

# CHAPTER 6

## Significant Unavoidable Impacts, Growth Inducement, Cumulative Impacts, and Other CEQA Considerations

### 6.1 Significant and Unavoidable Environmental Impacts

Section 15126.2(b) of the CEQA Guidelines requires an EIR to describe “any significant impacts, including those which can be mitigated but not reduced to a level of insignificance.” Chapter 2, Project Summary, summarizes the impacts, mitigation measures and levels of significance before and after mitigation for each impact statement evaluated in this EIR. While implementation of the mitigation measures would reduce the levels of impacts, the impacts identified in **Table 6-1** cannot be reduced to a level of insignificance without imposing an alternative design or use, such as those described in Chapter 5, Alternatives.

**TABLE 6-1**  
**SIGNIFICANT UNAVOIDABLE (SU) IMPACTS BY PROJECT DEVELOPMENT SCENARIO**

SU Impacts / Significance Criteria	DSP	DSP-V	CPP	CPP-V
<b>A. Aesthetics and Visual Resources</b>				
<b>Impact 4.A-4:</b> Would the Project create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?	SU	SU	SU	SU
<b>B. Air Quality</b>				
<b>Impact 4.B-2:</b> Would the Project generate construction emissions that would result in a cumulatively considerable net increase of criteria pollutants and precursors for which the air basin is in nonattainment under an applicable federal or state ambient air quality standard?	SU	SU	SU	SU
<b>Impact 4.B-4:</b> Would the Project generate operational emissions that would result in a considerable net increase of criteria pollutants and precursors for which the air basin is in nonattainment under an applicable federal or state ambient air quality standard?	SU	SU	SU	SU
<b>Impact 4.B-9:</b> Would the Project conflict with or obstruct implementation of the applicable air quality plan?	SU	SU	SU	SU
<b>C. Biological Resources</b>				
<b>Impact 4.C-1:</b> Would the Project have a substantial adverse effect, either directly or indirectly, on any species identified as a candidate, sensitive, or special-status plant and wildlife species, including species which meet the definition of endangered, rare or threatened in CEQA Guidelines Section 15380, either through direct injury or mortality, harassment, or elimination of plant or wildlife communities?	-	-	-	SU
<b>D. Cultural Resources – None</b>				

**TABLE 6-1 (Continued)**  
**SIGNIFICANT UNAVOIDABLE (SU) IMPACTS BY PROJECT DEVELOPMENT SCENARIO**

<b>SU Impacts / Significance Criteria</b>	<b>DSP</b>	<b>DSP-V</b>	<b>CPP</b>	<b>CPP-V</b>
<b>E. Geology, Soils, and Seismicity – None</b>				
<b>F. Greenhouse Gas Emissions</b>				
<b>Impact 4.F-1:</b> Would the Project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	-	-	SU	SU
<b>Impact 4.F-2:</b> Would the Project conflict with an applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	-	-	SU	SU
<b>G. Hazards and Hazardous Materials – None</b>				
<b>H. Surface Water Hydrology and Water Quality – None</b>				
<b>I. Land Use and Planning Policy – None</b>				
<b>J. Noise and Vibration</b>				
<b>Impact 4.J-4:</b> Would the Project result in a substantial temporary or periodic increase in ambient noise levels in the vicinity of the project above levels existing without the Project?	SU	SU	-	-
<b>K. Population and Housing</b>				
<b>Impact 4.K-1:</b> Would the Project induce substantial population growth in the area either directly or indirectly?	SU	SU	SU	SU
<b>L. Public Services – None</b>				
<b>M. Recreational Resources – None</b>				
<b>N. Traffic and Circulation</b>				
<b>Impact 4.N-1:</b> Would the Project result in a substantial increase in traffic under Existing plus Project conditions at intersections in the vicinity of the Project Site?	SU	SU	SU	SU
<b>Impact 4.N-2:</b> Would implementation of the Project contribute to significant existing traffic delays at freeway mainline segments?	SU	SU	SU	SU
<b>Impact 4.N-3:</b> Would the Project result in a substantial increase in traffic under Cumulative With Project conditions at the study intersections?	SU	SU	SU	SU
<b>Impact 4.N-4:</b> Would the Project's contribution to future cumulative traffic impacts at freeway mainline segments be significant?	SU	SU	SU	SU
<b>Impact 4.N-5:</b> Would the Project (DSP-V scenario) result in a substantial increase in PM peak hour traffic at study intersections and freeway mainline segments that would operate unacceptably due to weekday evening events at the arena?	-	SU	-	-
<b>Impact 4.N-7:</b> Would the Project cause an increase in transit demand that could not be accommodated by San Francisco Muni or SamTrans transit capacity?	SU	SU	SU	SU
<b>Impact 4.N-8:</b> Would the Project cause an increase in delays or operating costs resulting in substantial adverse effects on transit service levels (i.e., additional buses or trains could be required due to Project transit trips)?	SU	SU	SU	SU
<b>O. Utilities, Service Systems, and Water Supply</b>				
<b>Impact 4.O-3:</b> Would the Project result in the construction of new water, wastewater treatment, and/or stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	SU	SU	SU	SU
<b>P. Energy Resources – None</b>				

## 6.2 Growth-Inducing Impacts

### 6.2.1 Background

This section analyzes the growth inducement potential of Project Site development and the associated secondary effects of growth, as required by CEQA Guidelines Section 15126.2(d). CEQA Guidelines Section 15126.2(d) requires an EIR to evaluate the growth-inducing impacts of a proposed project, stating that an EIR must:

“Discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth (a major expansion of a recycled water plant might, for example, allow for more construction in service areas). Increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. Also discuss the characteristic of some projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.”

A project can have a direct effect on population growth if it would involve construction of substantial new housing. A project can have indirect growth-inducement potential if it would (1) establish substantial new permanent employment opportunities (e.g., commercial, industrial, governmental, or other employment-generating enterprises) or otherwise stimulate economic activity; or (2) remove an obstacle to additional growth and development, such as removing a constraint to or increasing the capacity of a required public service. For example, an increase in the capacity of utility or road infrastructure could allow either new or additional development in the surrounding area. Thus, the discussion of growth inducement draws largely on the housing and employment evaluations set forth in Section 4.K, *Population and Housing*, of this EIR.

### 6.2.2 Potential for Project to Induce Growth

The following discussion reviews the potential for various components of the Project Site development to induce growth.

To assess the growth-inducement potential of Project Site development, the following questions must be addressed:

- Would the Project Site development as described in Chapter 3, *Project Description*, remove obstacles to population growth?
- Would the Project Site development as described in Chapter 3, *Project Description*, directly or indirectly support economic or population growth or residential construction?

To address these questions, the discussion below reviews the growth-inducement potential of (1) proposed infrastructure improvements that could remove obstacles to population growth, (2) the proposed water transfer agreement included in the Project Site development, and (3) the housing and jobs that would result from the Project Site development.

## Infrastructure Improvements that Could Remove Obstacles to Population Growth

As noted above, Project Site development would require a number of infrastructure improvements. These include replacement or upgrade of water, wastewater, sanitary sewage, and storm drainage facilities, including an onsite recycled water plant to provide recycled water supply to the Project Site for irrigation purposes; roadway and streetscape improvements, including the Geneva Avenue Extension and access improvements for the Candlestick Point interchange at Harney Way/Alana Way and the Sierra Point interchange at Sierra Point Parkway/Lagoon Way; an upgraded communications network; renewable energy generation, electrical and natural gas facilities; and parks, trails, and habitat enhancements.

**Conclusion:** The water, wastewater, sanitary sewage, storm drain, communications, and utilities facilities improvements that would be constructed to support Project Site development would be designed and sized for use only by Project Site development. In addition, while the parks, trails, and habitat enhancements proposed as part of Project Site development would be available to the general public, these improvements would not remove any constraint to development other than development of the Project Site itself. With the exception of major roadway improvements designed to serve regional development in the Bi-County San Francisco/Daly City/Brisbane area (Geneva Avenue extension and access improvements for the Candlestick Point interchange at Harney Way/Alana Way and the Sierra Point interchange at Sierra Point Parkway/Lagoon Way), infrastructure improvements associated with Baylands development would only serve development on the Project Site, and would not result in a growth-inducing impact. However, by improving access to US Highway 101, the major roadway improvements designed to serve regional development in the Bi-County San Francisco/Daly City/Brisbane area identified above would remove a major obstacle to development and facilitate population growth in Daly City, as well as development of the San Francisco/San Mateo Bi-County and Bayview/Hunters Point/Candlestick Point PDAs described in Plan Bay Area, including cumulative projects addressed in Section 6.3, *Cumulative Impacts*, below. While these major roadway improvements are not part of the Baylands Project components described in Chapter 3, *Project Description*, of this EIR they are nonetheless required to support Project Site development. Because major roadway improvements would remove obstacles to development of the Project Site and surrounding areas, they would result in a growth inducing impact.

## Proposed Water Transfer Agreement

The proposed Project Site development as described in Chapter 3, *Project Description*, includes approval of a water transfer agreement to ensure a reliable source of water to serve the proposed development on the Project Site. Under the proposed water supply agreement, the City would acquire a supplemental water supply of up to 2,400 acre-feet per year (AFY) via a water transfer agreement with the Oakdale Irrigation District. The 2,400 AFY would include up to 2,000 AFY to serve the Baylands and 400 AFY to accommodate planned growth within Brisbane as a whole (see Chapter 3, *Project Description*, and Section 4.O, *Utilities, Service Systems, and Water Supply*, in Chapter 4, for detailed description of the proposed water transfer agreement).

As mentioned above, growth can be induced in a number of ways, including through the elimination of obstacles to growth. Up to 2,000 AFY of the new water supply would serve Project Site development; therefore, none of that portion of the water would induce growth other than that envisioned for Project Site development. Up to 400 AFY of the new supply would accommodate planned growth within Brisbane as a whole. This is growth that was already contemplated by the Brisbane General Plan and for which a reliable water supply would be needed. While the maximum water supply that would become available if the proposed water transfer agreement is approved would serve proposed Project Site development and development already contemplated by the Brisbane General Plan, the lack of an assured water supply to support such development represents an obstacle (e.g., lack of reliable water supply) that would be removed as the result of approving the proposed water supply agreement.

**Conclusion:** Approval of the proposed water transfer agreement to serve the Project Site and planned growth within Brisbane would result in a substantial growth-inducing effect since it includes 400 acre-feet of supply for future development outside of the Project Site that would remove an existing obstacle to development proposed in the Brisbane General Plan.

## Housing and Jobs

Section 4.K, *Population and Housing*, in Chapter 4 of this EIR presents a detailed analysis of the potential for the Project Site development to induce substantial increases in population not previously contemplated by regional growth projections. Association of Bay Area Governments (ABAG) growth forecasts for the cities of Brisbane, Daly City, San Francisco, and South San Francisco, as well as growth forecasts for the San Francisco/San Mateo Bi-County and Bayview/Hunters Point/Candlestick Point Priority Development Areas or PDAs provide the context for evaluating the projected population, housing, and employment impacts of Project Site development. As noted in Section 4.K, *Population and Housing*, the projections used in analyzing the extent to which development of the Project Site would induce population growth are based on both ABAG's Projections 2009 and the growth forecasts prepared for the Bay Area Sustainable Communities Strategy, draft Plan Bay Area, being evaluated in the EIR for Plan Bay Area. This same regional approach is used to assess the potential for Project Site development to induce substantial, unanticipated growth.

### ***DSP and DSP-V Scenarios***

The DSP and DSP-V scenarios would result in a substantial number of new housing units and jobs (through the provision of new employment-generating land uses) on the Project Site. As detailed in Section 4.K, *Population and Housing*, the growth in employment and households resulting from the DSP and DSP-V scenarios would accommodate a substantial portion of the housing and employment needs projected by ABAG for Brisbane and surrounding cities, but would greatly exceed ABAG projections for Brisbane. Therefore, the DSP and DSP-V scenarios each would generate housing and jobs at levels greater than what has been forecasted and planned for, representing a greater portion of growth in the regional context than projected by ABAG. Overall, the DSP and DSP-V scenarios would directly induce substantial household and employment growth, and the growth-inducing effect would be significant.

### ***CPP and CPP-V Scenarios***

The CPP and CPP-V scenarios would result in a substantial number of new jobs (through the provision of new employment-generating land uses) on the Project Site. As detailed in Section 4.K, *Population and Housing*, of this EIR, the growth in employment resulting from the CPP and CPP-V scenarios would accommodate a substantial portion of the employment needs projected by ABAG for Brisbane and surrounding cities, but would greatly exceed ABAG projections for the City of Brisbane. No new housing is proposed as part of the CPP and CPP-V scenarios, but the new jobs resulting from the proposed development of the Project Site, as discussed in Section 4.K, *Population and Housing*, of this EIR, would create increased demand for worker households that could be accommodated by projected household growth in Brisbane and the surrounding cities of San Francisco, Daly City, and South San Francisco. Therefore, the CPP and CPP-V scenarios each would generate jobs in excess of ABAG projections (Projections 2009, as well as the Sustainable Communities Strategy, draft Plan Bay Area, being evaluated in the EIR for Plan Bay Area) for the City, although associated household growth could be met elsewhere in the cities surrounding Brisbane at levels consistent with regional forecasts.

**Conclusion:** As described in Section 4.K, *Population and Housing*, of this EIR, development of the Project Site would induce substantial growth by constructing new housing (DSP and DSP-V scenarios) and/or creating new jobs (DSP, DSP-V, CPP, CPP-V scenarios) on the Project Site in excess of ABAG growth projections for the City of Brisbane. Because the employment growth represented by Project Site development is in excess of jobs growth projections for Brisbane and the San Francisco/San Mateo Bi-County and Bayview/Hunters Point/Candlestick Point PDAs, employment growth resulting from Project Site development would be consistent with ABAG forecasts of job growth only if it would draw jobs now projected by ABAG to be created within San Francisco, Daly City, South San Francisco, or elsewhere in the Bay Area to the Baylands. Otherwise, development of the Project Site under each Project Site development scenario would add new jobs to Brisbane and the San Francisco/San Mateo Bi-County PDA beyond that projected by ABAG in Projections 2009 or Plan Bay Area, resulting in a significant growth inducing impact.

The housing proposed in the DSP and DSP-V scenarios is substantially more than the household increases described in Projections 2009 for Brisbane between 2010 and 2035 and also more than those projected for Brisbane between 2010 and 2040 in the Plan Bay Area Sustainable Communities Strategy. Because the household growth that would result from development of the DSP and DSP-V scenarios exceeds projections for the City of Brisbane as a whole, the new housing proposed as part of the DSP and DSP-V scenarios would be consistent with forecasted increase in households only if residential development was drawn from housing now projected to be constructed in other portions of San Francisco, Daly City, South San Francisco, or elsewhere in the Bay Area to the Baylands. Otherwise, the new housing would result in a significant growth inducing impact.

## 6.3 Cumulative Impacts

CEQA Guidelines Section 15130 requires that an EIR evaluate the cumulative impacts of the project. CEQA defines cumulative impacts as “two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts” (CEQA Guidelines Section 15355). If the effects of the proposed project, in combination with the effects of past, present, and reasonably foreseeable future related projects, will be significant, the project’s incremental effects must be analyzed to determine if the project’s contribution to the cumulative impact is cumulatively considerable. “Cumulatively considerable” means that the incremental effects of an individual project are significant when viewed in connection with the effects of past, current, and reasonably foreseeable future projects (CEQA Guidelines Section 15065(a)(3)).

### 6.3.1 Approach to Cumulative Impact Analysis

In accordance with CEQA Guidelines Section 15130(b), “the discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, the discussion need not provide as great [a level of] detail as is provided for the effects attributable to the project alone.” The discussion should be guided by standards of practicality and reasonableness, and it should focus on the cumulative impact to which the identified other projects contribute rather than the attributes of other projects which do not contribute to the cumulative impact.

