through September 15) to determine if active bird nests are present. Surveys shall occur not more than 14 days prior to tree removal or trimming. Surveys shall include all trees in line-of-sight and within 500 feet of construction for raptors, and all vegetation (including bare ground within 250 feet) for all other species. If active nests are found, tree removal and/or tree trimming shall be conducted only after the young have left the nest and the nest is no longer in use. Confirmation that the nest is no longer in use shall be provided by a qualified biologist familiar with the species.

  If the qualified avian biologist identifies active nests, a no disturbance buffer of 150 feet shall be established and monitored by a qualified avian biologist, with authority to stop work in the event construction activities encroach within the disturbance buffer thus ensuring that impacts to nesting birds would not occur.

  Survey and monitoring reports shall be submitted to City staff for review: preconstruction survey reports shall be submitted prior to initiating construction activities; monitoring reports shall be submitted weekly until activities associated with nest habitat removal or disturbance activities are completed.

- *Burrowing Owl*. At all times of year, prior to initiating grading or ground disturbance activities associated with remediation activities required prior to site development, the following shall occur:

  - ~~Not less than 45 days prior to site grading, a qualified biologist shall survey the site to determine the presence of active burrowing owl nests. If active nests are found, passive relocation of the individuals would be accomplished according to the CDFW standards in effect at the time of the survey including the 2012 CDFW Staff Report on Burrowing Owls.~~

  - ~~Results of the burrowing owl survey will be forwarded to CDFW.~~

  - ~~Should the results of the survey include positive findings for occupied burrows, the location and condition of the burrows shall be reported to the CDFW, and an on-site mitigation plan shall be prepared for review and approval by the CDFW. Onsite mitigation shall include construction of artificial burrows at a ratio of not less than 1:1 with the burrows located away from areas permitted for use by dogs and hikers. Following construction of the artificial burrows, the existing owls shall be passively removed from their burrows using one-way trap doors. The artificial burrows shall be monitored for a period of five years to confirm occupation by the species. Monitoring reports shall be forwarded to the CDFW to document compliance with this mitigation measure.~~

  1. *Burrowing owl habitat assessment and surveys.* A qualified biologist (i.e., individual with a minimum of two years of burrowing owl survey experience that includes positive detections) shall conduct a habitat assessment and surveys for burrowing owl prior to construction. Focused surveys shall be conducted if warranted based on the habitat assessment. The habitat assessment and surveys shall follow the Department of Fish and Game Staff Report on Burrowing Owl Mitigation (2012) methodology (https://wildlife.ca.gov/Conservation/Survey-Protocols#377281284-birds) and the qualified biologist shall prepare a report documenting the survey results. The habitat assessment and surveys shall encompass the project site and a sufficient buffer zone to detect burrowing owl nearby that may be impacted, up to 500 meters (1,640 feet) around the project site pursuant to the above methodology.

  2. *Burrowing owl avoidance.* The applicant shall immediately notify CDFW if burrowing owl are detected and shall implement a

construction avoidance buffer around any detected burrowing owl pursuant to the buffer distances outlined in the Department of Fish and Game Staff Report on Burrowing Owl Mitigation (2012), which vary from 50 meters to 500 meters (164 feet to 1,640 feet).

3. *Biological monitoring*. Any detected burrowing owl shall be monitored by the qualified biologist to ensure they are not disturbed during construction activities, unless otherwise approved in writing by CDFW. Burrowing owls shall be allowed to leave on their own volition and shall not be disturbed without approval from CDFW.

MM BIO-1e: Special-Status Bat Roost Protection (Program EIR Mitigation Measure 4.C-4g). Applicants for demolition, grading or site-specific development projects pursuant to an approved specific plan within the Baylands shall take the following measures to avoid direct mortality of roosting special-status bats and disturbance of maternity roosts or winter hibernacula:

- All biological surveys must be performed by a qualified biologist with demonstrated expertise in bat biology whose work is subject to City staff and/or city-contracted peer review. Survey results shall be submitted to the City for review and approval prior to the commencement of any ground-disturbing activities. The Baylands developer shall pay or reimburse the City for all costs associated with survey reports and city-contracted peer review.
- A bat biologist familiar with Bay Area species shall conduct surveys of all potential bat habitat, including areas suitable for maternity roosts and/or winter hibernacula within a site proposed for development prior to initiation of construction activities, including initial grading. Surveys shall be conducted within one year prior to construction to capture current bat habitats at the site, as presence of bats could vary yearly and survey results several years before impacts occur could be inaccurate. Potentially suitable habitat shall be located visually. Bat emergence counts shall be made at dusk as the bats depart from any suitable habitat. In addition, an acoustic detector shall be used to determine any areas of bat activity. At least four nighttime emergence counts shall be undertaken on nights that are warm enough for bats to be active, or as otherwise deemed adequate by a qualified bat biologist to determine species absence. The bat biologist shall determine the type of each active roost (i.e., maternity, winter hibernacula, day or night).
- Removal or trimming of trees or demolition of buildings showing evidence of bat activity shall occur during the period least likely to affect

the bats as determined by a qualified bat biologist (generally between February 15 and October 15 for maternity roosts and between August 15 and April 15 for winter hibernacula). If active day or night (non-maternity) roosts are found, the bat biologist shall take action to allow individual bats to depart prior to tree removal or building demolition.

- The following steps shall be taken during the removal of active or suspected bat roosts:

    1. The qualified biologist shall be present during tree and structure disturbance or removal if active non-maternity or hibernation bat roosts or potential roosting habitat are present. Trees and structures with active non-maternity or hibernation roosts or potential habitat shall be disturbed or removed only under clear weather conditions when precipitation is not forecast for three days and when nighttime temperatures are at least 50°F, and when wind speeds are less than 15 mph.
    2. Trimming or removal of trees with active (non-maternity or hibernation) or potentially active roost sites shall follow a two-step removal process:
    3. On the first day of tree removal and under supervision of the qualified biologist, branches and limbs not containing cavities or fissures in which bats could roost, shall be cut only using hand tools (e.g., chainsaws).
    4. On the following day and under the supervision of a qualified biologist, the remainder of the tree may be removed, either using hand tools or other equipment (e.g., excavator or backhoe).
    5. All felled trees shall remain on the ground for at least 24 hours prior to chipping, off-site removal, or other processing to allow any bats to escape, or be inspected once felled by the qualified biologist to ensure no bats remain within the tree and/or branches.
    6. Disturbance to or removal of structures containing or suspected to contain active bat roosts (non-maternity or hibernation) or potentially active bat roosts shall be done in the evening and after bats have emerged from the roost to forage. Structures shall be partially dismantled to significantly change the roost conditions, causing bats to abandon and not return to the roost. Removal will be completed the subsequent day.

7. During construction, a no-disturbance buffer shall be created around active bat roosts being used for maternity or hibernation purposes at a distance to be determined in coordination with the CDFW.

Significance Conclusion for Impact BIO-1 with Implementation of Mitigation Measures Carried over from the Program EIR

The Program EIR identified Mitigation Measures MM BIO-1a and MM BIO-1b (Program EIR Mitigation Measures 4.C-1a and 4.C-1b) to reduce impacts on special-status plants by requiring surveys, rare plant mapping, and avoidance of rare plants, when possible. However, these measures did not provide explicit performance standards for special-status plant restoration areas.

The Program EIR identified Mitigation Measure MM BIO-1c (Program EIR Mitigation Measure 4.C-1c) to identify, avoid, and protect rare butterflies and their habitat at Icehouse Hill but also did not provide explicit performance standards related to long-term butterfly habitat management.

Presently, the large marble butterfly has no legal protection status and there is no requirement to provide mitigation under CEQA. Project-related disturbances within its preferred habitat of invasive radish and mustards, which grow sporadically throughout the Specific Plan area, would impact this butterfly. This would be a less than significant impact. If the butterfly gains legal protection status under CEQA, CESA, or FESA, prior to Project implementation, a significant impact would result.

To ensure the protection of special-status plants and butterflies, additional mitigation measures are needed.

Additional Mitigation Measures

MM BIO-1f: Performance Standards for Special-Status Plant Mitigation at Icehouse Hill. If direct or indirect impacts to special-status plants are unavoidable, rare plant populations shall be restored on-site in either the annual grassland or coastal scrub habitat on Icehouse Hill. Restoration would be at a 1:1 ratio based on the number of affected plants and/or acreage of the plant population, whichever is deemed most appropriate by a qualified botanist in coordination with the city. The special-status plant mitigation must be performed by a qualified biologist with demonstrated expertise in special-status plants whose work is subject to City staff and/or city-contracted peer review. The 1:1 replacement ratio shall be met at the end of five years and may therefore require initial plantings at a greater than 1:1 ratio, as determined by a qualified botanist. Any special-status plants and/or seeds shall be salvaged from on-site plants and used for any replacement plantings.

To reduce impacts from off-trail use, and increased horse use, trail head signage shall be required to educate the public regarding sensitive resources and restoration that would be affected by off-trail use. Mitigation areas shall be fenced or marked for a minimum of three years. Trail use rules shall be developed prior to construction, and in addition to limiting use to identified trails, may include other requirements to limit the possibility that rare plants would be impacted.

Prior to City approval of any site-specific development projects that affect special-status plants, a five-year restoration mitigation and monitoring program shall be developed and implemented for any planting areas established to mitigate impacts to such species. Restoration success criteria shall include:

1. Establishment of mitigation site(s) at or near the location of impacts where plant restoration will occur.
2. A qualified botanist shall identify an appropriate plant palette and restoration methodology compatible with the specific impacted special-status species. Mitigation sites could include existing annual grassland or coastal scrub habitat areas on Icehouse Hill, depending on site conditions and locations of special-status plants found.
3. Regular maintenance shall be performed twice annually or more frequently as needed to identify and resolve risks to mitigation sites. Site weeding shall be performed as necessary to reduce competition from non-native vegetation.
4. No loss in total number of individual plants in a special-status plant population found on the Baylands shall be verified at the end of the five-year monitoring period established in coordination with state and federal agencies with jurisdiction over these resources, as applicable. The mitigation plan shall provide contingency measures to restore and manage rare plant populations, including plant salvage, replanting, and continued monitoring and management, if the above standard is not met within five years.

<u>The Baylands developer shall pay or reimburse the City for all costs associated with the 5-year monitoring plan and city-contracted peer review.</u>

MM BIO-1g: Rare Butterfly Surveys and Habitat Protection Performance Standards. The Butterfly Protection Plan identified in Mitigation Measure BIO-1c shall be included in site development plans for Icehouse Hill to be submitted to the City for review and approval prior to City approval of any ground disturbing activities within Icehouse Hill. The Plan shall include, but not be limited to, the

following elements and specific performance standards to minimize impacts to listed butterfly species and their host plants and restored habitat and thereby facilitate reintroduction of listed butterfly species on Icehouse Hill as proposed by the Specific Plan:

i. Trail configurations and any non-pedestrian path uses (i.e., observation areas, educational areas, overlooks, nature play areas, gardens, and relocation of the Mission Blue Nursery), shall be sited to avoid butterfly host and nectar plants, whether or not they are being used by rare butterflies at the time of the pre-construction surveys.

