

# LINK21

CONNECT NORTHERN CALIFORNIA

## ENVIRONMENTAL INPUT TO LINK21 CONCEPTS

**DRAFT**

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December 2023

Prepared By:  
Link21 Environmental Team

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# Executive Summary

## ES.1 Purpose of this Report

The purpose of this report is to document the environmental input provided on the various rail concepts developed by the Link21 Team. This report focuses on (1) identifying potential critical environmental constraints and opportunities (ECO) to support concept and alternative development by the Link21 Planning and Engineering (P&E) Team, and (2) identifying potential environmental risks (also known as “yellow flags”) for consideration in the Link21 Business Case (BC) evaluations.

### ES.1.1 Background and Use of this Report

The Link21 Team includes the San Francisco Bay Area Rapid Transit District (BART), Capitol Corridor Joint Powers Authority (CCJPA), the Link21 Program Management Consultants (PMC), and Link21 technical consultants supporting program identification and project selection. In early 2022, the Link21 Team prepared an Environmental Constraints and Opportunities Report (ECO Report) for the Northern California Megaregion (Link21 Environmental Team 2022).<sup>1</sup> This report focused on ECO associated with many potential concepts initially identified by the Link21 Team.

In late 2022, using input from the ECO Report, stakeholders, and additional program technical work, the Link21 Team developed an initial list of six concepts (Round 1) that was evaluated in early 2023. After analysis and refinements to the Round 1 concepts, three Round 2 Representative Concepts were developed to facilitate the evaluation between BART and Regional Rail (RR) in Link21’s Preliminary BC analysis. The Link21 Team expects that these concepts, or parts thereof, will ultimately culminate in a proposed project (and potentially alternatives) for environmental review pursuant to the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA).

Note that the Round 1 and Round 2 concepts were not advanced to the level of detail where conclusions could be made on potential impacts to environmental resources. Because of this, critical ECO were not compared between concepts in either Round 1 or Round 2, and no ranking of concepts was possible.

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<sup>1</sup> The full ECO Report, including appendices, is available in the Link21 Document Library under “Environmental” ([click here](#)).



## ES.2 Key Definitions

The report identifies critical constraints, critical opportunities, and yellow flags for project concepts. These are defined as:

- A “**critical environmental constraint**” is a physical or social condition that may:
  - Substantially impede the ability for Link21 to meet its vision, goals, and objectives, and ultimately its preliminary purpose and need;
  - Substantially impede the ability of equity communities (priority populations [PP] and potential environmental justice [EJ] communities) to experience the benefits of Link21;
  - Result in substantial impacts on people or the environment due to infrastructure development; and/or
  - Should otherwise be considered in early project concepts/alternatives planning and design.

Critical constraints may be addressed through design refinements and/or appropriate mitigation.

- “**Yellow flags**” are a type of critical constraint that represent those environmental risks that may result in substantial challenges for design to address during environmental review and permitting, and/or require extensive mitigation to address. A yellow flag is not necessarily a fatal flaw that would prevent a project concept from being advanced through environmental review or approval. It is a notification of potential risk to inform the BC analysis.
- A “**critical environmental opportunity**” is an opportunity to improve the environmental performance of Link21 in terms of substantially reducing environmental effects or promoting environmental benefits and/or an opportunity that provides for collaboration between Link21 and other efforts that could substantially advance other environmental priorities.

A concept and critical ECO/yellow flag are said to “overlap” where an aboveground extent and the resource intersect. “Adjacent” is used when a critical ECO/yellow flag is next to, but not overlapping, an aboveground concept extent. “Near” is used when the critical ECO/yellow flag is within the concept’s study area (defined in **Section 2.3**), but not overlapping or adjacent to an aboveground extent.