Pursuant to CEQA Guidelines Section 15130(a)(1), an EIR should not discuss impacts which do not result at least in part from the project being evaluated in the EIR. The currently developed portions of ongoing phased development projects as they existed in the 2010 baseline year are incorporated in the environmental setting/baseline described in the individual resource sections. The portions of ongoing phased development projects that are yet to be built are included as part of the analysis of cumulative impacts.

The CEQA Guidelines provide two approaches to analyzing cumulative impacts (CEQA Guidelines Section 15130(b)(1)). The first is the “list approach,” which requires a listing of past, present, and reasonably foreseeable future projects producing related or cumulative impacts, including, if necessary, projects outside the control of the lead agency. The second approach relies upon projections contained in an adopted local, regional, or statewide plan or related planning document as the basis of the cumulative analysis. A reasonable combination of the two approaches may also be used.

The cumulative analysis in this EIR uses both the list of projects approach and the projections approach, depending upon the resource area being analyzed.

The cumulative analysis for air quality, greenhouse gas emissions, and traffic relies on projections contained in adopted local, regional, or statewide plan or related planning documents, such as the San Mateo County Transportation Plan and relevant regional plans developed by the City/County Association of Governments (C/CAG) of San Mateo County. The analysis of cumulative transportation impacts (and transportation-related traffic and air quality) also relies on

SF-CHAMP model travel demand estimates, which was also used to evaluate the impacts of proposed Project Site development. Also used were ABAG land use and socio-economic database and growth forecasts, including *Projections 2009* and *draft Plan Bay Area*, which provide forecasts of employment and population growth for the nine county San Francisco Bay Area. All other resource areas use the list of projects approach. The list of reasonably foreseeable future projects within the geographic scope of the impact analyses is based upon information provided by the City of Brisbane, as well as major project lists provided by San Mateo County, San Francisco, and Daly City.

Major projects that could result in cumulative impacts in conjunction with proposed Project Site development are shown in **Table 6-2**. Locations of the cumulative projects in relation to the Project Site are shown in **Figures 6.1A** and **6.1B**.

### 6.3.2 Geographic Scope of Cumulative Impact Analysis

Different types of cumulative impacts occur over different geographic areas. For example, the geographic scope of the cumulative air quality analysis, where cumulative impacts occur over a large area, is different from the geographic scope considered for cumulative analysis of aesthetic resources, for which cumulative impacts are limited to specific viewsheds. Thus, in assessing aesthetic resources impacts, only development within the vicinity of the Project Site would contribute to a cumulative visual effect, whereas cumulative air quality impacts are based upon all development within the air basin. Because the geographic scope and other parameters of each cumulative analysis discussion can vary, the cumulative geographic scope, and the cumulative projects included in the geographic scope (when the list of projects approach is used), are described for each resource area.



**TABLE 6-2  
CUMULATIVE PROJECTS**

Map ID	Project Name	Jurisdiction	Distance from Project Site	Residential Units	Non-Residential Square Footage	Other	Description
<b>Local Projects</b>							
1	Sierra Point Biotech Campus	Brisbane	< 0.25 mile southeast	0	540,000 (R&D) 15,000 (Retail)	0	The 22-acre site is located southeast of Sierra Point Parkway and east of Shoreline Court.
2	Sierra Point Opus Office Buildings (3000-3500 Marina Boulevard)	Brisbane	< 0.25 mile southeast	0	448,000	0	Two office buildings at the northwestern corner of Sierra Point.
3	Northeast Ridge Residential Development	Brisbane	0.5 mile west	71 units	0	0	Residential; 16.67 acres.
4	3710-3760 Bayshore Boulevard Residential Condominium Project	Brisbane	< 0.25 mile southwest	30 units	0	0	Residential condominium complex on 2.9 acres.
5	9000 Marina Boulevard	Brisbane	< 0.25 mile southeast	0	0	700 hotel rooms	Hotel on eastern portion of Sierra Point.
6	1 Quarry Road	Brisbane	1.0 mile west	0	0	144 acres	Former quarry facility; General Plan designations are <i>Planned Unit Development-Trade Commercial</i> and <i>Open Space</i> .
7	Hunter's Point Shipyard (Phase 2)	San Francisco	1.5 miles northeast	2,650 units	5.2 million	0	Residential, research and development, commercial, and community uses.
8	Candlestick Point	San Francisco	1.0 mile northeast	7,600 units	1.2 million	0	Residential, office, commercial, community, and hotel uses.
9	Executive Park	San Francisco	0.5 mile northeast	1,600 units	-230,000	0	Demolition of three office buildings and conversion to residential units.
10	Visitacion Valley Redevelopment Mixed Use Project (Schlage Lock site)	San Francisco	Adjacent to Project Site on northwest portion (between Caltrain Station and Bayshore Boulevard)	1,585 units	120,000	0	Residential and commercial, community uses.

**TABLE 6-2 (Continued)  
CUMULATIVE PROJECTS**

Map ID	Project Name	Jurisdiction	Distance from Project Site	Residential Units	Non-Residential Square Footage	Other	Description
<b>Local Projects (cont.)</b>							
11	Sunnydale Housing Redevelopment	San Francisco	1.0 mile west	1,700 units	0	0	Residential (will replace existing Sunnydale Public Housing Project).
12	East Daly City-Cow Palace (Bayshore Redevelopment Project Area Plan)	Daly City	1.0 mile west	1,700 units	300,000	0	Mixed use residential, retail, office, commercial.
13	Geneva Avenue Extension	Brisbane	through Project Site	0	0	0	Extend Geneva Avenue from Bayshore Boulevard to US Highway 101 southbound ramps at Beatty Avenue/Alan Way.
14	Sierra Point Interchange Improvements	Brisbane	East of Sierra Point Parkway, immediately north and south of Brisbane Lagoon	0	0	0	Reconstruct the Sierra Point southbound ramps to reconfigure Lagoon Way /Sierra Point Parkway/Sierra Point Parkway Intersection.
15	Candlestick Point Interchange Improvements	Brisbane	West of US Highway 101 at Beatty Road and east of US Highway 101 at Harney Way	0	0	0	Extend Executive Park Boulevard south as a two lane road to Harney Way, and widen Harney to accommodate turn lanes for traffic entering and exiting US Highway 101.
<i>Subtotal Local Projects:</i>				<i>16,936 units</i>	<i>7,593,000 square feet</i>	<i>700 hotel rooms</i>	
<b>Regional Projects</b>							
16	Mission Bay Development	San Francisco	5.0 miles north	6,000 units	7.55 million	500 hotel rooms; 49 acres open space	303-acre project site that includes residential units, office/life science/ biotechnology commercial space, UCSF research campus containing UCSF hospital complex, and city- and neighborhood-serving retail space.
17	Treasure Island Development	San Francisco	11.0 miles north	8,000 units	551,000	500 hotel rooms; 300 acres open space	Residential units; commercial and retail space; office space; adaptive reuse for commercial, retail, and/or flex space uses in the historic buildings on Treasure Island.

**TABLE 6-2 (Continued)  
CUMULATIVE PROJECTS**

Map ID	Project Name	Jurisdiction	Distance from Project Site	Residential Units	Non-Residential Square Footage	Other	Description
<b>Regional Projects (cont.)</b>							
18	Oyster Point Specific Plan	South San Francisco	1 mile south from southern tip of Brisbane Lagoon	0	2.3 million	350 hotel rooms	Office/research and development (R&D) development.
19	Caltrain Modernization Program	Caltrain	Caltrain corridor through Project Site	0	0		<u>Electrification</u> of the existing Caltrain corridor between San Francisco and San Jose; installation of a Communications Based Overlay Signal System Positive Train Control, which is an advanced signal system that includes federally-mandated safety improvements; and the replacement of Caltrain's diesel trains with high-performance electric trains called Electric Multiple Units.
20	Park Merced	San Francisco	5.5 miles from southern tip of Brisbane Lagoon	8,900	0	68 acres open space	152-acre site (including streets, 116-acre excluding streets) currently developed with 3,221 housing units; would be, re-developed and expanded over the course of three decades,
21	High Speed Rail	High Speed Rail Authority	Caltrain corridor through project site	0	0		Planned 800-mile high-speed rail system connecting San Francisco, the Central Valley, and Southern California. 50 mile segment runs through project site from San Francisco to San Jose and would require four tracks in the Caltrain corridor, either side by side or in a stacked configuration. The Bayshore Caltrain Station will not be a stop for high-speed rail; however, in the current supplemental alternatives analysis report, Brisbane/Bayshore is the recommended site for one 100 acre high-speed train maintenance and storage facility.
22	Runway Safety Area SFO North-South Runways 1L-19R and 1R-19L (2014)	SFO	Approximately 5 miles south of project site	0	0		Airfield lighting and paving; Relocate aircraft navigational aids and antennas; Relocate runway end thresholds to make space for Engineered Materials Arrestor System (EMAS) installations and realignment of associated taxiways.
<b>Subtotal Regional Projects:</b>				<b>22,900 units</b>	<b>10,401,000 square feet</b>	<b>1,350 hotel rooms</b>	
<b>Total Local and Regional Projects:</b>				<b>39,836 units</b>	<b>17,994,000 square feet</b>	<b>2,050 hotel rooms</b>	

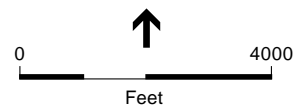
SOURCE: City of Brisbane, 2013.



① Cumulative Project Location (Corresponds to Map ID in Table 7.1)

— Project Site

▨ Not a part of Proposed Project

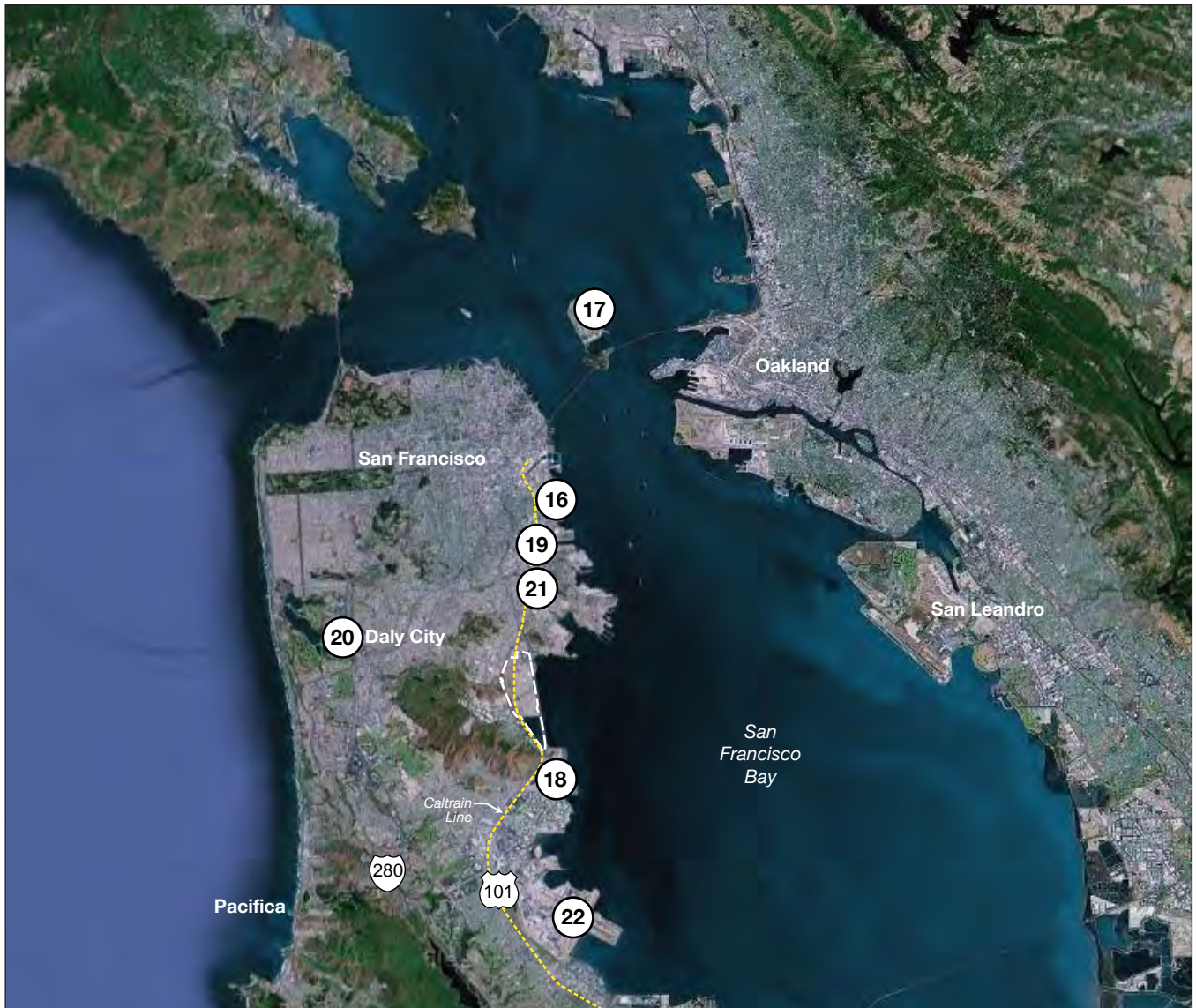


SOURCE: Google Maps; ESA, 2012

Brisbane Baylands . 206069

**Figure 6.1A**  
Cumulative Projects-Local  
Brisbane Baylands EIR

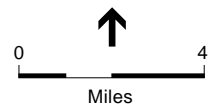




**16** Cumulative Project Location (Corresponds to Map ID in Table 7.1)

 Project Site

 Caltrain Line



SOURCE: Google Maps; ESA

Brisbane Baylands . 206069

**Figure 6.1B**  
Cumulative Projects-Regional  
Brisbane Baylands EIR

### 6.3.3 Cumulative Analysis

Where a list of projects approach is used, the cumulative impact analysis analyzes the impacts of past, present and reasonably foreseeable future development within the vicinity of the Project Site, including Brisbane, Daly City, and the southeast portion of San Francisco, in combination with Project Site development. This analysis includes the cumulative projects, as represented in Table 6-2 within the geographic areas described for each impact. As noted above, the cumulative analysis for air quality, greenhouse gas emissions, and traffic relies on projections contained in adopted local, regional, or statewide plan or related planning documents.

#### Aesthetics

**Would the Project, in conjunction with past, present and reasonably foreseeable future projects, contribute to cumulative impacts on aesthetic resources?**

##### *Scenic Vistas*

##### **Cumulative Impacts**

To assess cumulative impacts on scenic vistas, the analysis included cumulative projects within the viewshed of the Project Site, as well as within views from parcels surrounding the Project Site and from surrounding ridgelines. Projects considered in this analysis included eight of the projects listed in Table 6-2. Numbers corresponding to Table 6-2 are included in parentheses. Included projects encompassed three new residential developments adjacent to existing residential neighborhoods west of Bayshore Boulevard (Cumulative Projects 3, 4, and 5); a biotech campus, hotel, and two office buildings to be added to the existing office complex at Sierra Point (southeast of the Project Site) (Cumulative Projects 1, 2, and 6); a residential project located at Executive Park (northeast of the Project Site) (Cumulative Project 10); and a mixed-use residential and commercial project at the current Schlage Lock site immediately adjacent to the Project Site's northwestern boundary (Cumulative Project 11).

Given the height limits, and likely building locations and building orientations proposed by Project Site development, the Project Site development in combination with Cumulative Projects that are within the viewshed of the Project Site, as well as within views from parcels surrounding the Project Site and from surrounding ridgelines (Cumulative Projects 1-6, 10, 11), would alter the scenic vista to San Bruno Mountain by placing a substantial amount of urban development in the foreground of views to the mountain and partially block existing views of natural hillside areas. In addition, by placing substantial new urban development near the Bay shoreline, views of the shoreline and the Bay as seen from surrounding areas including Visitacion Valley and John McLaren Park, and northbound US Highway 101 may be blocked.