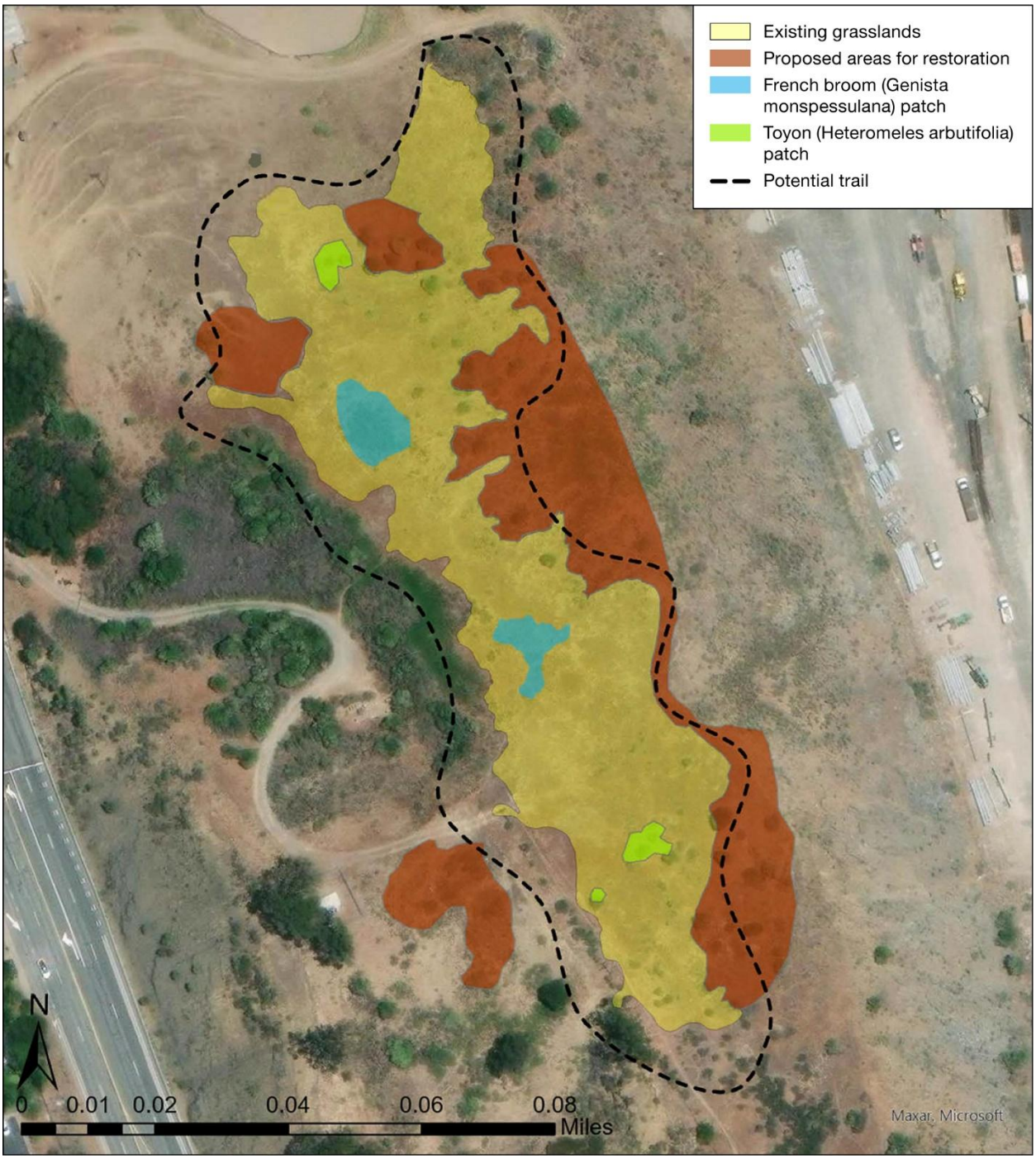
ii. Trail construction may be constructed through butterfly host plant restoration areas as conceptually illustrated in Figure 4.6-4.

iii. Establishment of seasonal restrictions or a period during which horses would be permitted to occur on Icehouse Hill associated with passive recreation areas shall be implemented in a manner that coordinates best with the use pattern of special status butterflies, under consultation with a Lepidopterist.

iv. Identification of habitat management areas for the enhancement/ restoration of quality patches of nectar and host plants to contribute to the survival and/or the reintroduction of listed butterfly species (i.e., Callippe silverspot, Bay checkerspot, and Mission blue butterflies) on Icehouse Hill.

v. Identification of restoration activities that protect and support the survival of listed butterfly species, including, but not necessarily limited to, the restoration and enhancement of native grassland habitat on Icehouse Hill to maintain and expand healthy populations of butterfly host plants and stabilize soils; development of a scrub encroachment and invasive species management plan; development of a planting palette designed by a qualified botanist using plant species that are known to support special-status butterflies, including Callippe silverspot, Bay checkerspot, and Mission blue butterfly host plants; ensuring that non-native Italian thistle (*Carduus pycnocephalus*) will not be removed from Icehouse Hill until alternate butterfly nectar plant sources have become established; and identification of potential sources of nectar and host propagules or seeds to enhance plant populations.

Figure 4.6-4: Potential Areas for Butterfly Habitat Restoration at Icehouse Hill



SOURCE: Coast Ridge Ecology, 2023

vi. Identification of operational actions to protect and support the survival of listed butterfly species, including, but not necessarily limited to, the fencing of trails or sensitive habitats and/or the creation of buffer areas to minimize the establishment of "informal" trails through habitats supporting butterfly host or nectar plants; providing signage that dogs shall be allowed on Icehouse Hill trails on leash only; providing interpretative signage posted at trailheads explaining the presence of endangered butterflies and/or their habitat and the importance of preserving Icehouse Hill as habitat for listed butterfly species; and development of a grazing management program, which would include seasonal restrictions on horse grazing on Icehouse Hill to allow grazing only between November and April, or as otherwise determined appropriate by a qualified biologist, and ongoing monitoring and modifications to grazing regimes.

vii. Annual monitoring surveys shall be conducted for 5 years after completion of restoration to assess habitat conditions and determine whether populations of Callippe silverspot, Bay checkerspot, or Mission blue butterflies are present and/or reproducing on Icehouse Hill.

MM BIO-1h: Large Marble Butterfly Surveys and Habitat Protection. (Required only if the species gains legal protection status). Focused surveys for the large marble butterfly shall be performed by a qualified biologist whose work is subject to City staff and/or city-contracted peer review during the butterfly flight season (March-June) prior to construction, vegetation management, or other ground disturbing activities. Survey findings shall be coordinated with the U.S. Fish and Wildlife Service. The implementation of Mitigation Measures MM BIO-1c (Rare Butterfly Surveys and Habitat Protection at Icehouse Hill) and MM BIO-1g (Rare Butterfly Surveys and Habitat Protection Performance Standards) would be applied to mitigate impacts to the large marble butterfly, which would consist of habitat avoidance and native vegetation plantings to support large marble butterfly populations. The Baylands developer shall pay or reimburse the City for all costs associated with [technical studies] and city-contracted peer review.

Significance Conclusion for Impact BIO-1 with Implementation of All Mitigation Measures

The Baylands Specific Plan area and surrounding areas support habitat for special-status wildlife species and rare plants that would be impacted as part of Specific Plan development. Mitigation Measures MM BIO-1a, MM BIO-1b, and MM BIO-1c ensure that construction of trail and recreational improvements at Icehouse Hill, as well as habitat enhancement and management activities in this area, would survey for and avoid special-status plants, retain

existing butterfly habitat, and maintain quality patches of nectar and host plants to support potential populations of Callippe silverspot and Bay checkerspot butterflies. Mitigation Measure MM BIO-1d establishes appropriate surveys for nesting birds, buffer areas around active nests, and time restrictions for construction activities within buffer areas, thereby protecting nesting birds within trees and shrubs during the nesting season. Mitigation Measure MM BIO-1e would avoid direct mortality of roosting special-status bats and disturbance of maternity roosts or winter hibernacula. Mitigation Measures MM BIO-1f and MM BIO-1g provide performance standards for special-status plants and rare butterflies and would reduce impacts to a less-than-significant level. Mitigation Measure BIO-1h would require focused surveys for the large marble butterfly to determine its presence and distribution in the Specific Plan area and avoid and mitigate impacts to this species. These mitigation measures ensure that impacts to special-status plants and wildlife species would be reduced to less than significant.

b. Threshold BIO-2: Freshwater Habitat, Tidally Influenced Habitats, Waters of the United States, Waters of the State, and Areas Subject to the Jurisdiction of the State Lands Commission or Bay Conservation Development Commission

Methodology for Determining Significance

Analysis of the Specific Plan's impacts recognizes that grading activities associated with site remediation, final landfill closure, and creation of development pads for Specific Plan development requires removal of nearly all portions of the site containing wetlands and non-wetland waters. As a result, the analysis focuses on documenting existing conditions within the Baylands and determining whether the habitat restoration plans for Visitacion Creek and Lagoon Park described in the Specific Plan would result in a net loss of wetlands and non-wetland waters in relation to acreage and habitat values and functions. If Specific Plan development would result in a net loss of wetlands or non-wetland waters in relation to acreage and habitat values or functions, the analysis identifies a significant impact along with mitigation measures to be implemented as part of site development.

Impact Assessment

Direct Impacts

Loss of Wetlands and Non-Wetland Waters/Sensitive Natural Communities

Wetlands and non-wetland waters, including open waters (e.g., the Lagoon and Visitacion Creek) within the Specific Plan area would be subject to direct and indirect impacts, principally during grading and construction. Wetlands and riparian habitats are CDFW-regulated sensitive natural communities which are collectively discussed below. The Specific Plan area contains one terrestrial sensitive natural community, California Goldfields-Dwarf Plantain Flower Fields,

as identified in Figure 4.6-3, that would be avoided by the Baylands Specific Plan. There would be no direct or indirect impacts to this sensitive natural community.

Visitacion Creek and any surrounding (but limited) jurisdictional habitats would be graded and removed as part of Specific Plan development. The Lagoon would remain in place. Both Visitacion Creek and all other wetland and non-wetland waters that would be removed would ultimately be replaced as part of the Specific Plan's habitat restoration plans for Visitacion Creek, Lagoon Park, and the stormwater detention facility. A majority of the jurisdictional aquatic features that would be impacted and enhanced at Visitacion Creek and the north shore of the Lagoon occur within the footprint of the former Brisbane Landfill.