## **ES.3 Round 1 Evaluation**

### **ES.3.1 Round 1 Concepts Considered**

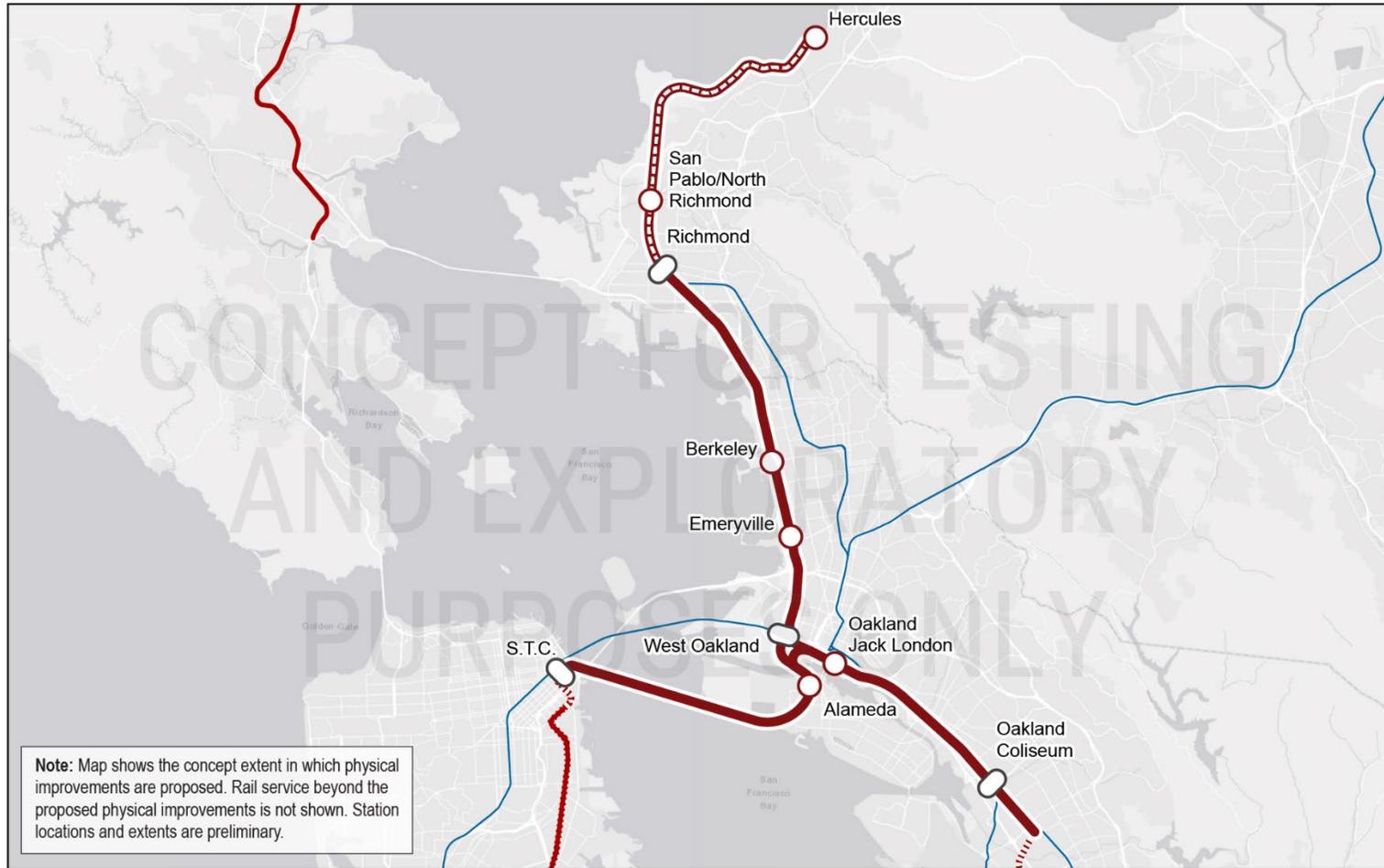
Four Regional Rail and two BART concepts were considered during Round 1.

#### **RR — Concepts A, B, E, and F**

The RR concepts begin at the Salesforce Transit Center (STC) in downtown San Francisco, then would tunnel under the San Francisco Bay toward the East Bay. Concepts A, F, and E include a potential station in Alameda in between San Francisco and Oakland, while Concept B tunnels straight to West Oakland from San Francisco. All RR concepts include potential stations in Oakland but are routed differently through the city. The RR concepts have two common sections: (1) from 19<sup>th</sup> Avenue in Oakland (in the San Antonio neighborhood) to the existing Oakland Coliseum Station and (2) from south of a potential modified Emeryville Station north to the potential new Hercules Station. **Figures ES-1** through **ES-4** present the four RR concepts.



Figure ES-1. Concept A: Regional Rail STC to Jack London District via Alameda

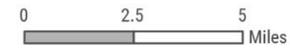


LEGEND

- Exploratory Concept Infrastructure
- Existing Rail
- Regional Rail
- - - Richmond to Hercules Optional Extension
- - - Regional Rail
- Regional Rail
- Transfer

The Regional Rail northern endpoint could be anywhere between the potential Richmond and Hercules stations.