Cumulative Impact Significance/ Project Scenario Contribution			
DSP	DSP-V	CPP	CPP-V
CS/CC	CS/CC	CS/CC	CS/CC
CS = Significant Cumulative Impact			
LCS = Less than Significant Cumulative Impact			
CC = Cumulatively Considerable Project Contribution			
LCC = Less than Cumulatively Considerable Project Contribution			
- = Not Applicable			

### **Contribution of the DSP and DSP-V Scenarios to Cumulative Impacts**

The project-specific analysis concluded that the DSP and DSP-V scenarios would result in a substantial adverse effect on scenic vistas; therefore, the contribution of the DSP and DSP-V scenarios to the significant cumulative impact to scenic vistas would be cumulatively considerable.

### **Contribution of the CPP and CPP-V Scenarios to Cumulative Impacts**

The analysis set forth in Section 4.A concluded that the CPP and CPP-V scenarios would result in less-than-significant impacts on scenic vistas. While neither the CPP nor the CPP-V scenario standing alone would result in a significant adverse effect on scenic vistas by placing a substantial amount of new development near the Bay shoreline in the foreground of views of the Bay, the contribution of the CPP and CPP-V scenarios to the significant cumulative impact described above would be cumulatively considerable.

**Conclusion:** All Project Site development, in combination with the cumulative development analyzed above, would result in a significant cumulative impact with respect to scenic vistas.

**Mitigation Measures 4.A-1a-b** (included in Section 4.A, *Aesthetics*), recommended decreasing maximum building heights and thereby reducing significant impacts on scenic views from and across the Project Site. While the impact of Project Site development itself would be reduced to a less-than-significant level by these mitigation measures, the large mass of urban development placed in the foreground of views of San Bruno Mountain and the San Francisco Bay would remain cumulatively significant, even if specific views of the mountain and bay were not blocked. Given the Project Site's location near the Bay shoreline, the large amount of urban development each development scenario would place in the foreground of Bay views would result in cumulatively considerable contribution to cumulative impacts related to scenic vistas.

## **Scenic Resources**

### **Cumulative Impacts**

As discussed in Section 4.A, *Aesthetics*, Project Site development would not substantially damage scenic resources. Because scenic resources would be preserved and not altered, Project Site development in combination with past, present, and reasonably foreseeable future projects that are nearby the Project Site (including Cumulative Projects 1-6, 10, and 11 shown on Figure 6.1A) would not substantially damage scenic resources. Because there would be no substantial damage to the area's scenic resources themselves (even though scenic views of those resources would be affected), cumulative impacts on scenic resources would be less than significant.

### **Visual Character**

#### **Cumulative Impacts**

Project Site development under each scenario, in combination with the cumulative projects (residential development, a biotech campus, hotel, office buildings, and mixed-use developments identified as Cumulative Projects 1-6, 10, and 11 on Figure 6.1A) would substantially change the existing visual character of the Project Site, Central Brisbane, and surrounding areas by introducing a large number of development that is substantially more intensive than existing development.

While Project Site development and cumulative projects would be subject to existing requirements for design permits and findings, without *project-specific* design standards applied and cohesive standards amongst the agencies approving development, cumulative development would also substantially degrade the existing visual character of the area. Thus, the Project Site development, combined with other cumulative development (Cumulative Projects 1-6, 10, and 11 on Figure 6.1A) in the Project Site's viewshed would result in a significant cumulative impact.

#### **Contribution of the DSP, DSP-V, CPP and CPP-V Scenarios to Cumulative Impacts**

As discussed in Section 4.A, *Aesthetics*, without mitigation, buildout of the Project Site under each development scenario would result in disjointed and inconsistent development across the Project Site resulting in a poorly designed area with an overall adverse effect on the existing visual character. As such, Project Site development would substantially degrade the existing visual character of the site and its surroundings. **Mitigation Measure 4.A-3** (included in Section 4.A, *Aesthetics*) would require specific design standards that, when applied to the Project Site as a whole, would ensure development of a cohesive urban aesthetic across the site and support a well-designed urban environment and positive visual character.

**Conclusion:** While each cumulative development project would each be analyzed for their individual impacts on visual character, the large mass of high density development proposed within the viewshed of the Project Site would result in substantially greater development intensities than existing adjacent development, and a significant cumulative impact would result. The high density character of proposed Project Site development in relation to existing surrounding uses would make a cumulatively considerable contribution to the significant cumulative impact described above.

#### ***Nighttime Lighting and Daytime Glare***

##### **Cumulative Impacts**

Cumulative projects 1 through 13, identified above in Table 6-2, would result in new sources of light and glare in the Project Site vicinity. While two of these projects would replace existing structures (Cumulative Projects 10 and 12) and thus not necessarily create substantial new sources of light and glare, the remainder of the projects range from small condominium projects (30 units) to larger developments of several million square feet. These cumulative projects in combination with Project Site development under each scenario would result in a substantial increase in nighttime lighting and daytime glare conditions.

The large amount of development represented by Project Site development in combination with Cumulative Projects 1-13 as shown on Table 6-2 would create a substantial amount of building and structural surfaces that would cause a new source of daytime glare. With typical mitigation consisting of non-glare building surfaces applied to each project, buildings and structures would be designed to avoid significant daytime glare impacts under both project and cumulative conditions. However, even with which mitigation measures, some reflective surfaces would be developed, which, over the large amount of cumulative development proposed for the Project Site and Cumulative Projects 1-13 would, in combination, result in a cumulative significant impact.



Nighttime lighting impacts from the Project Site in combination with Cumulative Projects 1-13 would be cumulatively significant even with mitigation.

#### **Contributions of DSP, DSP-V, CPP, and CPP-V Scenarios to Cumulative Impacts**

Implementation of specific lighting-related design guidelines as required by **Mitigation Measure 4.A-4a** would reduce the project-specific impact, but not to a less-than-significant level. Therefore, given the substantial change that would occur from existing minimal existing nighttime lighting conditions within the Project Site, the Project Site development's contribution to nighttime lighting impacts would be cumulatively considerable.

**Conclusion:** Each Project Site development scenario, combined with past, present, and other foreseeable development in the area, would not result in a cumulatively considerable impact related to daytime glare. However, even with mitigation measures applied to each cumulative project to reduce site-specific impacts to less than significant levels, increases in nighttime lighting over the large area encompassed by Project Site development and Cumulative Projects 1-13 would be cumulatively significant. The large size of the Project Site and amount of development would represent a cumulatively considerable contribution to a significant cumulative impact of nighttime lighting, even with implementation of **Mitigation Measures 4.A- and 4b.**

## **Air Quality**

### **Would the Project, together with anticipated cumulative development in the Bay Area Air Basin, result in significant impacts to air quality?**

The cumulative impact analysis for air quality relies on projections contained in an adopted local, regional, or statewide plan or related planning document, in particular, the San Mateo County Transportation Plan and relevant regional plans developed by C/CAG. The analysis of cumulative air quality impacts (mobile or transportation-related air quality) also relies on SF-CHAMP model travel demand estimates.

These estimates incorporate Association of Bay Area Governments land use and socio-economic database and

growth forecasts for the year 2035 (*Projections 2009*), which provide forecasts of economic and population growth for San Francisco and the other eight Bay Area counties. Employment and housing projections from Plan Bay Area were also reviewed, as was the EIR for the Candlestick Point-Hunters Point Shipyard Development Project, which is the nearest proposed large-scale development to the Project Site.

Cumulative Impact Significance/ Project Scenario Contribution			
DSP	DSP-V	CPP	CPP-V
CS/CC	CS/CC	CS/CC	CS/CC
CS = Significant Cumulative Impact			
LCS = Less than Significant Cumulative Impact			
CC = Cumulatively Considerable Project Contribution			
LCC = Less than Cumulatively Considerable Project Contribution			
- = Not Applicable			

## **Criteria Air Pollutants**

### **Cumulative Impacts**

According to the Bay Area Air Quality Management District (BAAQMD), no single project is sufficient in size, by itself, to result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. There are many projects throughout the San Francisco Bay area that have been identified as having significant and unavoidable operational and construction-related regional pollutant impacts, such as the Candlestick Point/Hunters Point Development Project, which is located approximately 1 mile northeast of the Project Site. Consequently, for assessment of cumulative regional pollutant impacts, BAAQMD has developed a methodology of assessing whether a project would have a cumulatively considerable contribution. According to the BAAQMD *Justification Report*, if a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions (BAAQMD, 2009). Alternatively, if a project does not exceed the identified significance thresholds, then the project would result in less-than-significant air quality impacts and would not be considered cumulatively considerable.

As described in Section 4.B, *Air Quality*, Impacts 4.B-2 and 4.B-4, Project Site development emissions from construction and operations, respectively, would exceed the BAAQMD thresholds after implementation of mitigation for each Project Site development scenario. Impacts would therefore be significant. In addition, the Candlestick Point/Hunters Point Development Project EIR concludes that that proposed project would exceed BAAQMD significance thresholds for criteria pollutant emissions from mobile and area sources and contribute substantially to an air quality violation at that project's full build-out in the year 2029. Since it is known that construction and operational emissions from Project Site emissions would be significant and unavoidable, combining Project Site development emissions with emissions from other projects, including at least one other nearby development project that would contribute to an air quality violation result would result in cumulatively significant air quality construction and operational impacts.

**Conclusion:** Project Site development in combination with other developments in the San Francisco Bay Area Air Basin would result in cumulatively significant construction and operational emissions of criteria air pollutants.

### **Contributions of DSP, DSP-V, CPP, and CPP-V Scenarios to Cumulative Impacts**

As described in Section 4.B, *Air Quality*, of this EIR, Project Site development emissions from construction and operations would exceed the BAAQMD thresholds after implementation of mitigation for each scenario. Even with implementation of feasible mitigation measures, impacts would remain significant.

**Conclusion:** Because Project Site development would result in significant and unavoidable construction and operational emissions of criteria air pollutants, its contribution to cumulative impacts would be cumulatively considerable.

## **Toxic Air Contaminants**

### **Cumulative Impacts**

Unlike ozone and other regional pollutants, toxic air contaminants are a localized pollution problem. Toxic air contaminants produced at distant locations do not readily combine to create concentrations of toxic air contaminants at any single location what would cause health risks. Thus, the BAAQMD *CEQA Air Quality Guidelines* include standards and methods for determining the significance of cumulative health risk impacts for new projects. The BAAQMD method for determining health risk requires the review of health risk from permitted sources and major roadways in the vicinity of a project (i.e., within a 1,000-foot radius of the source), then adding the project operational impacts to determine whether the cumulative health risk thresholds are exceeded. Unlike for a project level assessment, for the cumulative assessment, the risks from all sources are summed and compared to a cumulative significance threshold. A summary of the cumulative existing plus project health impacts for existing emissions sources is found in **Table 6-3**.

As demonstrated in Section 4.B, *Air Quality*, Impact 4.B-6, health impacts from the Project Site development (both construction and operations) plus other existing sources (permitted sources and roadways) in the area would have a cumulative impact below the BAAQMD threshold of 100 per million and would be less than significant. The cumulative health impact would be 0.20, well below the BAAQMD threshold of 10.

Because toxic air contaminant impacts dissipate with increasing distance from an emissions source, only cumulative projects that are in close proximity to the Project Site (within 1,000 feet) would contribute to a cumulative toxic air contaminant impacts. This would include the following projects shown in Figure 6.1A:

- Cumulative Project 1: Sierra Point Biotech Campus (540,000 square feet of R&D and 15,000 square feet of retail) less than 0.25 mile southeast of the Project Site;
- Cumulative Project 2: Sierra Point Opus Office Buildings (448,000 square feet of office space) less than 0.25 mile southeast of the Project Site;
- Cumulative Project 4: 3710 Bayshore Boulevard Condominiums (30 dwelling units) less than 0.25 mile southwest of the Project Site; and
- Cumulative Project 5: 9000 Marina Boulevard (700 hotel rooms) less than 0.25 mile southeast of the Project Site.

Because these projects combined represent far less development than is proposed for the Project Site under each scenario, adding emissions of toxic air contaminants from these projects to the existing plus Project Site development emissions shown in Table 6-3 would not exceed applicable thresholds. Therefore, no cumulatively significant impacts related to toxic air contaminants would result.

**Conclusion:** All four proposed development scenarios would result in a less-than-significant cumulative impact for toxic air contaminants.

**TABLE 6-3**  
**EXISTING PLUS PROJECT CUMULATIVE HEALTH IMPACTS<sup>a</sup>**

Site #	Facility Type	Address	Cancer Risk (persons per million)	Chronic Hazard Impact	PM2.5 Concentration (µg/m3)
2902	View Rite	455 Allan Street	0	0.001	0
G10024	Bayshore Chevron	2690 Bayshore Blvd	4.07	0.0067	0
17835	PG&E – Martin	3150 Geneva Avenue	0	0	0
G2818	Seven Eleven	2700 Bayshore Blvd	7.32	0.0121	0
4021	SFPF	950 Tunnel Avenue	0.17	0.011	0.0005
3520	Leland Cleaners	151 Leland Avenue	6.38	0.10	0
18394	InterMune	3260 Bayshore Blvd	1.88	0.001	0.001
4173	Recology Sunset	501 Tunnel Avenue	0.99	0.017	0.003
4173	Recology Sunset	501 Tunnel Avenue	14.1	0	0.044
Permitted Sources Total			34.9	0.15	0.05
Roadway Sources					
Geneva Avenue			2.74	0.02	0.09
Bayshore Boulevard			3.17	0.02	0.16
Roadway Total			5.91	0.04	0.25
Caltrain			<0.10	<0.01	<0.01
Project (adult/child)			5.18/2.84	<0.01	0.02
Grand Total			47.0/43.7	0.20	0.32
BAAQMD Cumulative Significance Criteria			100	10	0.8
Significant Cumulative Impact?			No	No	No

<sup>a</sup> Detailed assumptions and methodology of the HRA are included in Appendix D.

SOURCE: KBE, 2012 (provided in Appendix D).

## Biological Resources

### Would the Project, in conjunction with past, present, and reasonably foreseeable future projects, result in significant cumulative impacts on biological resources?

The geographic context for analysis of cumulative impacts on biological resources encompasses the area within the Brisbane city limits and surrounding neighborhoods, areas that are biologically linked (by, for example, birds, bats, fish or terrestrial wildlife) to the Baylands, and ecologically similar areas throughout the San Francisco Peninsula and within a five-mile radius of the Project Site (in relation to migratory species). Projects within the geographic scope of analysis include a variety of proposed urban land uses as listed in Table 6-2, above, and include Cumulative Projects 1-16 and 18-22.

Cumulative Impact Significance/ Project Scenario Contribution			
DSP	DSP-V	CPP	CPP-V
LCS/ -	LCS/ -	LCS/ -	LCS/ -
CS = Significant Cumulative Impact			
LCS = Less than Significant Cumulative Impact			
CC = Cumulatively Considerable Project Contribution			
LCC = Less than Cumulatively Considerable Project Contribution			
- = Not Applicable			

## ***Upland Habitat / Special-Status Species***

### **Cumulative Impacts**

The cumulative projects cited above could involve removal and/or modification of areas that have the potential to contain special-status species and sensitive natural communities (wetlands are discussed in a separate impacts statement below). As development in and around the Project Site continues, natural habitats and sensitive wildlife species, including those species listed under federal and state ESAs and those individuals identified by state and federal resources agencies as species of concern, fully protected, or sensitive, would be continue to be adversely affected through conversion of habitat to urbanized environment.

Although more mobile species might be able to survive continuing habitat loss by moving to new areas, movement corridors are limited, and less mobile species could simply be lost with remaining habitats limited to preservation areas such as San Bruno Mountain. As a result, the availability and accessibility of remaining natural habitats would dwindle and smaller remaining natural areas, such as disjunct habitat areas preserved within development sites may not be able to support additional plant or animal populations at their current carrying capacities. Thus, the cumulative conversion of plant and wildlife habitat would result in a significant cumulative impact on special-status species and their habitats.