As shown in **Table 4.6-3**, a total of 16.92 acres of federal and/or state-jurisdictional wetland and non-wetland waters within and along Visitacion Creek and the north shore of Brisbane Lagoon would be removed by implementation of the Baylands Specific Plan, including 14.50 acres of wetlands and 2.42 acres of non-wetland waters. The 14.50 acres of wetlands that would be removed by Specific Plan development include:

- 11.68 acres of palustrine emergent habitat (freshwater marsh; south of Visitacion Creek and within the future Roundhouse/Icehouse Hill Districts)
- 1.09 acres of estuarine emergent habitat (tidal/intertidal marsh; north and south of Visitacion Creek and along the north shore of Brisbane Lagoon)
- 1.73 acres of constructed basin (seasonal wetlands; north and south of Visitacion Creek and within the future Sustainability District)

The 2.42 acres of non-wetland waters that would be removed by Specific Plan development include:

- 1.10 acres of open waters (subtidal non-wetland waters; Visitacion Creek and Brisbane Lagoon)
- 1.06 acres of estuarine rocky shore habitat (tidal/intertidal marsh; northern shore of Brisbane Lagoon)
- 0.26 acres of constructed waterways (seasonal; Visitacion Creek)

Table 4.6-3: Wetland and Non-Wetland Waters along Visitacion Creek to Be Removed

	Classification	Habitat Type/Hydrologic Function	Impacted Area (Acres)
Wetlands			
Wetland	Palustrine Emergent	Freshwater Marsh (1)	11.68
Wetland	Estuarine Emergent	Tidal/Intertidal Marsh (2)	1.09
Wetland	Constructed Basin	Seasonal Wetlands (3)	1.73
	SUBTOTAL WETLANDS		*14.50*
Non-Wetland Waters			
Non-wetland waters	Subtidal Mudflat	Subtidal Mudflat (4)	1.10
Non-wetland waters	Estuarine Rocky Shore	Tidal/Intertidal Marsh (2)	1.06
Non-wetland waters	Constructed Waterway	Seasonal Non-Wetland Waters (5)	0.26
	SUBTOTAL NON-WETLAND WATERS		*2.42*
	TOTAL WETLANDS AND NON-WETLAND WATERS		**16.92**

SOURCE: ESA Associates, *Brisbane Baylands Specific Plan Biological Resources Technical Report*, September 2023; Biohabitats, *Baylands Wetland Delineation Report*, representing the acreages accepted by the verified PJD from July 2021.

NOTE: The parenthetical numbers – (1) through (5) – relate to the hydrologic functions also provided in **Table 4.6-3**.

Proposed Habitat Restoration and Net Effect on Acreage of Wetlands and Non-Wetland Waters within the Specific Plan Area

Table 4.6-4 analyzes the extent to which the habitat restoration proposed in the Specific Plan would provide in-kind replacement of the 16.92 acres of impacted wetlands and non-wetland waters on a 1:1 acreage basis.

Table 4.6-4: Impacted and Restored/Enhanced Wetlands and Non-Wetland Waters

Habitat Type/ Hydrologic Function	Impacted Wetlands and Non-Wetland Waters	Restored/Enhanced Wetland and Non-Wetland Waters					
		Visitacion Creek		North Shore of Brisbane Lagoon (Lagoon Park)		Visitacion Creek + North Shore of Brisbane Lagoon (Lagoon Park)	
		As Initially Installed	Year 2100 +3.1 ft-6.5 ft SLR	As Initially Installed	Year 2100 +3.1-6.5 ft SLR	As Initially Installed	Year 2100 +3.1-6.5 ft SLR
Freshwater Marsh/Seasonal Wetlands and Non-Wetland Waters (1), (3), (5)	13.67	11.38	11.38	3.82	3.82	15.20	15.20
Tidal/Intertidal Marsh (2)	2.15	2.20	2.52–13.01	2.00	8.72–12.72	4.20	11.24–25.73
Subtidal Mudflat (4)	1.10	1.60	3.67–6.24	0.20	1.85–10.76	1.80	5.52–17.00
WETLANDS & NON-WETLAND WATERS TOTAL	***16.92***	***15.18***	***17.57–19.25***	***6.02***	***14.39–23.48***	***21.20***	***31.96–42.73***

SOURCES: ESA, *Sea Level Rise Technical Report*, Figure 5, 2024; Biohabitats, *Wetland Delineation Report*, 2023; *The Baylands Specific Plan*, Chapter 5, 2023

ABBREVIATION: SLR = sea level rise

NOTE: Parenthetical numbers (1) through (5) refer to the hydrologic functions also provided in **Table 4.6-3**.

The total area of wetlands and non-wetland waters that will be lost during Baylands development (16.92 acres) is proposed to be replaced with 21.20 acres of wetlands and non-wetland waters when habitat restoration within Visitacion Creek and Lagoon Park are completed (**Table 4.6-4**). As demonstrated in that table, proposed habitat restoration of Visitacion Creek would fall short of replacement on a 1:1 acreage basis (16.92 acres of impact vs. 15.18 acre of enhancement). However, as described in **Table 4.6-4** and in the Land Use Program in Draft EIR Chapter 3, *Project Description* (Section 3.3.2), additional planned habitat restoration at the Lagoon's north shore would provide in-kind replacement for freshwater marsh, tidal/intertidal marsh and subtidal mudflats.

As shown in **Table 4.6-4**, the effects of 3.1 feet to 6.5 feet of sea level rise through 2100 (Low Risk Aversion scenario) on proposed restoration of Visitacion Creek and Lagoon Park would be to increase the area of each wetland type, expanding the total area of wetlands and non-wetland waters from 21.20 acres when habitat restoration is complete to 31.96 to 42.73 acres in the Year 2100.[135]

Indirect Construction Impacts

Grading and construction in areas with erodible soils such as Visitacion Creek and the north shore of Brisbane Lagoon can lead to soil particles entering drainages, freshwater or intertidal/ tidal marshes, and ultimately Brisbane Lagoon and San Francisco Bay. Sedimentation can degrade aquatic and marsh wildlife habitat by clogging vegetation with sediment. In addition, riparian vegetation along freshwater drainages can be harmed or killed by changes in water quality, which may alter habitat important to marsh wildlife. The analysis of Threshold HWQ-1 (Section 4.14) noted that installation of habitat improvements within Visitacion Creek and along the north side of Brisbane Lagoon would have a heightened potential for erosion due to tidal action and stormwater drainage over exposed soils.

Adherence to required NPDES permits and SWPPPs in combination with certified Program EIR Mitigation Measures 4.H-1a and 4.H-1b would avoid these adverse effects on aquatic and marsh wildlife habitat.

Offsite Lands

The Bayshore Mobility Plan improvements, relocation site for Fire Station No. 81, the existing Bayshore School, and offsite utility lines are within fully urbanized areas or underneath existing streets (potable and recycled water lines). These project components are not located in wetland areas and therefore would have no impact on wetlands and non-wetland waters.

[135] The Year 2100 High Emissions/Low Risk Aversion scenario of 3.1 and 6.5 feet of sea level rise is consistent with the 2018 State of California sea level rise guidance developed by the Ocean Protection Council, which identifies 3.1 feet of sea level rise as the appropriate criterion for protection of habitat areas and other open space types.

Human Encroachment within Wetlands and Non-Wetlands Waters

Proposed trails within Visitacion Creek and Lagoon Park are proposed to be designed to limit recreational access and thereby the intensity or duration of human encroachment that could lead to a decline in the quality of habitat areas. To control disturbance to the lagoon marsh complex by visitors and/or pets, the Specific Plan provides for an adjacent upland area to serve as a habitat buffer between Lagoon Road and development areas to the north and wetland habitats along the north side of the lagoon (see **Figure 3-20**). However, as shown in **Figure 3-19**, a series of trails are proposed running through wetland areas south of the buffer area. The Specific Plan further provides for physical barriers, such as cyclone fencing or equivalent screening, to be maintained along with educational signage. Specific Plan Section 5.4.3 states that barriers, should they be provided, would be at least 3 feet high with native vegetation planted on either side to keep dogs, cats, other household pets, and visitors out of water-related (or biologically sensitive) habitats. Trails within the wetland portions of Lagoon Park and Visitacion Creek provided on raised platforms such as the illustrative examples provided in Specific Plan Figures 5.3.24 and 5.3.32 (**Figure 4.6-5** and **Figure 4.6-6**, below) would have minimal effects on habitat areas along the north shore of the lagoon.

Figure 4.6-5: Illustrative Examples of Trails within Lagoon Park (Specific Plan Figure 5.3.24)



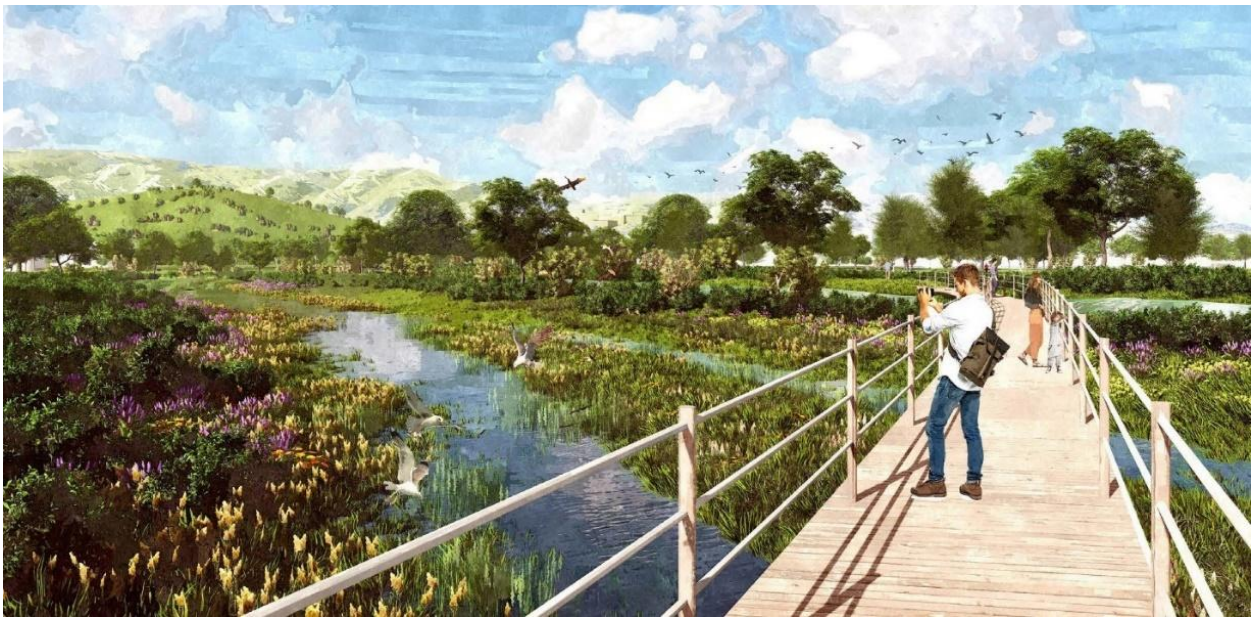
Multi-Use Path



Grassland Walk

Trails within Visitacion Creek would be provided on raised platforms such as the illustrative example provided in Specific Plan Figure 5.3.32 (**Figure 4.6-6**, below). This design would avoid adverse effects on habitat areas along the creek due to human/pet interference Section 8.16.060 of the Brisbane Municipal Code requires that "The owner or person in control of any private property shall at all times maintain the premises free of litter; provided, however, that this section shall not prohibit the storage of litter in authorized private receptacles for collection." Therefore, the Specific Plan area would be kept free of litter (or debris); avoiding that could potentially have adverse effects on regulated biological resources.

Figure 4.6-6: Illustrative Example of Trails within Visitacion Creek (Specific Plan Figure 5.3.32)



Visitacion Creek – Looking West

Significance Conclusion for Impact BIO-2

- The Specific Plan proposes restoration of habitat along the north shore of Brisbane Lagoon and Visitacion Creek, as illustrated in **Figure ~~3-19~~ 3-33** and **Figure ~~3-22~~ 3-36a**, that would provide in-kind replacement of wetlands and non-wetland waters.[136] Even with in-kind replacement, there would be a temporal loss of wetlands between the time the landfill is capped and before wetland features are recreated. A significant impact would occur.