Project Site development, in combination with Cumulative Projects 1-16 and 18-22, would result in a significant cumulative impact to avian species, special status birds, migrating through the cumulative project area as the result of an increased number of mid-rise buildings and associated lighting along the Pacific Flyway. Migrating birds such as songbirds 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. A majority of bird strikes occur when birds do not recognize windows on buildings. Thus, tall residential and non-residential buildings would pose collision hazards to migratory birds since effects associated with the lighting of the towers can alter the flight patterns of migratory birds and substantially increase bird strike collisions with the structures. As discussed in Section 4.C, *Biological Resources*, of this EIR, due to the potential for bird strikes at tall buildings associated with construction of dense urban development with many windows adjacent to the Bay and within the Pacific Flyway. Thus, cumulative project development would result in an increase in bird strikes, and result in a significant cumulative impact.

**Conclusion:** The continuing loss of upland habitat that would occur as part of Project Site development, in combination with other past, present, and reasonably foreseeable projects would result in a significant cumulative impact.

### **Contributions of DSP, DSP-V, CPP, and CPP-V Scenarios to Cumulative Impacts**

Sensitive upland habitat and special status plant and butterfly species occur within the Project Site only on Icehouse Hill, which is being preserved in open space. In addition, specific mitigation is proposed for bird strike impacts to increase nighttime visibility of buildings. Thus, Project Site development would not make a cumulative considerable contribution to the significant cumulative impact described above.

**Conclusion:** Because Project Site development would not result in loss of sensitive upland habitat areas or impact special status species, it would not make a cumulatively considerable contribution to the significant cumulative impact described above.

## ***Wetland and Waters***

### **Cumulative Impacts**

More than 90 percent of historic tidal wetlands in the Bay Area have been lost to diking, draining, and filling. In spite of the highly urbanized surrounding areas and the dramatic alteration of the Bay itself for shipping, salt production, and urban development, the Peninsula bayshore supports some of the most important habitat remaining in the Bay Area for a number of wildlife species. Wetland and jurisdictional waters restoration projects within the Bay area extensive, with approximately 40,000 acres of wetlands are either in progress or planned. Although these restoration projects are attempting to reduce the cumulative loss of these habitats, the large historical loss of these areas due to past projects, including construction of US Highway 101 has resulted in a cumulatively significant loss of wetlands and jurisdictional waters.

Cumulative projects include projects proposed or under construction along the shoreline of the San Francisco Bay that could affect federally protected wetlands or jurisdictional waters, either adversely (i.e., development projects) or beneficially (i.e., restoration as part of development). Permanent impacts are those that would remove wetlands or jurisdictional waters and not replace them in the exact same location.

**Conclusion:** Continuing permanent loss of wetlands or jurisdictional waters, such as would result from development of Cumulative Projects 1-16 and 18-22, would constitute a significant cumulative impact.

### **Contributions of DSP, DSP-V, CPP, and CPP-V Scenarios to Cumulative Impacts**

As discussed in Section 4.C, *Biological Resources*, although Project Site development grading, remediation, and construction activities would impact onsite wetlands, mitigation requirements for replacement and restoration of habitats would result in a net positive benefit. Thus, impacts of Project Site development would make a cumulatively considerable contribution to the significant cumulative impacts described above.

**Conclusion:** Project Site development would not make a cumulatively considerable contribution to cumulative impacts on wetlands and jurisdictional waters.

## ***Wildlife Corridors***

### **Cumulative Impacts**

As discussed in Section 4.C, *Biological Resources*, open space areas in the vicinity of the Project Site that support wildlife populations and attract wildlife movement include the San Bruno Mountain area to the west of the Project Site, and wetland and aquatic habitats in San Francisco Bay located to the east of the site. Currently, suitable wildlife habitat within the Project Site is limited to Icehouse Hill, which could attract butterfly species present in the San Bruno Mountain

area, and aquatic habitat in the lagoon which may attract fish species present in San Francisco Bay. None of the cumulative projects cited in Table 6-2 are in a location such that their biological resource impacts could interact with Project Site development impacts to result in a cumulative impact.

**Conclusion:** Because cumulative projects are not in locations where biological resources impacts could interact with those of Project Site development, significant cumulative impacts would not result.

## Cultural Resources

**Would the Project, in conjunction with past, present, and reasonably foreseeable future projects, result in significant cumulative impacts on cultural resources?**

Cumulative effects involving cultural resources occur as the result of multiple project affecting cultural resources involving a resource type or theme, such as historic ethnic sites or an industry (e.g., railroads), that occur within a larger geographic context than a single project site. Thus, this analysis considers cumulative development projects that are located immediately adjacent to the Project Site and elsewhere in Brisbane and adjacent communities, as well as major regional projects, particularly those along and within the Bay. These include each of the cumulative projects depicted in Table 6-2 and Figures 6.1A and 6.1B in addition to all past projects in this area, which are evident in the existing physical setting.

Cumulative Impact Significance/ Project Scenario Contribution			
DSP	DSP-V	CPP	CPP-V
LCS/ -	LCS/ -	LCS/ -	LCS/ -
CS = Significant Cumulative Impact			
LCS = Less than Significant Cumulative Impact			
CC = Cumulatively Considerable Project Contribution			
LCC = Less than Cumulatively Considerable Project Contribution			
- = Not Applicable			

### Cumulative Impacts

As discussed in Section 4.D, *Cultural Resources*, in addition to the historic Roundhouse within the Project Site, other historic resources in the surrounding area include the 7 Mile House Sports Bar and Grill, the former Schlage Lock Building A (Old Office Building), and the Bayshore/Crocker Tunnel. The significance of these resources is site-specific, since they do not involve a common involving a resource type or theme, and no thematic historical resources are recognized to exist among the collective cumulative projects identified in Table 6-2.

Past developments that involved the recent demolition of numerous industrial buildings at the Schlage Lock site immediately north of the Project Site were determined to have significant and unavoidable impacts to historic resources because demolition cannot be mitigated to a less-than-significant level, even with incorporation of mitigation measures such as photo-documentation and public interpretation (San Francisco Redevelopment Agency, 2008). These past impacts at the Schlage Lock site would not combine with impacts of the Proposed Project to form a significant cumulative impact to historic resources because the type and severity of impacts at the Project Site and Schlage Lock site are entirely different (demolition of historic resources on the Schlage Lock site vs. potential incompatible adaptive reuse and potential incompatible new construction adjacent

to historic resources on the Project Site; the latter of which can be mitigated to a less-than-significant level by the application of the *Secretary of the Interior's Standards for Rehabilitation*, while the former cannot). In addition, there is no shared building type or historical theme between the historic industrial buildings at the Schlage Lock site and the former SPRR Roundhouse and Machinery and Equipment Building on the Project Site.

In addition, the distance between the Project Site and these offsite historic resources, as well as the distance between the cumulative project identified in Table 6-2 and historic resources within the Project Site is relatively large and separated by major highways and roads (such as US Highway 101 and Bayshore Boulevard). The lack of a common resource type or theme, combined with the distances between historic resources, and cumulative project sites, precludes the occurrence of cumulative impacts on historic resources.

Similarly, because of distances between cumulative project sites, the cumulative projects described in Table 6-2 would not result in significant effects on archaeological or paleontological resources or human remains through accidental discovery and damage, and that are located close enough to combine with the effects of the Project Site development to create a significant cumulative impact.

**Conclusion:** Project Site development, combined with other cumulative development, would not result in a significant cumulative impact on cultural resources.

## Geology, Soils, and Seismicity

**Would the Project, in conjunction with past, present, and reasonably foreseeable future projects, result in significant cumulative impacts with respect to geology, soils or seismicity?**

The San Francisco Bay Area is within a seismically active region with a wide range of geologic and soil conditions. Due to widely varying conditions and the types of local impacts that result from seismic and soils hazards, the geographic scope for considering cumulative impacts includes the Project Site and adjacent areas. Thus, each of the local projects listed in Table 6-2 (Cumulative Projects 1-15), along with Oyster Point Specific Plan (Cumulative Project 18) and the portions of the Caltrain Modernization (Cumulative Project 19), and High Speed Rail (Cumulative Project 21) projects running through the Project Site constitute the list of cumulative projects for Geology, Soils, and Seismicity.

Cumulative Impact Significance/ Project Scenario Contribution			
DSP	DSP-V	CPP	CPP-V
LCS/ -	LCS/ -	LCS/ -	LCS/ -
CS = Significant Cumulative Impact			
LCS = Less than Significant Cumulative Impact			
CC = Cumulatively Considerable Project Contribution			
LCC = Less than Cumulatively Considerable Project Contribution			
- = Not Applicable			

### Cumulative Impacts

Project Site development, combined with the above referenced cumulative development, would result in increased population in an area subject to seismic risks and hazards. However, any new



project<sup>1</sup>, including proposed Project Site development, would be required to meet building code requirements that address the various seismic and geologic hazards present in the Bay Area region, which would reduce cumulative impacts related to geology, soils and seismicity. Development projects are required to meet the most recent geologic and seismic standards, which are generally more stringent than older codes and practices, making new structures likely to perform better than older structures in the event of a significant seismic event. Generally, compliance with applicable building and other codes, as would be required for all present and future cumulative projects, would reduce cumulative impacts to a less than significant level.

**Conclusion:** Project Site development, combined with past, present, and other foreseeable development in the area, would adhere to current building code and other regulatory requirements and would not therefore result in a cumulatively significant impact related to exposing people or structures to risk related to geologic hazards, soils and/or seismic conditions.

## Greenhouse Gas Emissions

**Would the Project generate greenhouse gas emissions, either directly or indirectly, that may have a significant cumulative impact on the environment?**

Greenhouse gas (GHG) emissions impacts are assessed in a cumulative context, since no single project can cause a discernible change to climate. Climate change impacts are the result of incremental contributions from natural processes, and past and present anthropogenic activities. Therefore, the area in which a proposed project in combination with other past, present, or future projects, could contribute to a significant cumulative climate change impact would not be defined by a geographical boundary such as a project site or combination of sites, city or air basin. GHG emissions have high atmospheric lifetimes and can travel across the globe over a period of 50 to 100 years or more. Even though the emissions of GHGs cannot be defined by a geographic boundary and are effectively part of the global issue of climate change, CEQA places a boundary for the analysis of impacts at the state's borders. Thus, the geographic area for analysis of cumulative GHG emissions impacts is the State of California.

Assembly Bill 32 (AB 32), the California Global Warming Solutions Act of 2006 (Nunez), recognizes that California is the source of substantial amounts of GHG emissions. The statute begins with several legislative findings and declarations of intent, including the following:

Cumulative Impact Significance/ Project Scenario Contribution			
DSP	DSP-V	CPP	CPP-V
CS/LCC	CS/LCC	CS/CC	CS/CC
CS = Significant Cumulative Impact LCS = Less than Significant Cumulative Impact CC = Cumulatively Considerable Project Contribution LCC = Less than Cumulatively Considerable Project Contribution - = Not Applicable			

<sup>1</sup> The portions of past and current projects that were constructed as of the 2010 baseline year may have been constructed under earlier codes than now exist, and therefore not perform as well in response to geologic, seismic, or other soil conditions as would structures built to current (2010) code standards. As a result older construction could result in significant geologic, soil, or seismic impacts as the result of subjecting more people to those hazards. However, since the portions of past and current projects that were constructed as of the 2010 baseline year are treated as part of baseline (existing conditions), no cumulative impacts would result from such older construction.

Global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California. The potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the state from the Sierra snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems” (California Health and Safety Code, Section 38501(a)).

Thus, AB 32 recognizes the significance of the statewide cumulative impact of greenhouse gas emissions from sources throughout the state, and sets a performance standard for mitigation of that cumulative impact: reducing GHG emissions to 1990 levels by the year 2020 (a reduction of approximately 25 percent from forecast emission levels) with further reductions to follow.

Thus, the analysis of greenhouse gas emission impacts under CEQA effectively constitutes an analysis of a project’s contribution to the significant statewide cumulative impact of GHG emissions.

**Conclusion:** As evidenced by the findings of AB 32 (California Health and Safety Code, Section 38501(a)), a significant cumulative greenhouse gas emission impact would result.

#### **Contributions of DSP, DSP-V, CPP, and CPP-V Scenarios to Cumulative Impacts**

As described in Section 4.F, *Greenhouse Gas Emissions*, GHG emissions from the DSP and DSP-V scenarios would be below BAAQMD’s “efficiency threshold” of 4.6 metric tons of CO<sub>2</sub>e per service population per year. This would represent a cumulatively less-than-significant GHG impact for these two scenarios. Section 4.F also notes that, even with implementation of **Mitigation Measure 4.F-1** (see Section 4.F, *Greenhouse Gas Emissions*, of this EIR), the CPP and CPP-V scenarios would result in significant and unavoidable environmental effects on greenhouse gas reduction efforts.

**Conclusion:** Because GHG emissions would be below the BAAQMD’s “efficiency threshold,” DSP and DSP-V scenarios would not make a substantial contribution to cumulative GHG impacts. However, because the GHG emissions would exceed the BAAQMD’s “efficiency threshold,” the CPP and CPP-V scenarios would make a substantial contribution to cumulative GHG impacts.

## **Hazards and Hazardous Materials**

**Would the Project, in conjunction with past, present, and reasonably foreseeable future projects, result in significant cumulative impacts with respect to hazards and hazardous materials?**

Hazards and hazardous materials impacts are generally localized and site-specific, with the exception of those resulting from transportation of hazardous materials. As a result, the cumulative context for this analysis varies, depending on the threshold being analyzed. For example, cumulative impacts

Cumulative Impact Significance/ Project Scenario Contribution			
DSP	DSP-V	CPP	CPP-V
CS/CC	CS/CC	CS/CC	CS/CC
CS = Significant Cumulative Impact			
LCS = Less than Significant Cumulative Impact			
CC = Cumulatively Considerable Project Contribution			
LCC = Less than Cumulatively Considerable Project Contribution			
- = Not Applicable			

associated with the transportation of hazardous materials would be analyzed for projects along the transportation route, while the context for the use of hazardous materials would be limited to the area immediately surrounding the Project Site. Cumulative impacts associated with the accidental release of hazardous materials into the environment would also be limited to the Project site and the immediately surrounding properties. Cumulative impacts associated with emergency response would be limited to development in the vicinity of emergency access routes. Air emissions also represent a potential source of hazards; impacts related to air emissions resulting from the Project Site development are addressed in Section 4.B, *Air Quality*, of this EIR. The cumulative effects related to hazards are discussed below.

### ***Transport, Use, and Disposal of Hazardous Materials***

#### **Cumulative Impacts**

Several development projects within the vicinity of the Project Site (Cumulative Projects 1, 2, 3, 4, 5, 10, 13, 14, and 15 as shown on Figure 6.1A) could involve the routine need for use and disposal of hazardous materials. While there would be a substantial cumulative increase in the use and disposal of hazardous materials, the resulting cumulative impact would be less than significant.

The proposed commercial development within the Project Site and cumulative projects would use hazardous chemicals common in other commercial/retail and support settings. These common consumer products would be used for the same purposes as in any commercial/retail or support setting. Small quantities of hazardous materials are also associated with residential land uses, including cleaning products, fuels, oils, pesticides, and lubricants. Because general commercial/retail and household hazardous materials are typically handled and transported in small quantities, and because the health effects associated with them are generally not as serious as industrial uses, adverse cumulative effects on the environment with respect to the routine transport, use, or disposal of general office and household hazardous materials would not result.

The industrial uses proposed within the Project Site, in combination with the R&D uses proposed for the Sierra Point Biotech Campus (Cumulative Project 1) and the former Schlage Lock site (Cumulative Project 10) could include the storage, handling, transport, and disposal of relatively larger quantities of hazardous materials that would be subject to regulatory requirements that are designed to minimize the potential for adverse effects due to exposure.

Proposed industrial uses within the Project Site, Sierra Point Biotech Campus, and former Schlage Lock site would be expected to include laboratory-based activities, including both “dry” laboratories (or operations), where relatively small or negligible quantities of hazardous materials would be used and the types of hazardous materials would be limited to such items as cleaning and maintenance materials, and office products, as well as “wet” lab functions that could involve a broad spectrum of activities involving hazardous materials used in controlled indoor environments. These industrial and R&D uses would be subject to more intense regulation and oversight than typical commercial/office businesses. Employees performing wet laboratory work would be required (by law) to receive specific training in the use and handling of hazardous materials, which is intended to protect the workplace and also to minimize the potential for spills

or inadvertent releases that could adversely affect the environment through air emissions or releases to sewers, storm drains, or land. Medical-related establishments would involve use, transport, and storage of small amounts of laboratory-type chemicals, compressed gases, pharmaceuticals, and radiological materials would be used and stored. Medical, biohazardous, and low-level radioactive wastes would also be produced from these activities.