- Specific Plan requirements for physical barriers, such as cyclone fencing or equivalent screening, to be maintained along with educational signage for trails within and adjacent to areas of wetlands and non-wetland waters, would reduce or minimize impacts associated with human encroachment. In addition, trails within the wetland portions of Visitacion Creek and Lagoon Park would be provided on raised platforms, resulting in minimal effects on habitat areas. Thus, impacts associated with human encroachment would be less than significant.

Program EIR Mitigation Measures

MM BIO-2a: Avoid or Minimize Adverse Effects on Sensitive Natural Communities and Wetland Areas (Program EIR Mitigation Measure 4.C-2a). The applicant shall avoid or minimize adverse effects on sensitive natural communities and restored

[136] While the Specific Plan's intention is to enhance Visitacion Creek and along the north shore of the lagoon to replace habitat lost due to site grading and development, resource agencies may not accept enhancement or mitigation actions located within the landfill footprint as mitigation and could require additional off-site mitigation.

wetland mitigation areas. After site grading has concluded, measures shall be implemented to avoid impacts to sensitive natural communities or restored habitat areas, including the installation of silt fencing, straw wattles, or other appropriate erosion and sediment control methods or devices to prevent runoff and construction debris from entering these areas. Such measures shall also be employed where pre-construction grading and post-remediation development requires work adjacent to sensitive natural communities, either prior to or after restoration of those areas occurs. Avoidance and minimization measures shall be overseen by a qualified biologist whose work is subject to City staff and/or city-contracted peer review. Where construction activities occur in the vicinity of sensitive natural communities on-site, the following shall be implemented to ensure no loss of restored mitigation sites:

- Fencing shall be erected adjacent to the areas where construction is occurring to avoid unintended impacts to sensitive natural areas that occur just outside the construction area and shall be constructed in a manner that will not impede wildlife access to wetland areas. Construction workers will be educated about local resources and instructed to avoid sensitive habitats during construction including limiting any human intrusion into natural areas.
- If work in the vicinity of natural communities cannot be avoided, work within these areas shall be conducted during the dry season, typically between May 1 and October 15, and shall occur under permit authority of the California Department of Fish and Wildlife, the Corps of Engineers, and the Regional Water Quality Control Board pursuant to the Clean Water Act Section 404 requirements for avoidance, mitigation and monitoring. Mitigation Measures MM BIO-2b, MM BIO-2c, and MM BIO-2d shall also apply if work cannot be avoided in or directly adjacent to sensitive natural areas or restored habitats.

The Baylands developer shall pay or reimburse the City for all costs associated with monitoring reports and city-contracted peer review.

MM BIO-2b: Maintain Water Quality and Control Erosion and Sedimentation during Construction (Program EIR Mitigation Measure 4.C-2b). The measures described below shall be employed to avoid degradation of natural communities or sensitive natural communities by maintaining water quality and controlling erosion and sedimentation during construction as required by compliance with the National Pollutant Discharge Elimination System (NPDES) General Permit for Construction Activities to address impacts on water quality. Avoidance and minimization measures shall be overseen by a qualified biologist whose work is

subject to City staff and/or city-contracted peer review. In addition, measures shall include, but not be limited to, the following:

- Installing silt fencing between aquatic sensitive natural communities and Project-related activities;
- Locating fueling stations away from potentially jurisdictional areas and features; and
- ~~Isolating construction work areas from any identified jurisdictional features.~~Where jurisdictional features can be avoided, incorporating design elements to ensure avoidance. Where avoidance is not feasible, compensatory mitigation shall be implemented in accordance with Mitigation Measures MM BIO-2d and MM BIO-2e.

The Baylands developer shall pay or reimburse the City for all costs associated with monitoring reports and city-contracted peer review.

MM BIO-2c: Water Quality Protection Measures near Aquatic Sites (Program EIR Mitigation Measure 4.C-1g). Construction and operation of proposed uses and open space areas along Visitacion Creek or adjacent to the northern lagoon edge shall include implementation of erosion control and water pollution control measures consistent with Stormwater Pollution Prevention Program (SWPPP) requirements, and implementation of an ongoing maintenance plan to ensure no reduction in water and environmental quality within the Creek and lagoon.

Project applicants shall provide the City with proof that appropriate stormwater permits have been obtained pursuant to the City of Brisbane's NPDES stormwater discharge permit, the San Francisco Regional MS4 Permit. This shall include construction site inspection and control programs at all construction sites, with follow-up and enforcement consistent with each Permittee's respective Enforcement Response Plan, to prevent construction site discharges of pollutants and impacts on beneficial uses of receiving waters. The goal of Provision C.3 of the MS4 Permit is for the Permittee, such as the City of Brisbane, to use their planning authorities to include appropriate source control, site design, and stormwater treatment measures in new development and redevelopment projects to address both soluble and insoluble stormwater runoff pollutant discharges and prevent increases in runoff flows from new development and redevelopment projects. This goal is to be accomplished primarily through the implementation of low impact development techniques.

Project applicants shall comply with local municipal requirements and the local stormwater program as mandated under the Municipal Stormwater Permit, including, at minimum, the following measures:

- Plan the development to fit the topography, soils, drainage pattern and natural vegetation of the Baylands.
- Delineate clearing limits, easements, setbacks, sensitive or critical areas, trees, drainage courses, and buffer zones to prevent excessive or unnecessary disturbances and exposure.
- Phase grading operations to reduce disturbed areas and time of exposure.
- Avoid excavation and grading during wet weather.
- Limit on-site construction routes and stabilize construction entrance(s) and exit(s).
- Any increase in impervious surface area shall include establishment of vegetated swales, permeable pavement materials, preserve vegetation, re-plant with native vegetation and appropriate measures should be evaluated and implemented where appropriate.
- Whenever practicable, native vegetation buffer areas shall be provided as part of a project to control pollutants from entering the Bay, and vegetation shall be substituted for rock riprap, concrete, or other hard surface shoreline and bank erosion control methods where appropriate and practicable.
- Construct diversion dikes and drainage swales to channel runoff around the site and away from bodies of water.
- Use berms and drainage ditches to divert runoff around exposed areas.
- Place diversion ditches across the top of cut slopes.
- No use of fertilizers or pesticides.

Applicants shall prepare a maintenance program for approval by the City that includes maintenance of water quality pollution-control features such as swales, sediment traps or other passive applications of pollution-prevention measures required as part of NPDES permitting. The maintenance program shall address the management of open space adjacent to the Brisbane lagoon and Visitacion Creek and, at minimum, shall include the following requirements, to be performed to the satisfaction of the City:

- Identify the entity responsible for ongoing maintenance of the lagoon perimeter and recreational facilities within the perimeter area (e.g.,

property owners' association, landscape maintenance district), along with provisions permitting the City to enforce maintenance requirements and recoup costs for such enforcement.

- Provide trash receptacles at appropriate locations and regular litter removal.
- Maintain all improvements within the lagoon perimeter in a safe and working condition.
- Identify a funding mechanism to ensure site maintenance and implementation of environmental quality monitoring at the creek and lagoon as part of the open space interpretive center. Monitoring parameters shall include water quality monitoring that, at a minimum, tests the first draw of stormwater from the new rainy season, and may include, but not be limited to vegetation monitoring, and passive observation and recording of fish species present.

MM BIO2d: Compensatory Mitigation, Monitoring, and Reporting for Impacts to Wetlands and Non-Wetland Waters and Sensitive Natural Communities (Program EIR Mitigation Measure 4.C-2c). Where disturbance to sensitive natural communities including jurisdictional wetlands and non-wetland waters cannot be avoided, compensation shall be provided for temporary impacts and permanent loss to ensure that there is no overall loss of sensitive natural communities as a result of Baylands development. Onsite, in-kind replacement of sensitive natural communities including coastal scrub, willow scrub, tidal marsh, freshwater emergent wetlands, and lined manmade drainages that have developed bed and bank characteristics shall be a condition of development. Compensation shall be detailed on an impact-specific basis and shall include development of an onsite Wetland Mitigation and Monitoring Plan, which shall be developed prior to Project Site development or in coordination with permit applications and/or conditions. Alternately, offsite mitigation may be pursued through an approved mitigation bank, although this option may result in a higher ratio for compensation. At a minimum, such plans shall include:

- Baseline information, including a summary of findings for the most recent wetland delineation conducted at the Project Site;
- Anticipated habitat enhancements to be achieved through compensatory actions, including mitigation site location (onsite enhancement or offsite habitat creation) and hydrology;

- Performance and success criteria for wetland creation or enhancement including, but not limited to, the following:
    - At least 90 percent survival of installed plants for each of the first three years following planting.
    - Performance criteria for vegetation percent cover in Years 1-4 as follows: at least 10 percent cover of installed plants in Year 1; at least 20 percent cover in Year 2; at least 30 percent cover in Year 3; at least 40 percent cover in Year 4; and at least 50 percent cover in Year 5.
    - Performance criteria for hydrology in Years 1-5 as follows: 14 or more consecutive days of flooding, ponding, or a water table 12 inches or less below the soil surface during the growing season at a minimum frequency of three of the five monitoring years; OR establishment of a prevalence of wetland obligate plant species.
    - Invasive plant species that threaten the success of created or enhanced wetlands should not contribute relative cover greater than 35 percent in Year 1, 20 percent in Years 2 and 3, 15 percent in Year 4, and 10 percent in Year 5.
    - If necessary, supplemental water shall be provided by a water truck for the first two years following installation. Any supplemental water must be removed or turned off for a minimum of two consecutive years prior to the end of the monitoring period, and the wetland must meet all other criteria during this period. At the end of the five-year monitoring period, the wetland must be self-sufficient and capable of persistence without supplemental water.
    - At least 75 percent cover by hydrophytic vegetation at the end of the five-year monitoring period. In addition, wetland hydrology and hydric soils must be present and defined as follows:
        - *Hydrophytic vegetation* – A plant community occurring in areas where the frequency and duration of inundation or soil saturation produce permanently or periodically saturated soils of sufficient duration to exert a controlling influence on the plant species present.
        - *Wetland hydrology* – Identified by indicators such as sediment deposits, water stains on vegetation, and oxidized rhizospheres along living roots in the upper 12 inches of the soil, or satisfaction of the hydrology performance criteria listed above.

- *Hydric soils* – Soils that are saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions, which are often characterized by features such as redox concentrations, which form by the reduction, translocation, and/or oxidation of iron and manganese oxides. Hydric soils may lack hydric indicators for a number of reasons. In such cases, the same standard used to determine wetland hydrology when indicators are lacking can be used.

- Five years after any wetland creation, a wetland delineation shall be performed to determine whether created wetlands are developing according to the success criteria outlined in the project permits. If they are not, remedial measures such as re-planting and or re-design and construction of the created wetland shall be taken to ensure that the Project's mitigation obligations are met.
- Monitoring and reporting requirements. If permanent and temporary impacts on jurisdictional waters cannot be compensated onsite through the restoration or enhancement of wetland features incorporated within proposed open space areas, the specific project applicant shall provide additional compensatory mitigation for these habitat losses. Potential options include the creation of additional wetland acreage onsite, the purchase of mitigation bank credits, or the purchase, implementation, and maintenance in perpetuity of offsite mitigation as approved by the City and state and federal permitting agencies. Offsite compensatory mitigation would be required to fulfill the performance standards described above.

The Wetland Mitigation and Monitoring Plan shall be prepared by a qualified biologist whose work is subject to City staff and/or city-contracted peer review. The Baylands developer shall pay or reimburse the City for all costs associated with Wetland Mitigation and Monitoring Plan and city-contracted peer review.

Significance Conclusion for Impact BIO-2 with Implementation of Program EIR Mitigation Measures

The Program EIR identified Mitigation Measures MM BIO-2a (Program EIR Mitigation Measure 4.C-2a) to avoid and reduce impacts on sensitive natural communities, including jurisdictional wetlands and waters. and maintain water quality during construction; and Mitigation Measure MM BIO-2d (Program EIR Mitigation Measure 4.C-2c) to compensate for impacts to such areas where avoidance is not possible. These measures did not, however, contain explicit performance standards for sensitive natural community restoration areas for which additional mitigation is needed.

In addition, the Specific Plan's proposed phasing of habitat restoration improvements in relation to sensitive natural community disturbance at Visitacion Creek and the north shore of Brisbane Lagoon could result in a temporal gap as long as 10-12 years between the impacts and site restoration.

In addition, the Specific Plan's proposed phasing of sensitive natural community disturbance relative to restoration timing, particularly at Visitacion Creek and the north shore of Brisbane Lagoon, could result in a temporal gap as long as 10-12 years between the impacts and site restoration, resulting in a significant impact. Additional mitigation would be required to address these wetland restoration performance standards.

The Specific Plan identified Mitigation Measures MM BIO-2b and MM BIO-2c (Program EIR Mitigation Measures 4.C-2b and Measures 4.C-2c) to protect water quality and reduce the effects of water pollution on aquatic habitat. Implementation of these measures would reduce such effects to less than significant.

Additional Mitigation Measure

MM BIO-2e: Design and Reporting Performance Standards for Sensitive Natural Community Restoration Areas. The wetland mitigation and monitoring plan described in Mitigation Measures MM BIO-2d shall additionally include design-level plans detailing the restoration of Visitacion Creek and the north shore of Brisbane Lagoon. The plan shall also include long-term monitoring requirements. Additional elements to include in the plan are as follows:

- The location of restored/enhanced habitats that provide at least a 1:1 in-kind replacement ratio by acreage and habitat type.
- An assessment of existing and proposed wetland and non-wetland waters habitat functions and values, including a discussion of sensitive habitats, soils, hydrology, and existing or potential sensitive species that are or would be supported by existing or proposed habitats demonstrating no net loss of habitat functions and values.
- Planting specifications for habitat areas (e.g., tidal, intertidal, and freshwater marsh).
- A strategy for invasive species management in mitigation areas.
- Location and design of recreational improvements, including buffer areas required to protect mitigation areas from encroachment by visitors or pets, including specific planting/management plan.

- Site monitoring and management responsibilities to be carried out over a minimum of 5 years based on identified performance standards and success criteria.
- Contingency measures, including the need for additional planting, watering, and/or maintenance, and an extension of monitoring requirements if standards are not met within the initial 5-year performance period.

MM BIO-2f: Performance Standards to Minimize Temporal Habitat Losses. To facilitate natural revegetation near restored aquatic sites, final grading for Visitacion Creek and Lagoon Park shall be completed within 2 years of initial site disturbance, or as otherwise determined by the city.

Significance Conclusion for Impact BIO-2 with Implementation of All Mitigation Measures

The Baylands Specific Plan area and surrounding areas support wetlands and non-wetland aquatic habitats and sensitive natural communities that would be graded and removed as part of Specific Plan development. Mitigation Measures MM BIO-2a, MM BIO-2d, and MM BIO-2e avoid and minimize adverse effects to wetland and non-wetland waters and ensure no net loss of wetland and non-wetland waters acreage, functions, and values. Mitigation Measures MM BIO-2f defines the allowable timeframe for the temporal loss of on-site wetlands. Mitigation Measures MM BIO-2d and MM BIO-2e affirm that because disturbance to wetland and non-wetland waters cannot be avoided, compensation shall be provided for temporary and permanent loss to jurisdictional resources on a 1:1 mitigation of in-kind habitat. Mitigation Measures MM BIO-2d and MM BIO-2f identify the requirements of a Compensatory Wetland Mitigation and Monitoring Plan to explicitly demonstrate how mitigation would be successfully implemented, including planting plans for tidal wetland and freshwater/marsh wetlands; specific performance and success criteria for revegetation; monitoring requirements and approaches; and long-term management plans. Implementation of Mitigation Measures MM BIO-2a through MM BIO-2f would ensure that a less than significant impact would occur with respect to the loss of wetland and non-wetland waters, including temporal impacts. Consequently, impacts would be less than significant with mitigation incorporated.

Adherence to required NPDES permits, SWPPPs, and implementation of Mitigation Measures MM BIO-2b and MM BIO-2c would ensure that Baylands construction activities would not degrade aquatic and marsh wildlife habitat due to sediment discharge. Impacts would therefore be less than significant with mitigation incorporated.

c. Threshold BIO-3: Fish and Wildlife Movement

Methodology for Determining Significance

As discussed above, proposed habitat enhancements and mitigation measures for Icehouse Hill would create the potential for butterfly movement between Icehouse Hill and the San Bruno Mountain Habitat Conservation Plan area. Thus, analysis of impacts on wildlife movement focuses on avian movement through the Baylands. Should on-site buildings be of sufficient height and have a design that could obstruct avian movement or cause bird strikes within the Baylands, the Specific Plan would cause a significant impact.

Impact Assessment

Wildlife movement corridors may provide favorable locations for wildlife to travel between different habitat areas such as foraging sites, breeding sites, cover areas, and preferred summer and winter range locations. They may also function as dispersal corridors, allowing animals to move between various locations within their range. Topography and other natural factors, in combination with human disturbance or urban development, can fragment or separate large open-space areas and wildlife habitats, thus impeding wildlife movement between areas of suitable habitat. This fragmentation creates isolated "islands" of vegetation that may not provide sufficient area to accommodate sustainable populations and can adversely affect genetic and species diversity. Movement corridors lessen the effects of this fragmentation by allowing animals to move between remaining habitats, which in turn allows genetic exchange between separate populations. CDFW's California Essential Habitat Connectivity online data viewer provides a resource to view statewide areas of natural landscape blocks, areas that connect these landscape blocks, and areas that are important for biological conservation (CDFW 2024). The Baylands Specific Plan area is not located within a mapped California Essential Habitat Connectivity landscape block, is not within modeled blacktail deer habitat connectivity or movement areas, and is not recognized as a wildlife movement corridor (CDFW 2024).

There is limited potential for terrestrial wildlife movement through the Baylands Specific Plan area given the area's existing physical barriers to wildlife movement, including major roads and highways, industry, railroad tracks, pipelines, and fences. However, small resident wildlife species may move along Visitacion Creek and within the freshwater marshes in the western portion of the site. No native wildlife nursery sites were identified within the Specific Plan area; therefore, no impacts to such areas would occur.

For rare butterflies, Icehouse Hill provides potential connection to habitat on San Bruno Mountain with butterfly habitat patches within Baylands. The Specific Plan proposes to avoid development within rare butterfly habitat on Icehouse Hill, with the intention to improve on-site habitat and movement opportunities for such species in the long run.

Fish and other aquatic species may enter Baylands waters through culverts under US Highway 101. These waters provide foraging habitat only and do not provide or connect to spawning habitat for any species. Site remediation will reduce the contaminants from entering Brisbane Lagoon and San Francisco Bay, thereby reducing toxins in the local aquatic food chain; while eelgrass planting in the Lagoon and shoreline enhancements would improve habitat for native fish.

Marine mammals may occasionally stray into Brisbane Lagoon while foraging, but site improvements would have no impacts to these species. In the long-term, site improvements will improve foraging habitat quality for marine mammals by reducing toxins entering San Francisco Bay and promoting the revegetation of marine and shoreline habitats.

Terrestrial Species

Present conditions within the Baylands include fragmented habitat for terrestrial species, including amphibians, reptiles, and small mammals, in freshwater wetlands and tidal marshlands, with scattered trees and grassland vegetation providing nesting habitat for birds. Barriers including the railroad, major roads, and industrial development impede the use of the Baylands for wildlife movement.

Following construction and restoration of wetland and upland habitat areas within Baylands Park, the Ecological Park, Visitacion Creek, Icehouse Hill, Lagoon Park, and the Baylands Preserve (see **Figure 3-13** in Draft EIR Chapter 3, *Project Description*), the Specific Plan would provide connectivity for terrestrial species that use wetland habitats and aquatic corridors. This would be ensured through implementation of the habitat restoration and enhancement plans contained in the Specific Plan for Visitacion Creek and Lagoon Park. Under-road wildlife connections would be provided at Tunnel Avenue, Visitacion Creek Road North, and Sierra Point Parkway in the form of a small culvert or clear-span bridge sized appropriately for small terrestrial fauna to traverse between local and regional habitat patches. The under-road wildlife connection provided at Sierra Point Parkway and the Bay Trail would consist of a clear-span bridge to replace the existing culvert.

Butterflies

The distance between Icehouse Hill and the easternmost point of San Bruno Mountain (the Carter-Martin management unit) is 0.23 mile, less than the reported 0.75-mile dispersal distance for Callippe silverspot butterfly (Coast Ridge Ecology 2023). However, these butterfly species have a high habitat specificity and short reproductive season, with one generation per year. Butterfly reproduction further depends on temperature, precipitation, and wind speed (San Mateo County Parks Department 2008). These factors reduce the likelihood or frequency of the Baylands serving as a habitat corridor for these butterfly species.

The currently proposed layout of trails on Icehouse Hill as provided in the Specific Plan (Baylands Development Inc. 2023) would cross a grassland area with host plants (*Viola pedunculata*) for the Callippe silverspot butterfly. Although surveys during flight season did not find evidence of this species within the Baylands (Coast Ridge Ecology 2023; Biohabitats 2023c), larvae or pupae could be present in leaf litter in areas containing the host plant. Thus, damage or removal of this grassland habitat would result in a significant impact on wildlife movement.

As provided in Mitigation Measure MM BIO-1c above, trails and other recreational facilities on Icehouse Hill would be sited and constructed to avoid damage to larval host plants and nectar plants (which feed adult butterflies), while restricting visitor access within sensitive areas. Ongoing management would be required to implement the proposed actions, remove invasive plants in the grassland, and control future encroachment and proliferation of invasive species (Coast Ridge Ecology 2023), as indicated by Mitigation Measure MM BIO-1c. As further required by Mitigation Measure MM BIO-1c, Icehouse Hill would host nectar plants that would also be suitable for pollinators, which would support movement of butterflies, bees, moths, and other pollinators.

Birds

Thousands of migratory birds use the Pacific Flyway during spring and fall, passing over the San Francisco Peninsula and the Bay. Migrating birds such as songbirds, including special-status species, can be affected by human-built structures because of their propensity to migrate at night, their low flight altitudes, and their tendency to be disoriented by artificial light, making them vulnerable to collision with obstructions. Bird-strike impacts resulting from development of the Specific Plan's medium and high density residential and commercial areas with structures having reflective surfaces, as well as additional night lighting, would increase bird-strike hazards to avian movement through the Baylands.

Bird flights close to man-made structures risk collisions with these structures. Approximately 100 million to 1 billion birds die in North America as a result of building collisions each year (Seewagen and Sheppard 2017). Daytime collisions occur most often when birds fail to recognize window glass because it reflects clouds and sky. Lighting also affects birds during their movement and reproduction. Indirect effects of light disturbance on migratory birds include delayed arrival at breeding or wintering grounds, and reduced energy stores necessary for migration, winter survival, or subsequent reproduction (Gauthreaux and Belser 2006).