Generally, the health and safety procedures required for the routine transport, use, and disposal of hazardous materials protect workers and other individuals in the immediate vicinity of those materials and also protect the adjacent community and environment. Because the use, transport, and disposal of hazardous materials is highly regulated, activities in compliance with those regulations would result in less than significant cumulative impacts, except in the case of accidents, which is discussed below.

Hazardous materials would be routinely transported to, from, and within the Project Site and cumulative project sites, as well as along area roadways, such as and small amounts of hazardous waste would be removed and transported off site to licensed disposal facilities. Quantifying the specific types and amounts of hazardous materials transported to or from cumulative project sites cannot be definitively accomplished. Development of the Project Site and cumulative projects would include uses that involve hazardous materials use, as well as simultaneous use of the same roads (e.g., Bayshore Boulevard, Tunnel Road, US Highway 101) for transportation of hazardous materials. Project Site development under any of the development scenarios would, when combined with the cumulative projects enumerated above, result in a substantial cumulative increase in the amount of hazardous material transported in the area. However, the cumulative impact of the transport of hazardous materials would be less-than-significant. Such transportation would be provided by vendors licensed for such transport, and appropriate documentation for all hazardous materials and wastes would be required for compliance with the existing hazardous materials regulations. Adherence to existing state and federal regulations related to hazardous materials would thus reduce the probability of such releases to below a significant level.

**Conclusion:** Project Site development, under each scenario, combined with past, present, and other foreseeable development in the area, would be required to adhere to current regulatory requirements and would not result in a significant cumulative impacts related to related to the routine use, transport, and disposal of hazardous materials.

## ***Release of Hazardous Materials***

### **Cumulative Impacts**

Implementation of remedial actions is proposed for the Project Site, as well as for the former Schlage Lock site (Cumulative Project 10). As described in Section 4.G, *Hazards and Hazardous Materials*, of this EIR, Project Site remediation would occur under the regulatory oversight of California Department of Toxic Substances Control and Regional Water Quality Control Board. Remediation of the former Schlage Lock site would be also subject to regulatory oversight. Other cumulative projects that might excavate soils (Cumulative Projects 1, 2, 3, 4, 5, 13, 14, and 15 as shown on Figure 6.1A) would also be required to adhere to applicable regulatory requirements.

Adherence to regulatory requirements would reduce cumulative impacts related to the release of hazardous materials to a less-than-significant level.

**Conclusion:** Project Site development, combined with past, present, and other foreseeable development in the area, would be required to adhere to current regulatory requirements and would therefore not result in a significant cumulative impacts related to the release of hazardous materials.

### ***Impair Implementation of Adopted Emergency Response Plan***

#### **Cumulative Impacts**

The geographic context for emergency response is the City of Brisbane, including the Project Site and cumulative projects within the City (Cumulative Projects 1-6). The City has an emergency response plan that was developed to ensure allocation of and coordination of resources in the event of an emergency. Future development within Brisbane would result in a cumulative increase in the demand for hazardous materials emergency response capabilities.

Any development involving increased hazardous materials use has the potential to increase the demand for emergency response capabilities in the area. Because the combination of Project Site and cumulative development would more than double Brisbane's population (DSP and DSP-V scenarios only) and commercial/industrial development inventory, current first response capabilities and hazardous materials emergency response capabilities would not be sufficient for buildout of the cumulative projects. Furthermore, while substantive hazardous materials accidents are typically rare based on the implementation of existing regulatory requirements, when such incidents, they typically require substantial response. Unless existing emergency service capabilities were to be expanded commensurate with future development of the Project Site and cumulative projects, a significant cumulative impact would occur. While additional hazardous materials response services could be available through other jurisdictions, and private hazardous materials emergency response agencies could be used, the reliability of such sources in lieu of expanding existing emergency service capabilities available to Brisbane would be speculative, and significant cumulative impacts would remain.

**Conclusion:** Based on the need to expand emergency response capabilities commensurate with the development of cumulative projects, a significant cumulative impact would result.

#### **Contributions of DSP, DSP-V, CPP, and CPP-V Scenarios to Cumulative Impacts**

As discussed in Section 4.L, *Public Services*, of this EIR, Project Site development under each scenario would require expansion of emergency response services under each development scenario. In the absence of such expansion of emergency response services, Project Site development would provide a cumulatively considerable contribution to cumulative impacts related to implementation of emergency response plans.

**Conclusion:** Based on the need to expand emergency response capabilities commensurate with Project Site development as discussed in Section 4.L, *Public Services*, of this EIR, Project Site development would make a cumulatively considerable contribution to a significant cumulative impact.

## Hydrology and Water Quality

### Would the Project, in conjunction with past, present, and reasonably foreseeable future projects, degrade water quality or increase flooding?

The geographic context for the analysis of hydrology cumulative impacts is often site-specific because each project site has physical considerations. The following hydrology impacts are site-specific and would not combine with other past, present, and reasonably foreseeable projects to form cumulative impacts: placement of housing in a 100-year flood hazard area, flooding in areas adjacent to the Bay, and exposure of people or structures to inundation by seiche, tsunami, mudflow, or dam failure.

Cumulative Impact Significance/ Project Scenario Contribution			
DSP	DSP-V	CPP	CPP-V
LCS/ -	LCS/ -	LCS/ -	LCS/ -
CS = Significant Cumulative Impact			
LCS = Less than Significant Cumulative Impact			
CC = Cumulatively Considerable Project Contribution			
LCC = Less than Cumulatively Considerable Project Contribution			
- = Not Applicable			

Water quality, on the other hand, does have the potential for compounding of impacts from individual development to create cumulative impacts. Even if the pollutants and sediments generated by individual projects are minor, the cumulative effect of multiple development projects in a watershed could have an adverse effect on receiving waters. The geographic context of cumulative analysis of water quality is the San Francisco Bay Area Hydrologic Region, and includes each of the cumulative projects described in Table 6-2. Cumulative water quality impacts could occur both locally within the Brisbane watershed, and regionally within the San Francisco Bay Area. Stormwater runoff entering storm sewers and groundwater flows within the immediate Project Site vicinity eventually discharge to San Francisco Bay.

### Cumulative Impacts

Project Site development, in combination with each of the cumulative projects identified in Table 6-2 would result in a substantial increase in amount of impervious surfaces in the form of new paved areas, building rooftops, parking lots, etc. This increase in the amount of impervious surface would generate additional stormwater pollution in runoff during storm events, including petroleum hydrocarbons, lubricants, sediments, and metals (generated by the wear of automobile parts.) Increased landscaped areas within the Project Site and cumulative projects sites would also result in increased use of herbicides and pesticides. These typical urban pollutants would be transported in runoff, washed by rainwater from rooftops and landscaped areas into onsite and local drainage networks, and potentially adversely affecting the quality of receiving surface waters or groundwater. Pollutant concentrations in runoff depend on numerous factors, including:

- Land use conditions;
- Implementation of best management practices;
- Site drainage conditions;
- Intensity and duration of rainfall; and
- Climatic conditions preceding a rainfall event.

In addition, expanded roadways, increased transit service, and subsequent maintenance and rehabilitation projects would increase the amount of impervious surface in the region and result in increased stormwater runoff, with the typical urban pollutants identified above.

Development of the Project Site and cumulative project sites would be required to adhere to the most current National Pollutant Discharge Elimination System (NPDES) permit conditions (including both construction phase and post-construction phase), which are designed to minimize hydrology and water quality impacts, taking into account the requirements needed to be placed on individual projects to protect the quality of receiving waters from the cumulative impacts of these individual projects on a regional basis.

Water quality standards incorporated into permit requirements are periodically updated and guided by regional water quality issues such that future development must adhere to standards that would minimize potential impacts through ensuring that stormwater runoff is given appropriate treatment, if necessary, prior to offsite discharge as a means of protecting the quality of receiving waters. Treatment controls are generally designed to treat stormwater runoff to the maximum extent practical and have made vast improvements over practices that were in effect for older past projects.

The Municipal Regional Stormwater NPDES Permit (MRP) adopted by the Regional Water Quality Control Board-San Francisco Bay Region in November 2011 includes prescriptive requirements for incorporating post-construction stormwater control/Low Impact Design measures into new development and redevelopment projects. These measures are more prescriptive than those included in the previous countywide stormwater permit. Because Project Site development and each of the projects identified in Table 6-2 would be required to adhere to these stringent stormwater requirements, these projects would not result in a significant cumulative impact relative to hydrology and water quality.

**Conclusion:** Because Project Site development, as well as development of cumulative projects would be required to comply with applicable water quality regulations, significant cumulative impacts would not result.

## Land Use and Planning Policy

### Would the Project, in conjunction with past, present, and reasonably foreseeable future projects, result in cumulatively considerable land use impacts?

The geographic context for evaluation of cumulative impacts associated with land use changes is the adjacent area to the north of the Project Site encompassing the San Francisco portion of the San Francisco/San Mateo Bi-County Priority Development Area (former Schlage Lock site identified in Table 6-2 and Cumulative Project 10), as well as Cumulative Projects 1 and 2 to the south of the Project Site within the Sierra Point area. These projects, in combination with Project

Cumulative Impact Significance/ Project Scenario Contribution			
DSP	DSP-V	CPP	CPP-V
LCS/ -	LCS/ -	LCS/ -	LCS/ -
CS = Significant Cumulative Impact LCS = Less than Significant Cumulative Impact CC = Cumulatively Considerable Project Contribution LCC = Less than Cumulatively Considerable Project Contribution - = Not Applicable			

Site development and existing development within Sierra Point, constitute a single cluster of development along the east side of Bayshore Boulevard facing central Brisbane. Past and present development in these areas is described in Section 4.I, *Land Use and Planning*, representing the baseline conditions for evaluation of cumulative impacts to land use.

Future cumulative development would result in substantial changes to the existing land use pattern through conversion of vacant land to developed uses, as well as through the conversion of existing land uses to substantially higher development intensities. Development of cumulative projects would also be subject to environmental and planning review that would address compatibility with adjacent land uses. It is anticipated that each cumulative project, as adopted, would be consistent with the adopted goals, policies, and objectives of the Brisbane General Plan (or San Francisco General Plan for development within that jurisdiction). The cumulative projects as a whole would result in a substantially different built environment than currently exists. However, because each community's General Plan sets forth policies to protect the character of existing development, it is anticipated that cumulative projects adopted in a manner consistent with those General Plans would not cumulatively degrade the existing character of area land uses.

Based on policies contained in the Brisbane and San Francisco General Plans, as well as the mitigation measures set forth in Sections 4.A, *Aesthetics*, and 4.I, *Land Use and Planning*, of this EIR, it is anticipated that the projects ultimately approved would provide for development of new uses that would be compatible with the existing community to the west of Bayshore Boulevard. While cumulative development would increase development intensities and introduce residential development densities at the Project Site (DSP and DSP-V scenarios only), it is anticipated that requirements for General Plan consistency would result in development patterns that include transitions from low-density to higher density uses, and thereby not result in a substantial adverse change in the existing land use character. As a result, there would be no significant cumulative impact to which Project Site development could contribute.

**Conclusion:** As noted above, cumulative projects, including Project Site development, would be subject to General Plan consistency determinations and environmental assessment, including mitigation measures as necessary to address policy conflicts that may result in physical environmental impacts. Consistency with General Plan policies aimed at ensuring land use compatibility would result in a less-than-significant cumulative impact.

## Noise and Vibration

**Would the Project, in conjunction with past, present, and reasonably foreseeable future projects, expose people to or generate excessive ambient noise levels or groundborne vibration or groundborne vibration noise?**

### *Ambient Noise Levels*

The geographic area considered for cumulative traffic noise analysis, consistent with Section 4.N, *Traffic and*

Cumulative Impact Significance/ Project Scenario Contribution			
DSP	DSP-V	CPP	CPP-V
CS/LCC	CS/LCC	CS/LCC	CS/LCC-
CS = Significant Cumulative Impact LCS = Less than Significant Cumulative Impact CC = Cumulatively Considerable Project Contribution LCC = Less than Cumulatively Considerable Project Contribution - = Not Applicable			



*Circulation*, of this EIR, includes roadways examined in the transportation analysis. The cumulative development program assumed in the traffic forecasts used in the noise modeling effort includes large projects such as the Candlestick Point-Hunters Point Shipyard Development Project (over 10,000 housing units, 2.5 million square feet of Research & Development, and almost one million square feet of local and regional serving retail), Executive Park, Schlage Lock site, India Basin Shoreline, and Visitacion Valley. These projects represent at least 20 years of development in the vicinity of the Project Site.

## **Roadside Noise Levels**

### **Cumulative Impacts**

Cumulative traffic-related noise level projections were made using traffic data from Fehr & Peers and the Federal Highway Administration Noise Prediction Model for those road segments that would experience the greatest increase in traffic volume and/or that would pass through residential or other noise-sensitive areas. The results of the modeling effort are shown in **Table 6-4** for existing conditions and cumulative plus Project conditions.

The data in Table 6-4 indicate that all roadway segments except for San Bruno Avenue and Sunnydale Avenue would experience significant cumulative increases in traffic-related noise.

### **Contributions of DSP, DSP-V, CPP, and CPP-V Scenarios to Cumulative Impacts**

For the purposes of this analysis, whereas a *cumulative* impact less than 5.0 dB is not considered to be significant, Project Site development's *contribution* to that cumulative noise impact is not considered cumulatively considerable if it would be less than 1.5 dBA. Increases of less than 1.0 dBA are too small to be detected by the human ear in a laboratory environment (Caltrans, 2009). Based on this criterion, the DSP, DSP-V, CPP, and CPP-V would make a cumulatively considerable contribution to the cumulative noise increases along both segments of Geneva Avenue, Guadalupe Canyon Parkway, Old County Road, and Tunnel Avenue.

## **Noise Levels All Sources**

### **Cumulative Impacts**

Cumulative noise impacts would occur if construction activities associated with cumulative projects were to overlap with Project Site construction, or if operation of the Project Site development in combination with other projects in the vicinity would generate or result in exposure to excessive noise or vibration. These cumulative impacts would be more localized than traffic noise impacts and considered cumulative and existing development within 1,000 feet of the Project Site. Thus, cumulative noise impacts could occur if construction activities occurred simultaneously within the Project Site and either Cumulative Projects 1 (Sierra Point Biotech Campus), 2 (Sierra Point Opus Office Buildings), 4 (3710 Bayshore Boulevard Condominiums), 5 (9000 Marina Boulevard hotel), 13 (Geneva Avenue extension), 14, (Sierra Point interchange improvements), 15, (Candlestick Point interchange improvements), 19 (portions of Caltrain modernization project within 1,000 feet of the Project Site), or 21 (portions of high speed rail project within 1,000 feet of the Project Site).