Under existing conditions, the Baylands presents minimal obstacles for migratory birds as the site primarily consists of a landfill and open areas, with low-lying buildings interspersed. Mid- and high-rise buildings over 50 feet in height, including commercial and residential towers up to 270 feet in height within proposed medium- and high-density development areas (see **Figure 3-6** in Draft EIR Chapter 3, *Project Description*), would provide limited space for migrating birds to pass. These buildings would also increase the likelihood of migratory and resident birds

striking windows of the on-site buildings during flight, causing injury or mortality, particularly when nearby landscape areas are reflected onto these windows during the day or a building's interior nighttime lighting gives the appearance to birds that the exterior of a building is not a solid surface. Landscaping within the Specific Plan's park and habitat areas could also attract birds to its trees and may increase the likelihood of bird collisions with nearby structures.

The Specific Plan's Development Standards require that buildings taller than 100 feet employ the following bird-friendly design strategies:

- Consult a qualified biologist experienced with urban building bird-strike design issues to identify measures related to the external appearance of the building to minimize the risk of bird strike; and
- Use a bird-friendly glazing treatment on the façades of any floor within 12 feet of the level from a green roof if the façade has 50 percent or more glazed surface.

Examples of bird-friendly glazing treatments identified in the Specific Plan to be employed include but are not limited to:

- Use of paned glass with fenestration patterns;
- Use of decorative screens, applied film, louvers, angled, fritted and/or frosted glass; and
- Use of window treatments that reduce transmission of light of the building.

Different agencies and organizations have established varying standards for avoiding bird collisions, typically establishing 100 feet or less above grade as the primary area in which bird collisions occur. According to the City of San Francisco's *Standards for Bird-Safe Buildings* (SF Bird-Safe Buildings) (San Francisco Planning Code Section 139), "the most hazardous areas of all buildings, especially during the day and regardless of overall height, are the ground level and bottom few stories." The publication indicates the typical bird building collision zone is up to 60 feet. The New York City *Bird Friendly Building Design & Construction Requirements Guidance Document* (November 2020) indicates the bird building collision zone is typically up to 75 feet, and the Washington, D.C., *Migratory Local Wildlife Protection Act of 2022* (Law 24-337) cites a bird collision zone of up to 100 feet. For purposes of this analysis, the portions of buildings up to 100 feet above grade are considered potential bird collision zones.

Development within the Specific Plan area, combined with the development's proximity to natural areas, including on-site features, such as the restored/enhanced Visitacion Creek and Brisbane Lagoon, and off-site areas, including the San Francisco Bay and San Bruno Mountain Park, have the potential to increase the number of bird strikes compared to existing conditions. In addition, building night lighting during operation (i.e., internal lighting and lighting provided on the exterior of buildings, walkways, and parking areas) could attract migratory birds and increase the likelihood of strike injuries or mortality. Night migrants depend on starlight for navigation, and brightly lit buildings or areas can draw them off course.

Fish and Marine Mammals

A host of aquatic species, including marine invertebrates and native and introduced fish, occur in San Francisco Bay and Brisbane Lagoon. Habitat restoration and enhancement actions under the Specific Plan are planned to improve habitat along the shoreline of Brisbane Lagoon. These actions include planting tidal flats with eelgrass and redesigning riprapped shorelines with limited vegetation to support transitional saltmarsh habitat. Moreover, the capping of contaminated soils in upland portions of the site will isolate toxic substances, preventing them from entering the aquatic food chain, which could benefit fish species such as the bat ray, leopard shark, and striped bass, among others. Direct construction impacts to fish are expected to be less than significant because no sensitive spawning or rearing habitat occurs on-site or in Brisbane Lagoon, and foraging individuals, if present, would be able to move away from construction disturbance areas. Long-term benefits to fish and other aquatic species include reduced contamination and enhanced foraging habitat quality. Similarly, marine mammals would not be subject to short- or long-term impacts during construction but would benefit from improved habitat conditions within the Lagoon and San Francisco Bay.

Significance Conclusion for Impact BIO-3

There is limited potential for terrestrial wildlife movement through the Baylands Specific Plan area given the area's existing physical barriers to wildlife movement including major roads and highways, industry, railroad tracks, pipelines, and fences. However, wildlife would move along Visitacion Creek and within the freshwater marshes in the western portion of the site. Maintaining and enhancing this movement would be ensured through development and implementation of a Project-wide Open Space Plan (Mitigation Measure MM BIO-3a), Marsh Wildlife and Habitat Protection Plan (Mitigation Measure MM BIO-3b), and a pet safe policy that would apply during construction and operations (Mitigation Measure MM BIO-3c). Habitat enhancements proposed for Icehouse Hill along with recreational improvements consistent with Mitigation Measure MM BIO-1c would also provide for movement of butterflies between Icehouse Hill and the San Bruno Mountain Conservation Area.

Development of commercial and residential buildings, as well as additional night lighting, would increase bird strike hazards to avian movement through the Baylands. This is a significant impact.

Program EIR Mitigation Measures

MM BIO-3a: Wildlife-Safe Pet Policy during Construction and Operations (Program EIR Mitigation Measure 4.C-4c). All development on the Baylands shall be required to have a no-pets policy for construction workers. All development within the Baylands that includes a residential component shall also include a pet policy that requires residents to adhere to the measures of this policy to prevent impacts

on wildlife from domestic animals. The policy shall become a part of the Covenants, Conditions, and Restrictions (CC&Rs) attached to each property deed for for-sale residential properties and enforced through the homeowner's association or other entity specified in the CC&Rs and made part of leases for residential rental properties and commercial leases within the Baylands. The pet policy shall limit the number of animals per residence and require adult cats, dogs, and rabbits to be spayed or neutered. Cats and dogs shall be required to be kept inside the residences and allowed outside residences only if on a leash and under the tenant's control and supervision, except within areas specifically designed as dog parks. To provide effective predator control, feral animal trapping may be necessary.

~~MM BIO-3b: Use of Wildlife-Friendly Lighting (Program EIR Mitigation Measure 4.C-4d).~~ ~~During design of any building greater than 100 feet tall, the applicant and architect shall consult with a qualified biologist experienced in building/lighting design issues (as approved by the City of Brisbane Planning Department) to identify lighting related measures to minimize the effects of the building's lighting on birds. Such measures, which may include the following and/or other measures, shall be incorporated into the building's design and operation.~~

- ~~Use strobe or flashing lights in place of continuously burning lights for obstruction lighting. Use flashing white lights rather than continuous light, red light, or rotating beams.~~
- ~~Install shields onto light sources not necessary for air traffic to direct light towards the ground.~~
- ~~Extinguish all exterior lighting (i.e., rooftop floods, perimeter spots) not required for public safety.~~
- ~~When interior or exterior lights must be left on at night, the operator of the buildings shall examine and adopt alternatives to bright, all-night, floor-wide lighting, which may include:~~
  - ~~Installing motion-sensitive lighting.~~
  - ~~Using desk lamps and task lighting.~~
  - ~~Reprogramming timers.~~
  - ~~Use of lower-intensity lighting.~~
  - ~~Windows or window treatments that reduce transmission of light out of the building will be implemented to the extent feasible.~~
  - ~~Educational materials will be provided to building occupants encouraging them to minimize light transmission from windows,~~

especially during peak spring and fall migratory periods, by turning off unnecessary lighting and/or closing drapes and blinds at night.

- A report of the lighting alternatives considered and adopted shall be provided to the City of Brisbane Planning Department for review and approval prior to construction.
- The City of Brisbane Planning Department shall ensure that lighting-related measures to reduce the risk of bird collisions have been incorporated into the design of such buildings to the extent practicable.

MM BIO-3c: Bird-Safe Building Design (Program EIR Mitigation Measure 4.C-4e). During design of any building greater than 100 feet tall, the applicant and architect shall consult with a qualified biologist experienced with urban building bird strikes design issues (as approved by the City of Brisbane Planning Department) to identify measures related to the external appearance of the building to minimize the risk of bird strikes. Such measures, which may include the following and/or other measures, shall be incorporated into the building's design:

- Use non-reflective tinted glass.
- Use window films to make windows visible to birds from the outside.
- Use external surfaces/designs that break up reflective surfaces.
- Place bird attractants, such as bird feeders and baths, at least three feet and preferably 30 feet or more from windows in order to reduce collision mortality.
- A report of the design measures considered and adopted shall be provided to the City of Brisbane Planning Department for review and approval prior to construction. The City of Brisbane Planning Department shall ensure that building design related measures to reduce the risk of bird collisions have been incorporated to the extent practicable.

Significance Conclusion for Impact BIO-3 with Implementation of Program EIR Mitigation Measures

The implementation of the Specific Plan's habitat conservation and enhancement program will incorporate wildlife movement corridors into the site design and enhance existing high-quality habitat for native plant and wildlife species. Proposed habitat enhancements and mitigation measures for Icehouse Hill will enhance butterfly movement opportunities between Icehouse Hill and San Bruno Mountain and reduce impacts to less than significant.

The Program EIR recognized the potential for impacts on migratory birds from night lighting and potential to collide with windows and reflective surfaces on tall buildings associated with development of the site, a potentially significant impact, and proposed mitigation to reduce the magnitude of the impact. ~~Measures from the Program EIR reduce potential lighting impacts to birds and wildlife to less than significant.~~ Significant advancements have, however, been made over the last decade in the understanding of bird hazards and methods to reduce bird collision risks. This EIR therefore incorporates provisions from Program EIR mitigation measures into the ~~provides~~ additional mitigation measure~~s~~ below to address impacts related to avian movement and building collisions.

Additional Mitigation Measures

MM BIO-3~~d~~b: ~~Additional~~ Bird-Safe Building Design Requirements. All buildings shall be constructed to achieve a performance standard of a Threat Factor of 30 or less on each façade up to 100 feet above grade (American Bird Conservancy, no date).[137] The following requirements shall apply to meet this performance standard for the portions of all buildings up to 100 feet in height above grade, other than the Roundhouse, which is exempt from this requirement due to its historic character, need to maintain historic façade materials, and lack of reflective surfaces.

- No more than 5 percent of any building façade up to 40 feet above grade, as well as any façade within 24 feet ~~above~~ of any green roof, shall exceed a Threat Factor of 30.
- The exterior wall envelope and any exterior fenestration on the portion of buildings between 41 feet and 100 feet above grade shall be constructed with bird friendly materials and shall not exceed a Threat Factor of 30 on any given façade. Other materials may be used to the extent they do not exceed an aggregate of 10 square feet within any 10-by-10-foot-square area of exterior wall below 100 feet above grade.
- No glazed corners or fly-through conditions shall exceed a Threat Factor of 30.
- For Threat Factors equal to or less than 30, the building shall be exempt from the building façade requirements.