**TABLE 6-4**  
**CUMULATIVE TRAFFIC NOISE INCREASES ALONG ROADS IN THE PROJECT SITE VICINITY**

Road Segment	Modeled Noise Levels, dBA, DNL								
	Existing Traffic Noise	Cumulative Plus DSP	Cumulative Change with DSP	Cumulative Plus DSP-V	Cumulative Change with DSP-V	Cumulative Plus CPP	Cumulative Change with CPP	Cumulative Plus PP-V	Cumulative Change with CPP-V
1. Geneva Avenue (between Bayshore Boulevard and Schwerin Street) <sup>e</sup>	67.1	71.9	<b>+4.8</b>	72.0	<b>+4.9</b>	72.0	<b>+4.9</b>	72.1	<b>+5.0</b>
2. Guadalupe Canyon Parkway (between Bayshore Boulevard and Carter street) <sup>e</sup>	62.5	67.3	<b>+4.8</b>	68.7	<b>+6.2</b>	67.4	<b>+4.9</b>	67.5	<b>+5.0</b>
3 Old County Road (between Bayshore Boulevard and San Bruno Avenue)	61.2	65.3	<b>+4.1</b>	65.4	<b>+4.2</b>	65.6	<b>+4.4</b>	65.7	<b>+4.5</b>
4. Bayshore Boulevard (between Old County Road and San Bruno Avenue)	67.2	68.9	<b>+1.7</b>	68.8	<b>+1.6</b>	68.7	<b>+1.5</b>	68.7	<b>+1.5</b>
5. San Bruno Avenue (between Old County Road and Bayshore Boulevard)	51.9	54.0	+2.1	54.0	+2.1	54.0	+2.1	54.0	+2.1
6. Harney Way (East of Thomas Mellon Circle) <sup>f</sup>	55.7	66.2	<b>+10.5</b>	66.2	<b>+10.5</b>	66.2	<b>+10.5</b>	66.3	<b>+10.6</b>
7. Tunnel Avenue (between Beatty Road and Blanken Road) <sup>f</sup>	59.1	64.2	<b>+5.1</b>	64.3	<b>+5.2</b>	64.3	<b>+5.2</b>	64.3	<b>+5.2</b>
8. Blanken Avenue (between Bayshore Boulevard and Tunnel Avenue)	56.7	61.9	<b>+5.2</b>	61.9	<b>+5.2</b>	61.9	<b>+5.2</b>	61.9	<b>+5.2</b>
9. Sunnydale Avenue (between Desmond Street and Bayshore Boulevard)	56.9	60.9	+4.0	61.0	+4.2	61.1	+4.2	61.1	+4.2
10. Geneva Avenue (between Carter Street and Mission Street)	67.6	73.1	<b>+5.5</b>	73.2	<b>+5.6</b>	73.2	<b>+5.6</b>	73.3	<b>+5.7</b>

## NOTES:

**Bold** indicates values that represent a significant impact, based on measures listed in Table 4.J-4.

dBA = A-weighted decibels. DNL = day-night noise level.

SOURCE: ESA, 2013.

Cumulative noise impacts could also include pile driving. Due to the substantial noise levels associated with pile driving and the proximity to residential receptors developed under the DSP and DSP-V scenarios, temporary construction-related noise is identified as a significant and unavoidable impact for these scenarios in Impact 4.J-4. The adjacent Visitacion Valley project would have the potential to result in a cumulative noise impact with Project Site development. Because the Visitacion Valley project proposes building heights as high as eight stories, pile driving could be required for on that cumulative development site. Because Project Site development itself would have a significant and unavoidable construction noise impact from pile driving, addition of pile driving noise from the Visitacion Valley project would further exacerbate this impact should it occur simultaneously with the proposed project, resulting in a cumulatively significant impact.

The impact of all cumulative project operational sources, stationary and mobile, would combine with existing noise sources such as Bayshore Boulevard and US Highway 101, as well as rail traffic and the existing Recology facility to increase ambient noise levels. Cumulative development projects would include those indicated in Table 6-2 within a quarter mile of the site and identified above. These cumulative sources would affect not only the nearest sensitive receptors along roadways or near the sources but also result in an overall cumulative noise impact on the elevated portions of Brisbane.

These nearby cumulative projects, including Sierra Point Biotech Campus and Sierra Point Opus Office buildings, 9000 Marina Boulevard and the Bayshore Boulevard residential project, would generate traffic noise that was analyzed above, but would not generate other substantial sources other than rooftop heat, ventilation and air conditioning equipment that would be required to meet the restrictions of the City Noise Ordinance for stationary equipment.

Development of the Visitacion Valley project adjacent to the Project Site would result in additional daytime delivery noise at retail uses typically in the range of 70 to 72 dBA at 25 feet as was estimated for the Project Site development in Impact 4.J-3 and a significant impact identified. Consequently, the potential exists for delivery noise from future retail development at Visitacion Valley project to combine significantly with proposed Project Site development. Because the proposed project cannot impose mitigation on the future development of the Visitacion Valley project, this impact would be cumulatively significant.

Cumulative impacts such as the cumulative impact from loading activities can be further exacerbated by the presence of San Bruno Mountain which has the potential to heighten acoustical propagation under certain meteorological conditions, although the effect would be intermittent and not quantifiable. Given the cumulatively significant roadway and retail loading impacts described above, and the predicted significant noise impacts of the High Speed Rail project, cumulative noise impacts would affect the community at large, although the magnitude of this overall increase would be different for different portions of the community and be influenced by changing meteorology. Consequently the cumulative noise impact would be significant.

**Conclusion:** Cumulatively significant noise impacts would result from concurrent pile driving activities and from retail delivery trucks on the Project Site and the Visitacion Valley project.

**Contributions of DSP, DSP-V, CPP, and CPP-V Scenarios to Cumulative Impacts**

Because no feasible mitigation measures have been identified that would reduce Project Site development's contribution (in the form of both traffic noise, pile driving noise, as well as location of new receptors in cumulatively impacted areas) to a less than cumulatively considerable level, Project Site development's contribution to cumulative noise increase impacts would be cumulatively considerable.

**Conclusion:** Due to the existence of significant unavoidable Project Site development noise impacts, its contribution to cumulative impacts would be cumulatively considerable.

***Groundborne Vibration*****Cumulative Impacts**

Cumulative vibration impacts principally occur from two conditions. First, a project, together with other past, present, and reasonably foreseeable development projects that include vibration-generating operational sources, could combine to expose receptors to cumulative operational vibration impacts. Additionally, cumulative vibration impacts could occur from vibration-related construction activity, predominantly from pile driving required for project elements and for future development projects.

Project Site development would require pile driving for some building elements which would create significant but mitigable vibration impacts (Impact 4.J-2). Generally, vibration impacts occur if pile driving occurs within 300 feet of a sensitive receptor (nuisance) or within 85 feet of a historic structure (building damage). Of the cumulative projects identified in Table 6-2, only the adjacent Visitacion Valley project is close enough to combine with Project Site development to create a cumulative vibration impact. As noted above, building heights for the Visitacion Valley could be as high as eight stories and require pile driving. The Visitacion Valley site is as close as 50 feet from sensitive receptors that could also be affected by vibration from Project Site development.

The closest sensitive receptors to on-site pile driving of the proposed project would be residential development proposed in the DSP and DSP-V scenarios, which are approximately 400 feet away. Project Site development-related pile-driving vibration would be of 0.01 in/sec and barely perceptible at that location. Thus, Project Site development would not create a level of impacts at a sensitive receptor site that would also be affected by vibration from Visitacion Valley development. Cumulative impacts would therefore not be significant.

**Conclusion:** Project Site development would not result in a significant cumulative impact from groundborne vibration.

## Population and Housing

### Would the Project, in conjunction with past, present, and reasonably foreseeable future projects, have a significant cumulative population-inducing impact?

Evaluation of cumulative population and housing impacts was based on an evaluation of ABAG growth projections. Each of the cumulative projects identified in Table 6-2 were determined to be consistent with projections for the cities in which they are located.

#### Cumulative Impacts

As described in Section 4.K, *Population and Housing*, Project Site development would induce substantial growth by constructing new housing (DSP and DSP-V scenarios) and/or creating new jobs (DSP, DSP-V, CPP, CPP-V scenarios) on the Project Site in excess of ABAG growth projections for the City of Brisbane. Because the employment growth represented by each of the Project Site development scenarios is in excess of jobs growth projections for Brisbane, employment growth resulting from Project Site development would be consistent with ABAG forecasts of job growth only if it would draw jobs now projected by ABAG to be created within San Francisco, Daly City, South San Francisco, or elsewhere in the Bay Area to the Baylands. Otherwise, ABAG projections would be exceeded, and a significant growth inducing impact would result.

Similarly, the housing proposed in the DSP and DSP-V scenarios is substantially more than the household increases described in Projections 2009 for Brisbane between 2010 and 2035 and also more than those projected for Brisbane between 2010 and 2040 in the Plan Bay Area Sustainable Communities Strategy. Because the household growth that would result from development of the DSP and DSP-V scenarios exceeds projections for the City of Brisbane as a whole, the new housing proposed as part of the DSP and DSP-V scenarios would be consistent with forecasted increase in households only if residential development was drawn from housing now projected to be constructed in other portions of San Francisco, Daly City, South San Francisco, or elsewhere in the Bay Area to the Baylands. Otherwise, the new housing would result in a significant cumulative impact since ABAG housing projections would be exceeded.

**Conclusion:** Unless Project Site development in excess of ABAG projections drew employment growth (in all scenarios) and housing growth (DSP and DSP-V scenarios) from growth now projected to occur in other portions of San Francisco, Daly City, South San Francisco, or elsewhere in the Bay Area to the Baylands, the cumulative impact of Project Site development, together with cumulative projects, would be significant.

#### Contributions of DSP, DSP-V, CPP, and CPP-V Scenarios to Cumulative Impacts

As noted above, while the cumulative projects included in Table 6-2 were determined to be consistent with ABAG projections, Project Site development would result in employment and housing (DSP- and DSP-V scenarios) in excess of ABAG projections.

Cumulative Impact Significance/ Project Scenario Contribution			
DSP	DSP-V	CPP	CPP-V
CS/CC	CS/CC	CS/CC	CS/CC
CS = Significant Cumulative Impact			
LCS = Less than Significant Cumulative Impact			
CC = Cumulatively Considerable Project Contribution			
LCC = Less than Cumulatively Considerable Project Contribution			
- = Not Applicable			

Conclusion: Because Project Site development would exceed ABAG projections, its contribution to cumulative impacts would be cumulatively considerable.

## Public Services

**Would the Project, in conjunction with past, present, and reasonably foreseeable future projects, result in substantial adverse physical impacts associated with the provision of new or physically altered public service facilities, need for new or physically altered public facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives?**

Cumulative impacts on public services, including police, fire protection, schools, and libraries, would result when past, present, and reasonably foreseeable future projects combine with the Project Site development to increase demand on public services facilities such that additional facilities must be constructed to maintain acceptable levels of service, and the construction of such facilities would result in a physical impact on the environment.

Cumulative Impact Significance/ Project Scenario Contribution			
DSP	DSP-V	CPP	CPP-V
LCC/ -	LCC/ -	LCC/ -	LCC/ -
CS = Significant Cumulative Impact LCS = Less than Significant Cumulative Impact CC = Cumulatively Considerable Project Contribution LCC = Less than Cumulatively Considerable Project Contribution - = Not Applicable			

### Police

#### Cumulative Impacts

As noted under Impact 4.L-1, Project Site development-related resident and employee population increases would result in a need for one or more additional beats to be created to serve development within the Project Site, including additional personnel and equipment, along with the need for new police substation(s) within the Project Site.

The geographic scope for the analysis of cumulative impacts associated with police service is the service area of the Brisbane Police Department, which is the area within the Brisbane city limits. Cumulative projects are described in Table 6-2, and for analysis of police impacts, include each of the cumulative projects within Brisbane. The cumulative analysis encompasses other past, present, and reasonably foreseeable future plans and projects within the city that could contribute to cumulative impacts related to the construction of new or expanded police facilities.

Along with Project Site development, cumulative development projects east of Bayshore Boulevard (Cumulative Projects 1, 2, and 5) would add to the need for additional beat(s) to serve development in that area, while other cumulative projects in Brisbane would also add to the overall workload of the Brisbane Police Department. As noted in Section 4.L, the need for an additional 24/7 police shift(s) is caused by the large amount of development and distances involved in responding to calls east of Bayshore Boulevard. Increases in traffic on US Highway 101 would increase the number of calls to the Brisbane Police Department, as would cumulative development within Brisbane west of Bayshore Boulevard, all providing to a significant

cumulative impact on police services and the need for construction of a satellite police facility within the Project Site.

The construction of a police service facility within the Project Site has been anticipated as a part of all Project Site development scenarios and the potential cumulative impacts of their construction is analyzed in of the following EIR sections: 4.B, *Air Quality*; 4.C, *Biological Resources*; 4.E, *Geology, Soils, and Seismicity*; 4.G, *Hazards and Hazardous Materials*; 4.H, *Hydrology and Water Quality*; 4.J, *Noise and Vibration*; and 4.N *Traffic and Circulation*.

**Conclusion:** Project Site development and Cumulative Projects 1, 2, and 5 would combine to create the need for additional police beat(s), while Cumulative Projects 3, 4, 6, 13, 14, and 15, along with the portions of Cumulative Projects 19 and 21 constructed in Brisbane would contribute to increases in calls for service west of Bayshore Boulevard. However, no significant impacts would result from the construction of those facilities to house the additional officers. Therefore, no significant cumulative impacts would result.

## ***Fire Protection***

### **Cumulative Impacts**

The geographic scope for the analysis of cumulative impacts associated with fire protection includes the cities of Brisbane and Daly City, which are served by the North County Fire Authority (NCFA) and resources within these cities are commonly shared. The cumulative analysis encompasses other past, present, and reasonably foreseeable future projects within these cities that could contribute to cumulative impacts related to the construction of new fire protection facilities. Cumulative projects are described in Table 6-2, and include Cumulative Projects 1-6 and 12-15, as well as the portions of Cumulative Projects 19 and 21 that are the NCFA service area.

As noted under Impact 4.L-3, the Project Site development-related employee and resident (DSP and DSP-V scenarios) population increases would require increased fire protection services, which would, in turn, require a new and/or expanded fire facility. Other past, present, and reasonably foreseeable future projects within the cities of Brisbane and Daly City (Cumulative Projects 1, 2, 3, 4, 5, 6 and 12), including hotel rooms, residential units, and commercial space that would receive service from NCFA Fire Station No. 81, located at 3445 Bayshore Boulevard in Brisbane, would combine with Project site development to create a increase in demands for NCFA services, resulting in the need for a new and/or expanded fire facility. However, the construction of such fire protection facilities has been anticipated as a part of all Project Site development scenarios and the impacts of their construction is analyzed in of the following EIR sections: 4.B, *Air Quality*; 4.C, *Biological Resources*; 4.E, *Geology, Soils, and Seismicity*; 4.G, *Hazards and Hazardous Materials*; 4.H, *Hydrology and Water Quality*; 4.J, *Noise and Vibration*; and 4.N *Traffic and Circulation*. As discussed in Section 4.L, construction of needed fire facilities would not result in significant impacts.

**Conclusion:** Project Site development and Cumulative Projects 1, 2, 3, 4, 5, 6 and 12 would combine to create the need for expanded or new fire protection facilities, but no significant impacts

would result from the construction of those facilities. Therefore, no significant cumulative impacts would result.

## **Public Schools**

### **Cumulative Impacts**

The geographic scope for the analysis of cumulative impacts associated with public schools is the service areas of the Brisbane Elementary School District, Bayshore Elementary School District, and Jefferson Union High School District. The cumulative analysis encompasses other past, present, and reasonably foreseeable future plans and projects within the service areas that could contribute to cumulative impacts related to the construction of new school facilities. Cumulative projects are described in Table 6-2, and include Cumulative Projects 1, 2, 3, 4, 5, 6 and 12.

Although student generation is primarily the result of residential development, current state law permits parents to register their children for school based on their place of employment, as well as their place of residence. Thus, Cumulative Projects 1, 2, 3, 4, 5, 6 and 12 would each generate new students, even though they do not all contain residential development. These projects, in combination with Project Site development would combine to create the need for new or expanded school facilities.

Payment of school facilities impact fees mandated under SB 50 is the exclusive method of considering and mitigating the direct impacts on school facilities. However, the indirect impacts of Project Site development in combination with Cumulative Projects 1, 2, 3, 4, 5, 6 and 12, such as the environmental effects of school construction and use, must be considered.

The analysis of impacts related to school construction includes a discussion of impacts related to the appropriateness of the siting of schools as part of Project Site development with respect to the presence and potential for disturbance of hazards and hazardous materials (see Impact 4.G-3 in Section 4.G, *Hazards and Hazardous Materials*). Implementation of mitigation measures identified herein, as needed, along with subsequent environmental review for proposed offsite projects, would reduce cumulative impacts related to the construction of school facilities to a less-than-significant level.

Further, during the CEQA review process for individual facilities, all entities with responsibility for construction of new public service facilities or the expansion of existing facilities, including those of police and fire protection services, libraries, and schools, can and should apply necessary mitigation measures to avoid or reduce significant environmental impacts associated with the construction or expansion of such facilities. The environmental impacts associated with such construction or expansion should be avoided or reduced through the imposition of conditions required to be followed by those directly involved in the construction or expansion activities. Such conditions should include those necessary to avoid or reduce impacts associated with air quality, noise, traffic, biological resources, cultural resources, GHG emissions, hydrology and water quality, and other impacts that apply to specific construction or expansion of new public or expanded public service facilities.



Project Site development under the DSP and DSP-V scenarios includes provision of an elementary school and a charter high school, which could be expanded to accommodate the small number of students that would be generated by Cumulative Projects 1, 2, 3, 4, 5, 6 and 12. Thus, if needed schools were provided within the Project Site, cumulative impacts would be no greater than those of proposed Project Site development, and a significant cumulative impact would not result. Should needed school facilities be provided offsite, impacts resulting from such development would typically include air quality, GHG, traffic, and noise impacts during construction, with ongoing traffic impacts and public services and utilities impacts resulting from school operations. The indirect impacts of any schools that would be needed, such as traffic, noise, air quality, cultural and biological resources, geologic and other hazards and hazardous materials, flooding, utilities, and public services would occur as part of the overall impacts of developing Cumulative Projects 1, 2, 3, 4, 5, 6 and 12, and are therefore addressed in the cumulative impact analysis set forth in this Chapter.

**Conclusion:** Because payment of school fees provides mitigation in full for direct school impacts, those impacts would be less-than-significant since school fees would be collected. Cumulative indirect school impacts, as well as Project Site development's contribution to those impacts for traffic, noise, air quality, cultural and biological resources, geologic and other hazards and hazardous materials, flooding, utilities, and public services would occur as part of the overall impacts of developing Cumulative Projects 1, 2, 3, 4, 5, 6 and 12, and are therefore addressed in the cumulative impact analysis set forth in this Chapter.

### ***Public Libraries***

**Would the Project, in conjunction with past, present, and reasonably foreseeable future projects, result in substantial adverse physical impacts associated with the provision of new or physically altered library facilities, need for new or physically altered facilities, the construction of which could cause significant environmental impacts, in order to provide adequate library services?**

#### **Cumulative Impacts**

Project Site development, in conjunction with past, present, and reasonably foreseeable future projects, would not result in a significant cumulative effect on library services.

The geographic scope for the analysis of cumulative impacts associated with library services is the City of Brisbane. The cumulative analysis encompasses other past, present, and reasonably foreseeable future projects that could contribute to cumulative impacts related to the construction of new library facilities. Cumulative projects are described in Table 6-2 and would include Cumulative Projects 1-6.

Cumulative development would increase residential population and generate new employment, which would increase the demand on library services. However, given the increased availability of electronic materials and materials through inter-library loans, and an associated reduced reliance on large stored collections, an increased demand for library services can be met without requiring new or physically altered library facilities. As noted above, adequate provision of

library services cannot be evaluated by measuring the collection size within a specific branch against the number of registered borrowers or per capita. It is therefore concluded that the Project Site development, in conjunction with past, present, and reasonably foreseeable future projects, would not result in a significant cumulative effect.

**Conclusion:** The impacts of Project Site development combined with past, present, and reasonably foreseeable projects would not be cumulatively significant.

## Recreational Resources

**Would the Project, in conjunction with past, present, and reasonably foreseeable future projects, result in cumulative impacts regarding the degradation of recreational facilities or the construction of new recreational facilities?**

### *Recreational Facilities*

#### **Cumulative Impacts**

The geographic context for cumulative recreational use impacts includes the City of Brisbane (Cumulative Projects 1-5). As noted in Section 4.M, *Recreational Resources*, of this EIR, non-residential development does not typically generate the need for additional recreational facilities. Thus, only Cumulative Projects 3 and 4, totaling 101 dwelling units, would combine with the residential development proposed in the DSP and DSP-V development scenarios to form a cumulative impact, increasing the number of new dwelling units that would need recreational facilities from 4,434 to 4,535 dwelling units. It should be noted that Project #3 is part of the Northeast Ridge development, which provided adequate park land, along with ball fields at the Mission Blue Community Center.

Based on the provision of Sections 16.24.010-16.24.070 of the Municipal Code that authorized the City to require Quimby Act dedications to “provide for adequate and appropriate recreational facilities” at a standard of 4.50 acres per 1,000 residents, cumulative development would require provision of 45.5 acres of new park facilities to meet demands. As noted in Section 4.M, *Recreational Resources*, of this EIR, the DSP and DSP-V development scenarios propose a total of 138.1 acres of park and recreational land, exclusive of habitat preservation and enhancement areas that would not qualify as park or recreational land. In addition, as noted above, adequate park land is provided as part of the Northeast Ridge development.

Project Site development under the CPP and CPP-V scenarios would not include residential use, and would therefore not generate a need for park facilities that could, in combination with past, present, and reasonably foreseeable future projects, form a cumulative impact.

**Conclusion:** Because the DSP and DSP-V scenarios provide more park land than the cumulative demand for park facilities, and cumulative projects are also providing adequate park land, there would be no significant cumulative impact to recreation.

Cumulative Impact Significance/ Project Scenario Contribution			
DSP	DSP-V	CPP	CPP-V
LCS/ -	LCS/ -	LCS/ -	LCS/ -
CS = Significant Cumulative Impact			
LCS = Less than Significant Cumulative Impact			
CC = Cumulatively Considerable Project Contribution			
LCC = Less than Cumulatively Considerable Project Contribution			
- = Not Applicable			

## ***Windsurfing Resources***

### **Cumulative Development**

With respect to cumulative impacts on windsurfing, the geographic context includes the area of effect – a portion of San Francisco Bay and its shoreline, extending from Candlestick Point to the southern border of Brisbane – and the development area, an area within several thousand feet upwind of the shoreline that has the physical potential to cause a cumulative impact on the wind.

The cumulative effects of past, present and reasonably foreseeable future development on the wind resources are captured in wind testing by the measurement of wind speed and turbulence. Given the physical mechanisms that must operate to result in impact, projects whose wind effects could possibly combine with wind effects of Project Site development, include large developments that (1) include multi-acre areas of buildings of more than several stories in height, (2) are located upwind or cross-wind of the Project Site development, and (3) are located close enough to the Bay to have a measureable wind effect there. Very few developments meet those restrictive criteria. Of the developments listed in Table 6-2, only the following meet these initial criteria: Hunters Point Shipyard (Cumulative Project 7), Candlestick Point (Cumulative Project 8), Executive Park (Cumulative Project 9), and the Visitacion Valley Redevelopment Mixed Use Project (Cumulative Project 10).

As a part of the environmental review for the Executive Park project, wind testing was performed to assess the individual effects of the Executive Park developments and their cumulative effects together with the Candlestick Point/Hunters Point development on the Candlestick Point State Recreational Area (CSPRA) windsurfing resource. For the Executive Park project, direct wind impacts, including wind speed reductions of as much as 20 percent would occur over small areas near the shore at the CSPRA windsurf launch site; however, the EIR for Executive Park determined that these direct impacts would be less than significant. Furthermore, the EIR also determined that the Executive Park project did not contribute to substantial cumulative degradation of the value of the windsurfing resource near the CSPRA windsurf launch site; these contributions of the Executive Park project to any cumulative wind impacts were judged to be less than significant. This lack of cumulative effect results primarily because the Executive Park project lies west of the existing and planned future Candlestick Point developments and also lie west of the CSPRA launch site. Thus, only winds from the west-northwest could have any cumulative interaction and then only at locations close to the CSPRA launch site shoreline.

For proposed Project Site development, the wind testing performed for all scenarios considered the cumulative effects of these in conjunction other large, nearby existing, past, and future projects in addition to existing plus project conditions. Wind data were gathered for those test locations where Project Site development and cumulative development were oriented in a manner that, given prevailing wind direction their effects could combine to form a cumulative wind effect<sup>2</sup>. Wind speed data were not gathered for test locations that cumulative projects clearly

<sup>2</sup> As noted in Section 4.M, Recreational resources, Project Site development would be large enough to cause an adverse wind speed reduction downwind in the CSPRA windsurfing area only for winds blowing from the northwest, west-northwest, west and west-southwest directions. Winds from other directions would not be affected by the Project. Thus, cumulative impacts would only occur when winds from these directions would pass through not only Project Site development, but also a cumulative project site.

could not have an interaction with the wind effects of one of the Project Site development scenarios. Measurable cumulative wind effects involving past, present, and reasonably foreseeable future projects were found to occur only for the west wind under the DSP and CPP scenarios. These effects were found only in the northern part of the north grid, generally within less than 1,000 feet of the CSPRA shoreline. Within that limited area, the cumulative influence of the DSP and the past, present, and reasonably foreseeable future projects would result in wind speed ratios that range from 0.56 to 0.59, with reductions in wind speed that were one to four percent more than the DSP reductions alone. Within that same limited area, the cumulative influence of the CPP and future projects would result in wind speed ratios that range from 0.57 to 0.62, with reductions in wind speed that were one to five percent more than the CPP reductions alone.

Although these cumulative effects would manifest in decreased wind speeds in the northernmost part of the grid for the DSP scenario, the average combined reduction would be less than six percent, with the largest decrease being approximately nine percent, while for the CPP scenario the average combined reduction would be less than four percent and the largest decrease would be approximately seven percent. Considering each of the qualitative concerns stated by the San Francisco Boardsailing Association and discussed in Section 4.M, *Recreational Resources*, of this EIR, under the impact significance criterion, none of these combined or cumulative reductions would represent a significant impact with respect to the windsurfing resource. Project Site development, together with the other past, present, and reasonably foreseeable future projects would cause only small changes in wind speed over the northernmost part of the study area for the West wind direction only, resulting in a less than significant cumulative impact.

**Conclusion:** Project Site development, in combination with other cumulative projects, would result in a less-than-significant cumulative impact on wind speed and turbulence.

## Traffic and Circulation

**Would the Project, in combination with past, present, and reasonably foreseeable future projects cause roadway level of service standards to be exceeded or result in an increase in transit demand that could not be accommodated by transit capacity?**

### Roadway Level of Service

#### Cumulative Impacts

Impacts of Project Site development in relation to roadway levels of service, in combination with past, present, and reasonably foreseeable future development was evaluated in Section 4.N, *Traffic and Circulation*, Impact 4.N-3, which concluded that cumulative development would exceed roadway levels of service standards even with the implementation of feasible mitigation measures. A similar cumulative analysis was undertaken for impacts on the freeway mainline in Section 4.N, *Traffic and Circulation*, as part of

Cumulative Impact Significance/ Project Scenario Contribution			
DSP	DSP-V	CPP	CPP-V
CS/CC	CS/CC	CS/CC	CS/CC
CS = Significant Cumulative Impact			
LCS = Less than Significant Cumulative Impact			
CC = Cumulatively Considerable Project Contribution			
LCC = Less than Cumulatively Considerable Project Contribution			
- = Not Applicable			

Impact 4.N-4, which found that cumulative development would result in significant impacts even with the implementation of feasible mitigation measures.

**Conclusion:** Project site development, in combination with the past, present, and reasonably foreseeable projects included in the traffic model analysis reported in Impacts 4.N-3 and 4.N-4 would result in significant cumulative impacts.

### **Contributions of DSP, DSP-V, CPP, and CPP-V Scenarios to Cumulative Impacts**

As discussed in Section 4.N, *Traffic and Transportation*, of this EIR, roadway level of service standards would be exceeded, and significant cumulative impacts would result under Cumulative without Project conditions. The addition of project site development-related traffic is cumulatively considerable due to the large amount of traffic that would be generated by each Project site development scenario, as demonstrated in Section 4.N.

### **Transit Use**

#### **Cumulative Impacts**

Impacts related to transit use are evaluated in Section 4.N, *Traffic and Circulation*, as part of Impacts 4.N-6 and 4.N-7. The evaluation undertaken for Impact 4.N-6 concluded that cumulative increases in transit demand that could be accommodated by train transit capacity (BART and Caltrain). The Impact 4.N-7 analysis concluded that there would be a substantial increase in overall Muni transit ridership at San Francisco transit screenline locations along with significant cumulative impacts on San Francisco Muni transit service along the Geneva Avenue corridor. The analysis in Impact 4.N-7 also noted that Muni had mitigation programs in place to which Project Site development would contribute that would reduce cumulative impacts on Muni to a less than significant level.

**Conclusion:** Project Site development, along with cumulative development analyzed in Section 4.N, *Traffic and Transportation*, would not result in a significant cumulative impact on transit.

### **Utilities, Service Systems, and Water Supply**

**Would the Project result in a cumulatively considerable contribution, in conjunction with past, present, and reasonably foreseeable future projects, to significant cumulative effects associated with increased demands for utilities and service systems?**

#### **Wastewater Generation**

#### **Cumulative Impacts**

The geographic area for evaluation of cumulative wastewater generation impacts is the boundaries of the Bayshore Sanitary District. Determination of the significance of cumulative

Cumulative Impact Significance/ Project Scenario Contribution			
DSP	DSP-V	CPP	CPP-V
LCS/ -	LCS/ -	LCS/ -	LCS/ -
CS = Significant Cumulative Impact LCS = Less than Significant Cumulative Impact CC = Cumulatively Considerable Project Contribution LCC = Less than Cumulatively Considerable Project Contribution - = Not Applicable			

wastewater generation impacts is based on projected district-wide increases in wastewater generation, rather than a cumulative projects approach.

As noted in Section 4.O, *Utilities, Service Systems, and Water Supply*, of this EIR, the Bayshore Sanitary District (BSD) has an existing agreement with San

Francisco Public Utilities Commission (SFPUC) for dry weather flows of up to five million gallons per day. The BSD average daily wastewater flows in 2011 were 405,951 gallons per day. The BSD 2006/2011 Capital Improvements Plan (BSD, 2006) estimates that future developments in the BSD service area through 2044 would add an additional 301,200 gpd. With the Project and future development, BSD's wastewater flows would increase to a maximum of 2,313, 212 gpd by 2044. This would not exceed BSD's maximum permitted dry weather flow of to SFPUC.

Therefore no significant cumulative effects are expected associated with increases in wastewater demand in the BSD service area.

**Conclusion:** Because projected district-wide wastewater generation, including Project Site development, would not exceed the maximum amount of flow per the BSD's existing agreement with SFPUC for dry weather flows, cumulative impacts would not be significant.

## ***Water Supply***

### **Cumulative Impacts**

Supply Availability. The geographic area for evaluation of cumulative wastewater generation impacts is the City of Brisbane. Determination of the significance of cumulative water supply impacts is based on projected 20-year demand for water supplies as analyzed in the Water Supply Assessment prepared for Project Site development, rather than a cumulative projects approach.

As discussed in Section 4.O, *Utilities, Service Systems, and Water Supply*, of this EIR, the proposed water transfer agreement between OID and Brisbane would provide sufficient water supply (2,400 acre feet) to satisfy the needs of Project Site development and projected new development throughout the City.