During design of any building, the Project or Permit Applicant shall engage a qualified biologist (as approved by the City of Brisbane Planning Department)

[137] "Threat Factor" is defined by the American Bird Conservancy as a relative measure of a building material's visibility, which enables the bird to see and avoid the building surface and, as a result, reduce bird collisions. A Threat Factor of 30 suggests that bird collisions would be reduced by least 50 percent. Lower Threat Factors would reduce bird collisions by greater amounts. The American Bird Conservancy's inventory of estimated threat factors for building façades can be found at https://abcbirds.org/glass-collisions/products-database/.

who is experienced with urban bird-safe building design methods to identify and approve building design treatments/elements that reflect the most current practice in bird strike protection for those portions of buildings up to 100 feet in height above grade and achieve the performance standards described above. The qualified biologist's work is subject to City staff and/or city-contracted peer review. Building designs shall also be approved by the City of Brisbane Building Department. The Baylands developer shall pay or reimburse the City for all costs associated with building design treatments/elements and city-contracted peer review.

Building design treatments/elements that must be reviewed and incorporated into the building design to the extent needed to achieve the identified performance standard of a Threat Level of 30 or less may include, but are not necessarily limited to, the following:

- *Glazing Treatments:* Glazing treatments shall be used to create a transparent (rather than reflective) surface that is visible to birds. Examples of bird-friendly glazing treatments include, but are not necessarily limited to, the following:
    - Use of glass or a glass coating that reflects ultraviolet light
    - Use of dichroic or translucent glass; dichroic glass achieves the appearance of changing colors by transmitting and reflecting light, while translucent glass is porous and opaque
    - Use of fritted or frosted glass or angled glass
    - Use of panned glass with fenestration patterns
    - Use of non-reflective, tinted glass
    - Art treatment of glass
- *Building and Fenestration Strategies (Architectural Features):* Architectural features shall be used to block the uninterrupted view of glass from birds and/or to provide a physical obstacle to bird strikes. Examples of building and fenestration strategies that would reduce the potential for bird-strikes include, but are not necessarily limited to, the following:
    - Use of architectural features that block the view of glass from birds, including screens, overhangs, louvers, and awnings
    - Use of netting that is stretched several inches over windows or entry ways to prevent birds from hitting the glass

  - Use of external surfaces/designs that break up reflective surfaces (e.g., well-articulated building facades and/or fenestration broken up with mullions or other treatments)
  - Avoid the use of transparent building corners
  - Place bird attractants, such as bird feeders and baths, at least 3 feet and preferably 30 feet or more from windows in order to reduce collision mortality

- *Design and Operation of Nighttime Lighting:* Each site-specific development project shall comply with Threshold AES-4 and Mitigation Measure MM AES-4b, which provide night sky performance standards (e.g., light trespass restrictions). Examples of nighttime lighting design and operation that would comply with Threshold AES-4 and Mitigation Measure MM AES-4b and reduce the potential for bird-strikes caused by light trespass, over-illumination, light clutter, or skyglow include, but are not necessarily limited to, the following:
  - Low profile, low intensity lighting directed downward
  - Shielded fixtures for outdoor lighting
  - Motion sensor lighting and automatic shut offs for interior lights in unoccupied spaces
  - Interior blinds that automatically close at night to block light transmission
  - Motion sensor lighting and automatic shut offs for exterior lights where not required for public safety
  - Minimize vanity lighting
  - Strobe or flashing lights in place of continuously burning lights for obstruction lighting. Use flashing white lights rather than continuous light, red light, or rotating beams.
  - Outdoor lighting and colors of lighting that would increase the visibility of buildings to birds without substantially increasing energy consumption or decreasing public safety.
  - Install shields onto light sources not necessary for air traffic to direct light toward the ground.
  - Extinguish all exterior lighting (i.e., rooftop floods, perimeter spots) not required for public safety.

- When interior or exterior lights must be left on at night, the operator of the buildings shall examine and adopt alternatives to bright, all-night, floor-wide lighting, which may include:
  - Installing motion-sensitive lighting.
  - Using desk lamps and task lighting.
  - Reprogramming timers.
  - Using lower-intensity lighting.
  - To the extent feasible, providing windows or window treatments that reduce transmission of light out of the building.
  - Providing educational materials to building occupants encouraging them to minimize light transmission from windows, especially during peak spring and fall migratory periods, by turning off unnecessary lighting and/or closing drapes and blinds at night.

Significance Conclusion for Impact BIO-3 with Implementation of All Mitigation Measures

Mitigation Measures MM- BIO-~~3~~2a ~~and MM BIO-3b~~ through MM BIO-2f provide long-term open space planning and marsh protection planning for the Baylands. In addition, Mitigation Measure MM BIO-~~3c~~3a would establish a wildlife-safe pet policy that would apply during construction and operations to minimize impacts of pets on habitat areas.

Implementation of Mitigation Measures MM BIO-1a through MM BIO-1c would ~~be~~ reduce impacts to butterfly movement to less than significant, and in the long-term, restoration on Icehouse Hill would improve habitat for the Callippe silverspot butterfly and perhaps other listed butterfly species by providing a link to restored habitat in the Baylands (e.g., Icehouse Hill) and sensitive species resources on San Bruno Mountain.

Mitigation Measures ~~MM BIO-3e and MM BIO-3f~~ MM BIO-3b, MM AES-4, MM AES-5a, and MM AES-5b provide design requirements that would provide effective bird-safe building treatments to buildings to avoid or reduce bird mortality. Impacts would therefore be less than significant with mitigation incorporated. Mitigation Measures MM BIO-~~3d~~3b and MM AES-4 address the potential for nighttime lighting of buildings, which would reduce the potential for nighttime bird collisions. Thus, Impact BIO-3 would be less than significant with mitigation incorporated.

d. Threshold BIO-4: Brisbane Tree Ordinance

Methodology for Determining Significance

The Baylands Specific Plan was reviewed to determine whether any of its provisions would inhibit implementation of Brisbane Municipal Code Chapter 12.12. Should any Specific Plan provision conflict with or potentially inhibit the implementation of Chapter 12.12, a significant impact would result, and mitigation would be required.

The Bayshore Mobility Plan improvements, the existing Bayshore School, and offsite utility lines are within fully urbanized areas or underneath existing streets (potable and recycled water lines). These project components would not require tree removal and are therefore not discussed further.

Impact Assessment

Brisbane Municipal Code Chapter 12.12:

- Protects certain trees that contribute to the scenic beauty of the city, have been found to be of value or significance as a native tree species, or are required to be planted and maintained as a condition of development approval;
- Prevents the indiscriminate removal of trees; and
- Protects trees that provide protection against erosion, land instability, flooding, or other hazards.

The Municipal Code specifically defines protected tree species as:

(1) Any California bay (*Umbellularia californica*), coast live oak (*Quercus agrifolia*), or California buckeye (*Aesculus californica*) that is a mature tree;

(2) Any other tree designated as a protected tree by resolution of the City Council;

(3) Any tree, regardless of size, originally required by the City to be planted as a condition for the granting of a permit, license, or other approval, or any tree that existed at the time of the granting of such permit, license, or other approval and required by the City to be preserved as part of such approval; or

(4) Three or more mature trees of any one or more non-invasive species that are proposed to be removed from the same property or from adjacent property under common ownership.

Removal of protected trees requires a permit from the City, which typically requires replacement at a minimum ratio of 1:1 within a project site, off-site mitigation, or in-lieu payment. Severe trimming is defined as the removal of more than 50 percent of the foliage crown or more than 30 percent of the height of a tree.

Tree Removal and Replacement

The remediation and grading work at the Baylands would necessitate removal of nearly all trees presently on the site other than those on Icehouse Hill. These trees currently consist mainly of non-native acacia and eucalyptus species, as well as Monterey pines. As required by the Brisbane Municipal Code, prior to removing any trees from the site, the developer would apply for the necessary permit from the City and adhere to its provisions for tree replacement.

The Baylands Specific Plan's Open Space and Conservation Plan (Section 5.4.5) also requires replacement of removed trees at a minimum ratio of 1:1, including substituting native trees in place of non-native trees whenever possible. The minimum ratio of 1:1 is required to be met 5 years after planting; however, initial plantings may require greater than the minimum 1:1 ratio to achieve this standard. The Specific Plan commits to the planting of approximately 40 to 75 trees in the woodland habitat within planned open space, as well as planting of numerous ornamental trees within Baylands plazas and neighborhoods. The Specific Plan's on-site plantings would comply with the tree permit requirements and, as a result, ensure consistency with the City ordinance.

Impacts of the Relocated Fire Station

In addition to Baylands development, construction of a new City fire station at 140 Valley Road to replace the current fire station located at 3445 Bayshore Boulevard is proposed. The relocated and existing fire station sites were surveyed in February 2023 (ESA 2023). The existing fire station location would continue to be used by the North County Fire Authority for training purposes with no changes to the trees on the property.

The relocated fire station site consists of an existing large structure surrounded by a paved parking lot, which is bordered on the northeast by a stormwater swale downslope from Bayshore Boulevard. The perimeter of the site was lined with trees including blue gum (*Eucalyptus globulus*), blackwood acacia (*Acacia melanoxylon*), toyon (*Heteromeles arbutifolia*), pine (*Pinus* sp.), Monterey cypress (*Hesperocyparis macrocarpa*), and coast live oak (*Quercus agrifolia*). Ornamental trees including bottlebrush (*Callistemon* sp.) and a large Monterey cypress were also present near the building.

Because Municipal Code Chapter 12.12 is intended for private projects requiring permits from the City, relocation of the City's existing fire station by the North County Fire Authority and City would not require a City permit to remove trees within the relocation site. The relocated fire station will, however, provide 1:1 replacement of trees removed within the relocation site to the extent compatible with the fire station's emergency services functions. The Specific Plan's on-site plantings would comply with the tree permit requirements and, as a result, ensure consistency with the City ordinance.

Significance Conclusion for Impact BIO-4

Specific Plan development would result in the removal of nearly all trees within the Baylands. The Program EIR (Impact 4.C-5) found that site development would result in the removal of protected trees. In its analysis, the Program EIR concluded that reliance upon the City's tree ordinance, which requires a permit for tree removal and tree replacement at a minimum ratio of 1:1, would result in a less than significant impact with no mitigation required. Relocation of the City's existing fire station would also require removal of some existing trees at the relocation site. Such removed trees would be replaced at a 1:1 ratio to the extent possible given operational requirements for the relocated fire station.

The impact would, therefore, be less than significant.

e. Threshold BIO-5: San Bruno Mountain Habitat Conservation Plan

Methodology for Determining Significance

The Baylands Specific Plan area is not subject to the San Bruno Mountain Habitat Conservation Plan but has the potential to support or hinder the Habitat Conservation Plan's mission to conserve and restore listed butterflies. The Baylands Specific Plan was reviewed to determine whether any of its provisions would impair conservation and restoration of habitat for listed butterflies within the Habitat Conservation Plan area. This review focused on the physical environmental effects of Baylands development in relation to host plants and nectar plants within Icehouse Hill (see discussion of Impact BIO-3), above. In addition, the potential effects of the Specific Plan's proposal to relocate Mission Blue Nursery from its current location to the former police shooting range on Icehouse Hill were reviewed. Should Specific Plan development disrupt or adversely affect the ability of Mission Blue Nursery to continue growing native plants from seeds and cuttings collected by permit on San Bruno Mountain and providing these plants for ecological restoration projects on the mountain, such development would hinder the Habitat Conservation Plan's mission, and a significant impact would be identified.

The Bayshore Mobility Plan improvements, the existing Bayshore School, and offsite utility lines are within fully urbanized areas or underneath existing streets (potable and recycled water lines). These project component areas do not contain habitat for listed butterflies within the Habitat Conservation Area and are therefore not discussed further.