Tuolumne River Resources. As discussion in Impact 4.O-1 in Section 4.O, *Utilities, Service Systems, and Water Supply*, of this EIR, the OID-Brisbane water transfer would contribute to potential effects on streamside meadow and other alluvial deposits along the Tuolumne River between Hetch Hetchy Reservoir and New Don Pedro Reservoir. Other transfers or increased water diversions from the Tuolumne River in the future would contribute to cumulative effects on Tuolumne River resources in this reach of the river. The SFPUC also proposed to implement a 2 mgd dry-year water transfer as part of its adopted WSIP that would affect this stretch of the river, though to date the SFPUC has not executed an agreement for this 2 mgd transfer. The SFPUC is in discussion with OID for a one-year water transfer for 2014 to address anticipated drought conditions. In addition, the Bay Area Water Supply and Conservation Agency (BAWSCA), which represents the Wholesale Customers of the SFPUC regional water system, has recently completed the initial phases of a long-term reliable water strategy plan that recommends BAWSCA and/or its member agencies also pursue water transfers. While there are

no specific transfer proposals at this time, if these transfer make use of the SFPUC regional water system to delivery water, they could also contribute to flow effects on the Tuolumne River. Finally, as part of its 2008 approval of the Phased WSIP Variant, the SFPUC committed to reviewing the future water delivery needs of its customers, beyond 2018. During that review process the SFPUC will evaluate whether to pursue increasing its waters supply diversions from the Tuolumne River system under its existing water rights. The SFPUC has not made any specific proposals to do so at this time, but doing so would also contribute to this impact on the Tuolumne River resources.

The SFPUC's WSIP PEIR Mitigation Measure 5.3.7-2 and **Mitigation Measure 4.O-1b** in this EIR (see section 4.O, *Utilities, Service Systems, and Water Supply*) – Controlled Releases to Recharge Groundwater in Streamside Meadows and Alluvial Deposits, which is a performance-based measure aimed at supporting the natural streamline meadow and alluvial deposit resources along the river, would address the Project Site development's contribution to cumulative effects and would, in concept, address the overall cumulative effects of increasing diversions or otherwise modifying reservoir releases from Hetch Hetchy Reservoir affecting the downstream reach of the Tuolumne River. With implementation of this measure the Project Site development contribution to cumulative effects would be less than cumulatively considerable. However, each specific future proposal affecting this reach of the river would need to be evaluated for its contribution to cumulative effects and additional mitigation may be required to address significant cumulative effects.

Water Supply Conveyance. SFPUC regional water system conveyance capacity could be affected by the Project Site development plus future proposals to wheel water through the SFPUC system. While there is no other specific proposal to wheel water through the SFPUC system at this time, BAWSCA has identified wheeling water transfers through the SFPUC as a potential future action to secure additional water supply. The SFPUC is beginning an assessment of its system capacity to evaluate its ability to wheel other third-party transfer water through its system without adversely affecting its operations or ability to meet its customer level of service objectives and delivery obligations. The wheeling agreement between Brisbane and the SFPUC will establish conditions on the timing of water wheeling operations, if needed, to ensure that wheeling operations use SFPUC system capacity when it is available and do not significantly impact SFPUC customer service. As a result, the Project Site development would not make a cumulatively considerable contribution to this potential cumulative effect.

**Conclusion:** Supply Availability. Because the proposed water transfer agreement and development of an onsite recycled water plant, which are both part of Project Site development, would result in sufficient water supply (2,400 acre feet) to satisfy the needs of Project Site development and projected new development throughout the City, the cumulative impacts on water supply, Tuolumne River resources and SFPUC system conveyance capacity would be less than significant.

## ***Construction of Water, Stormwater and Wastewater Infrastructure***

### **Cumulative Impacts**

As discussed in Section 4.O, *Utilities, Service Systems, and Water Supply*, of this EIR, although Project Site development would require construction of new water, stormwater, and wastewater infrastructure, this infrastructure would be designed to serve only the Project Site. There would be no interaction between Project Site development and cumulative projects that could form a cumulative impact. While Project Site-generated wastewater would be transported to the SFPUC for treatment prior to construction of the proposed onsite recycled water facility, as discussed above and in Section 4.O, adequate capacity is available, and therefore no infrastructure improvements would be required that could combine with past, present, or reasonably future projects to form a cumulative impact. As discussed in Section 4.O, the one Project Site development-related infrastructure need that could combine with infrastructure needs of cumulative projects is the need for construction of a water storage tank to serve Project Site development and future development throughout the City. The evaluation of impacts related to construction of a new water storage facility concluded that since (1) the facility would likely need to be constructed in a hillside location, (2) the location of that facility has not yet been determined, and (3) because the location is not known, it cannot be determined that construction of the needed water storage facility would be less than significant, a significant and unavoidable impact would result. Because the water storage facility is needed for both Project Site development and cumulative development throughout the City, the significant impact cited in Section 4.O would also be considered to be a significant cumulative impact.

**Conclusion:** A significant cumulative impact would result from the construction of water storage facilities to serve Project Site and cumulative citywide development.

### **Contributions of DSP, DSP-V, CPP, and CPP-V Scenarios to Cumulative Impacts**

Because Project Site development is the primary contributor to the need for construction of a new water storage facility, Project Site development's contribution to the significant cumulative impact resulting from that construction of water storage facilities would be cumulatively considerable.

## ***Landfill Capacity***

### **Cumulative Impacts**

The geographic scope of cumulative analysis for landfill capacity is the service areas for the landfill serving the Project Site. Rather than a project list approach, projections of future landfill capacity based on the entire projected waste stream going to these landfills is used for cumulative impact analysis. As presented in Table 4.O-7 the current landfills serving the Project Site would reach full capacity by 2025 or earlier, with the exception of one landfill, which is projected to reach capacity at 2077. All other landfills would likely be closed by 2025.

**Conclusion:** Because landfill capacity would be available through 2077, the cumulative effect of Project Site development, in combination with the projected waste stream going to these landfills serving the Project Site would be less than significant.



## Energy Resources

**Would the Project, in conjunction with past, present and reasonably foreseeable future projects, use energy in a wasteful manner?**

### Cumulative Impacts

All development anticipated under the cumulative scenario, including Project Site development and development of the Cumulative Projects identified in Table 6-2, would be required to comply with the energy efficiency standards in Title 24, and, for those projects exceeding certain size thresholds, the additional energy conservation requirements adopted by ordinance in Brisbane and San Francisco. In accordance with these requirements, all proposed developments would use site and building design strategies similar to those employed by Project Site development to avoid wasteful energy consumption. While it is not certain that other developments would commit to the reductions in energy consumption represented by LEED silver energy efficiency ratings proposed for Project Site development and required by Brisbane ordinance, the cumulative demand for electricity and natural gas would be reduced through implementation of Title 24 requirements and Building Codes of Brisbane and San Francisco. As a result, cumulative electricity and natural gas consumption would not be wasteful, and the cumulative impact would be less than significant.

Petroleum consumption associated with the new development identified above would be primarily attributable to transportation, especially private automobile use. However, the cumulative projects identified in Table 6-2 are within an urban area, and therefore have a range of alternative transportation options. As cumulative development occurs consistent with the Sustainable Communities Strategy for the Bay Area, development patterns would provide for greater use of transit and alternative modes of transportation. Increased population density and mixed-use development would allow residents to work, shop, and live within a small area, reducing average trip lengths, which would in turn result in lower consumption of fuels. These considerations would reduce wasteful petroleum consumption associated with unnecessary automobile trips and long commutes. State fuel efficiency standards and alternative fuels policies contained in the State Alternatives Fuels Plan (see Section 4.P, Regulatory Framework) would also contribute to a reduction in fuel use. For these reasons, the cumulative impact with regard to the consumption of energy resources would be less than significant.

Project site development, along with past, present and reasonably foreseeable future projects shown in Table 6-2 would increase demand for energy resources. Such demand would be reduced with adherence to regulatory requirements related to energy conservation, as well as mitigation recommended for the Project Site development and other cumulative projects in order to minimize the wasteful, inefficient, or unnecessary consumption of energy. For instance, the State of California has implemented a variety of energy conservation and efficiency laws and

Cumulative Impact Significance/ Project Scenario Contribution			
DSP	DSP-V	CPP	CPP-V
LCC/ -	LCC/ -	LCC/ -	LC/ -
CS = Significant Cumulative Impact LCS = Less than Significant Cumulative Impact CC = Cumulatively Considerable Project Contribution LCC = Less than Cumulatively Considerable Project Contribution - = Not Applicable			

regulations, as described in Subsection 4.P.3, *Regulatory Setting*, above. Project Site development and the cumulative projects cited in Table 6-2 would be required to comply with these regulations in order to improve energy efficiency in new residential and non-residential developments.

On the utility side, the State of California has Renewable Portfolio Standard goals that seek to increase the amount of renewable energy resources used by certain utilities. The Renewable Portfolio Standard goal for California is to have 33 percent of an electricity seller's load served with renewable power by 2020 (Executive Order S-14-08 and SB X1 2). In 2010, Pacific Gas & Electric (PG&E) served 20.1 percent of its retail electricity sales with renewable power (CPUC, 2012). In working toward meeting the Renewable Portfolio Standard goals, the use of renewable energy resources should increase to 33 percent by 2020, reducing the use of nonrenewable resources.

**Conclusion:** Based on the implementation of required energy conservation measures, Project site development, in combination with the cumulative project cited in Table 6-2, would not result in wasteful use of energy, and cumulative impacts would therefore be less than significant.

## 6.4 Significant Irreversible Environmental Effects

An EIR for a project that involves adoption, amendment, or enactment of a plan, policy, or ordinance of a public agency, such as the Project Site development as described in Chapter 3, *Project Description*, of this EIR, must identify any significant irreversible environmental changes that could result from implementation of a proposed project. These may include current or future uses of non-renewable resources, and secondary or growth-inducing impacts that commit future generations to similar uses. CEQA dictates that irretrievable commitments of resources should be evaluated to assure that such current consumption is justified (CEQA Guidelines Section 15126.2(c)).

The Project Site is located within an urban area, and does not contain any state-designated agricultural lands that would be converted to non-agricultural uses. The Project Site does not contain known mineral resources and does not serve as a mining reserve.

Construction of the Project Site development as described in Chapter 3, *Project Description*, would require the use of energy, including energy produced from non-renewable resources. Energy consumption would also occur during Project operation due to the use of automobiles, lighting, heating and cooling systems, appliances, and the like. However, the Project Site development would incorporate energy-conserving features, including those required by the Uniform Building Code, California Energy Code Title 24, and the City of Brisbane Municipal Code Section 15.80, which specifies green building standards for new developments. The Project Site development also would incorporate sustainable construction policies and features, resulting in a more energy-efficient development and reduced consumption using local materials and labor. Project characteristics and mitigation measures related to energy consumption are summarized in Chapter 7, *Sustainability*, and in Section 4.P, *Energy Resources*, in Chapter 4 of this EIR.

## 6.5 Effects Found Not To Be Significant

As part of this EIR process, an Initial Study Checklist was prepared as part of the original 2006 Notice of Preparation (NOP) (2006). The 2006 NOP determined that impacts in relation to Agricultural and Forestry Resources and Mineral Resources would be less than significant, and therefore would not be addressed in the EIR prepared for Baylands development. That conclusion was carried forward in the updated NOPs in 2010 and 2012. The discussion below addresses Agricultural and Forestry Resources, Mineral Resources, and other environmental topics for which Project site development effects have been found not to be significant. All other environmental topics in the CEQA environmental checklist have been fully analyzed in this document (Chapter 4).

### 6.5.1 Agricultural and Forestry Resources

The Project Site is sparsely developed, containing mainly disturbed dirt areas that were formerly part of the Brisbane Landfill (east of the rail corridor) and the Southern Pacific Railroad yard (west of the rail corridor). Since the landfill's closure in 1967, the eastern portion of the Project Site has been used as a repository and recycling area for materials from construction sites in the region such as sand, dirt, and gravel. Within this eastern portion of the Project Site, two lumberyards and the Recology facility continue to operate. The former railyard is vacant except for several remaining buildings from the railroad era. The Project Site does not contain lands zoned or used for agriculture, does not contain any state-designated farmland and does not site contain or abut forest resources. Therefore, the Project Site development would have no impact on agricultural or forestry resources.

### 6.5.2 Mineral Resources

The Project Site is located in a developed urban area that has no known existing mineral resources. The California Geological Survey has classified lands within the San Francisco Bay Region into Mineral Resource Zones (MRZs) based on guidelines adopted by the California State Mining and Geology Board, as mandated by the Surface Mining and Reclamation Act of 1974 (Stinson et al., 1982). The Project Site, the majority of which consists of land fill, is mapped by the California Department of Mines and Geology as MRZ-1, an area where adequate information indicates a low likelihood of significant mineral resources (Stinson, et al., 1982). The intent of designating significant deposits is to identify areas where mineral extraction could occur prior to development. Therefore, implementation of proposed Project Site development would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state, and would not 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. Implementation of the Project Site development would have no impact on mineral resources.

### 6.5.3 Cultural Resources – Paleontological

None of the Project Site development scenarios (DSP, DSP-V, CPP, and CPP-V), including the relocation of the lumberyard components, would have impacts on known or recorded

paleontological resources or unique geologic features. As discussed in Section 4.D, *Cultural Resources* (in Subsection 4.D.2, *Environmental Setting*), no known paleontological resources or unique geologic features are located on the Project Site, nor is the Project Site geology sensitive for paleontological resources. Even with the magnitude (substantial depth, extent, and volume) of proposed earthwork and cuts that would occur under each of the Project Site development scenarios, including deep-driven piles into older bay muds, it is unlikely that construction crews would encounter unique paleontological resources or sites or unique geologic features.

#### **6.5.4 Geology and Soils – Septic Systems**

Project Site development would include the construction of an integrated sewer system across the Project Site. Therefore, as noted in Section 4.E, *Geology, Soils, and Seismicity*, Project Site development would have no impacts related to soils being incapable of supporting septic systems or other alternative wastewater disposal systems.

#### **6.5.5 Hazards and Hazardous Materials – Airports**

The Project Site is located more than two miles from the nearest public airport, the San Francisco International Airport and more than two miles from the nearest airstrip, and is not located within an airport land use plan. Development under any of the Project Site development scenarios (DSP, DSP-V, CPP, and CPP-V) would not conflict with an airport land use plan nor present any other impact related to a public airport use or private airstrip, as described in Section 4.G, *Hazards and Hazardous Materials*.

#### **6.5.6 Hazards and Hazardous Materials – Wildland Fire**

The Project Site is located in an urban setting that is not considered wildlands and does not adjoin any wildlands that are at risk for wildfires. As concluded in Section 4.G, *Hazards and Hazardous Materials*, Project Site development would therefore have no impact in relation to wildland fire. Fire protection services are provided to the City of Brisbane by the NCFA, which delivers emergency and non-emergency fire response services. Brisbane is served from Fire Station No. 81 located at 3445 Bayshore Boulevard, just southwest of the Project Site. Development of the Project Site under any of the scenarios would be required to adhere to the Uniform Fire Code, which provides minimum fire safety measures that would be incorporated into all building designs.

#### **6.5.7 Traffic and Circulation – Air Traffic Patterns**

As described in Section 4.N, *Traffic and Circulation*, the Project Site is located more than 2 miles from the nearest public airport, the San Francisco International Airport, or airstrip. Development under any of the proposed scenarios would not conflict with an airport land use plan nor present any other impact related to a public airport use or private airstrip.

## 6.6 References

- Bay Area Air Quality Management District (BAAQMD), Revised Draft Options and Justification Report for California Environmental Quality Act Thresholds of Significance, 2009.
- BSD. 2006. Draft 2006/2011 Bayshore Sanitary District Capital Improvements Plan (CIP), 2006. Prepared by Kennedy/Jenks Consultants
- California Department of Transportation (Caltrans), *Technical Noise Supplement*, prepared by ICF Jones and Stokes, November 2009.
- California Public Utilities Commission (CPUC), *Renewables Portfolio Standard Quarterly Report: 1st and 2nd Quarter 2012*, 2012.
- KB Environmental (KBE), Brisbane Baylands Health Risk Assessment, prepared for Environmental Science Associates, March 29, 2012 (provided in Appendix D).
- San Francisco Redevelopment Agency, Visitation Valley Redevelopment Program, Draft EIR, May 29, 2008.
- Stinson, M. C., M. W. Manson, J. J. Plappert, and others, Mineral Land Classification: Aggregate Materials in the San Francisco-Monterey Bay Area, Part II, Classification of Aggregate Resource Areas South San Francisco Bay Production-Consumption Region, California Division of Mines and Geology Special Report 146, 1982.