Impact Assessment

Although the Baylands is not subject to the San Bruno Mountain Habitat Conservation Plan, Baylands restoration would promote the goals of the Habitat Conservation Plan to conserve and restore listed butterflies. Specific Plan development would displace the Mission Blue Nursery

from its current site, which is leased from the Specific Plan applicant. The nursery is proposed to be relocated to Icehouse Hill as part of the hill's habitat and recreational improvements. The Specific Plan does not, however, explicitly address the timing of such relocation. Should the nursery's existing lease be terminated before its new site on Icehouse Hill is ready for occupancy, nursery operations would be adversely affected, which, in turn, could adversely affect ongoing habitat management and restoration efforts within the San Bruno Mountain Habitat Conservation Plan area.

Significance Conclusion for Impact BIO-5

Restoration of Icehouse Hill would promote the goals of the Habitat Conservation Plan to conserve and restore listed butterflies by restoring Icehouse Hill in a manner that supports native plants, and particularly host and nectar plants for listed butterfly species. Specific Plan implementation, in combination with Mitigation Measure BIO-1c would not conflict with the provisions of the San Bruno Mountain Habitat Conservation Plan and would likely result in a potentially beneficial impact on achieving the Habitat Conservation Plan's goals relative to listed butterfly species.

The Specific Plan would relocate Mission Blue Nursery to Icehouse Hill. Should there be a delay between the time the nursery would need to vacate its existing site and the time the new site on Icehouse Hill would be operational, this delay could lead to a temporary disruption in the nursery's ability to continue providing native plants for ecological restoration projects within the Habitat Conservation Plan area, which would be a significant impact.

Program EIR Mitigation Measures

No mitigation measures are being carried forward from the Program EIR.

Additional Mitigation Measures

MM BIO-5: Relocation of Misson Blue Nursery. The relocation of Mission Blue Nursery to its new location on Icehouse Hill shall be undertaken such that the Nursery is not required to vacate its existing facility until the relocation site on Icehouse Hill is ready to commence operation.

Significance Conclusion for Impact BIO-5 with Implementation of All Mitigation Measures

Mitigation Measure MM BIO-5 ensures that disruption to Mission Blue Nursery operations due to the nursery's relocation to Icehouse Hill would be minimized.

Impact BIO-5 is less than significant with mitigation incorporated.

4.6.7 REFERENCES – BIOLOGICAL RESOURCES

American Bird Conservancy. No Date. Glass Collisions: Products & Solutions Database. Database Overview. https://abcbirds.org/glass-collisions/products-database/.

California Department of Fish and Wildlife. 2024. Essential Habitat Connectivity Viewer, Biogeographic Information and Observation System (BIOS). Accessed November 6, 2024. https://apps.wildlife.ca.gov/bios6.

City of Brisbane. 1994. *The General Plan, City of Brisbane*. Adopted on June 21, 1994, as amended through GP-1-19.

City of Brisbane. 2001. *Open Space Plan for the City of Brisbane*. August 2001.

Coast Ridge Ecology, LLC, Butterfly Habitat Mapping and Restoration Opportunities at Icehouse Hill, Brisbane Baylands, Brisbane, CA. Prepared for ESA Environmental Science Associates, September 2023.

Coast Ridge Ecology, LLC, Technical Memorandum Regarding Large Marble Butterfly (*Euchloe ausonides ausonides*) at the Brisbane Baylands, Brisbane, CA. Prepared for ESA Environmental Science Associates, November 2024.

ESA (Environmental Science Associates). 2023. *Brisbane Baylands Biological Resources Technical Report*. October 2023.

iNaturalist. 2024. Species account for large marble butterfly (*Euchloe ausonides*) based on June 13, 2021, observation by P. Johnson. https://www.inaturalist.org/observations/97987795.

Xerces Society. 2023. Petition to list the large marble butterfly *Euchloe ausonides* (Lucas, 1852) as a threatened species and the large marble type subspecies *Euchloe ausonides* (Lucas, 1852) as an endangered species under the U.S. Endangered Species Act. Submitted by The Xerces Society for Invertebrate Conservation, October 5, 2023. https://ecosphere-documents-production-public.s3.amazonaws.com/sams/public_docs/petition/10605.pdf.

a. Resources Cited in the Brisbane Baylands Biological Resources Technical Report

Baylands Development, Inc. 2023. *The Baylands Specific Plan*. January. Chapter 5, Conservation and Open Space; Chapter 7, Infrastructure.

Bias, M.A., and M.L. Morrison. 1999. Movements and Home Range of Salt Marsh Harvest Mice. *The Southwestern Naturalist* 44(3):348–353.

Biohabitats. 2023a. *The Baylands Habitat Assessment*.

Biohabitats. 2023b. *The Baylands Wetland Delineation Report*.

Biohabitats. 2023c. *The Baylands Butterfly Protection Plan*.

Biohabitats. 2023d. *The Baylands Open Space Adaptive Management Plan*.

Biohabitats. 2023e. *The Baylands Wetland Mitigation Plan*.

Biohabitats. 2023f. *The Baylands Supplemental Biological Study*.

Biohabitats. 2023g. *The Baylands Marsh Wildlife and Habitat Protection Plan*.

CDFW (California Department of Fish and Wildlife). 2019. 2018–19 Summary of the Pacific Herring Spawning Population and Commercial Fisheries in San Francisco Bay. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=177969&inline.

CDFW. 2022. California Natural Communities List. July 5. https://wildlife.ca.gov/Data/VegCAMP/Natural-Communities.

CDFW. 2023. California Natural Diversity Database (CNDDB) RareFind 5. CDFW's Electronic database, Sacramento, California. https://www.wildlife.ca.gov/Data/CNDDB.

CNPS (California Native Plant Society). 2023. *California Native Plant Society Electronic Inventory*.

Dechant, J.A., M.L. Sondreal, D.H. Johnson, L.D. Igl, C.M. Goldade, P.A. Rabie, and B.R. Euliss. 2002. *Effects of Management Practices on Grassland Birds: Burrowing Owl*. Northern Prairie Wildlife Research Center, Jamestown, ND. 1999, revised 2002. https://pubs.usgs.gov/unnumbered/93887/report.pdf.

Edelstein, D. 2020. Letter Summary Report for California Ridgway's Rail surveys conducted in Brisbane, CA. May 28, 2020. Appended to Biohabitats 2023f.

ESA. 2023. *Reconnaissance Survey of Baylands Biological Resources*. February 1, 2023.

Gauthreaux, S.A., and C.G. Belser. 2006. *Effects of Artificial Night Lighting on Migrating Birds*. In: C. Rich and T. Longcore, *Ecological Consequences of Night Lighting*. Island Press. Covelo, CA, pp. 67–93.

Harrison, S. 1989. Long distance dispersal and colonization in the Bay Checkerspot butterfly, *Euphydryas Editha bayensis*. *Ecology* 70: 1236–1243

Haug, E.A., B.A. Millsap, and M.S. Martell. 1993. "Burrowing Owl (*Speotyto cunicularia*)." *The Birds of North America*, No. 61 (A. Poole and F. Gill, Eds.). Philadelphia: The Academy of Natural Sciences. Washington, D.C: The American Ornithologists' Union.

Leidy, R.A. et al. 2000. Steelhead, pp. 101–104. In *Bayland Ecosystems Species and Community Profiles: Life histories and environmental requirements of key plants, fish, and wildlife*. Prepared by the San Francisco Bay Area Wetlands Ecosystem Goals Project. P.R. Olofson, editor. San Francisco Bay Regional water Quality Control Board, Oakland, CA. January 2000

Leidy, R.A., G.S. Becker, and B.N. Harvey. 2005. *Historical distribution and current status of steelhead/rainbow trout (*Oncorhynchus mykiss*) in streams of the San Francisco Estuary, California*. Center for Ecosystem Management and Restoration, Oakland, CA.

Metis (Metis Environmental Group). 2022. *Baylands Habitats and Existing Conditions 2022*. May 2022.

Moyle, P.B. 2002. *Inland Fishes of California*. University of California Press, Berkeley, California.

Moyle, P.B., R.M. Yoshiyama, J.E. Williams, and E.D. Wikramanayake. 1995. *Fish Species of Special Concern in California*. Second edition. Final report to California Department of Fish and Game, contract 2128IF.

NMFS (National Marine Fisheries Service). 2006. Endangered and Threatened Species; Final Listing Determinations for 10 Distinct Populations Segments of West Coast Steelhead; Final Rule. *Federal Register* 71 (3): 834–862. January 5, 2006.

NOAA (National Oceanic and Atmospheric Administration) Fisheries. No Date. Essential Fish Habitat Mapper. Accessed September 9, 2023. https://www.habitat.noaa.gov/apps/efhmapper/?page=page_4.

New York City. 2020. *Bird Friendly Design & Construction Requirements Guidance Document*. November 2020.

Rochelle, Michael, and Tanner Harris. 2016. Bay Checkerspot Butterfly dispersal Corridor Modeline for Coyote Ridge, I. April 2016.

San Mateo County Parks Department. 2008. *San Bruno Mountain Habitat Management Plan*. September 2007, Revised March 2008. Prepared in Support of the San Bruno Mountain Habitat Conservation Plan. https://www.smcgov.org/parks/san-bruno-mountain-habitat-conservation-plan-hcp-documents.

Seewagen, C.L., and C. Sheppard. 2017. *Bird Collisions with Windows: An Annotated Bibliography*. American Bird Conservancy, Washington, DC.

Shellhammer, H., R. Duke, and M. Orland. 2010. Use of Brackish Marshes in the South San Francisco Bay by Salt Marsh Harvest Mice. *California Fish and Game* 96(4): 256–259.

Shuford, W.D., and Gardali, T., editors. 2008. *California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California*. Studies of Western Birds 1. Western Field Ornithologists, Camarillo, California, and California Department of Fish and Game, Sacramento.

Sustaita et al. 2011. Salt Marsh Harvest Mouse Demography and Habitat Use in the Suisun Marsh, California. *The Journal of Wildlife Management* 75 (6): 1498–1507; 2011; DOI: 10.1002/jwmg.187.

USACE (U.S. Army Corps of Engineers). 1987. *Wetlands Delineation Manual*. January 1987.

USACE. 2005. *Regulatory Guidance Letter 05-02*. https://www.nap.usace.army.mil/Portals/39/docs/regulatory/rgls/rgl05-02.pdf.

USDA (U.S. Department of Agriculture), Natural Resources Conservation Service (NRCS). 2023. Web Soil Survey. https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm.

USFWS (U.S. Fish and Wildlife Service). 1997. *Determination of Endangered Status for the Callippe Silverspot Butterfly, Behren's Silverspot Butterfly, and Threatened Status for the Alameda Whipsnake*. 62 FR 64306 64320.

USFWS. 2013. *Recovery Plan for Tidal Marsh Ecosystems of Northern and Central California* (Recovery Plan). Two volumes. Sacramento, California.

USFWS. 2016. Critical habitat for species listed as endangered or threatened under the Endangered Species Act. GIS data layer mapped by the USFWS Endangered Species Program. Available through the Environmental Conservation Online System (ECOS) at https://ecos.fws.gov/ecp/report/table/critical-habitat.html.

USFWS. 2023. iPac, USFWS Information for Planning and Consultation online system. Official Species List. June 2023. https://ecos.fws.gov/ipac/.