Concept A  
Regional Rail STC to Jack London District via Alameda

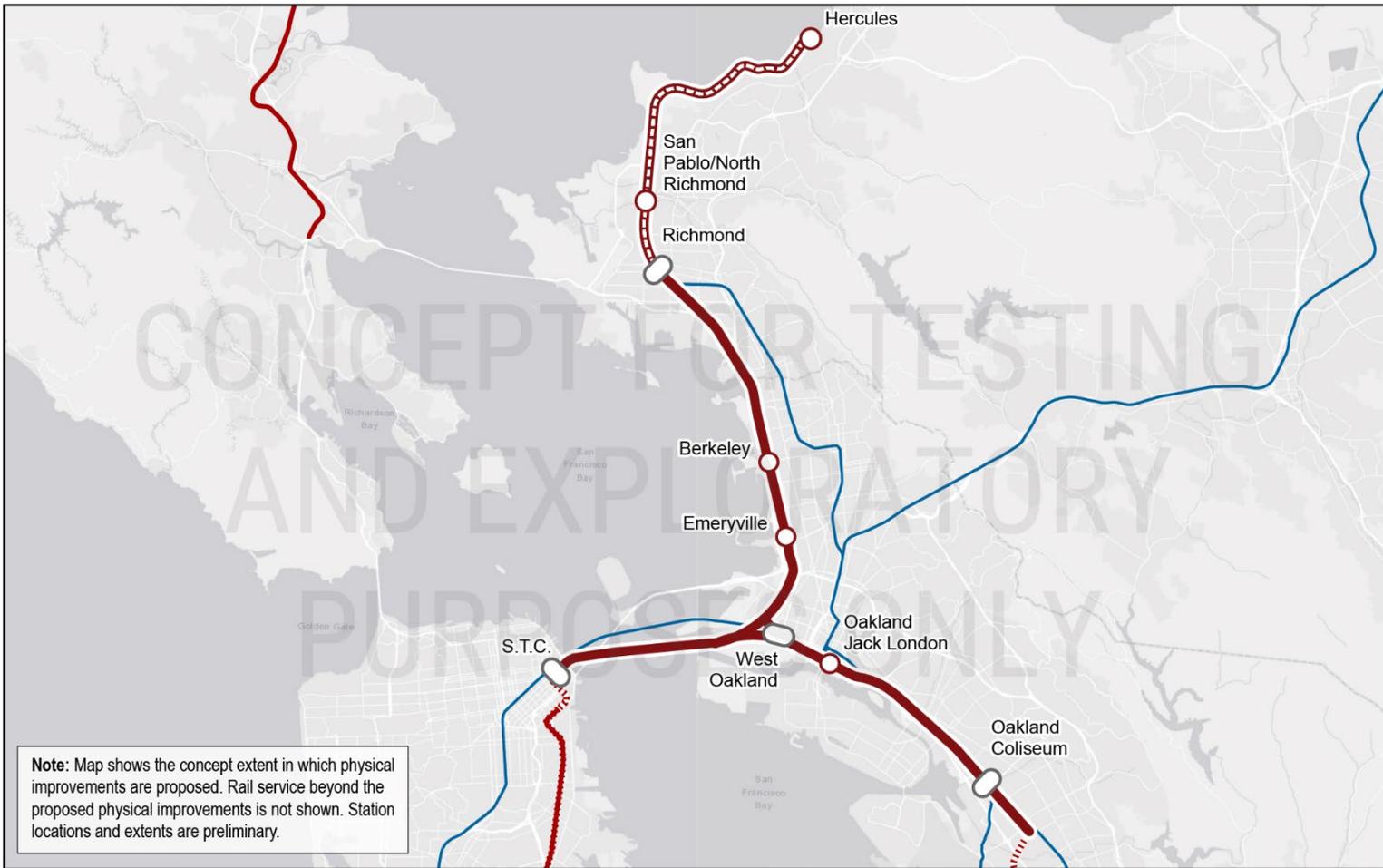


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Figure ES-2. Concept B: Regional Rail STC via Port of Oakland



LEGEND

— Exploratory Concept Infrastructure    
 - - - Richmond to Hercules Optional Extension

Existing Rail

— BART

— Regional Rail

Baseline Projects

- - - Regional Rail

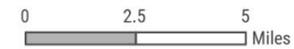
Stations

○ Regional Rail

○ Transfer

The Regional Rail northern endpoint could be anywhere between the potential Richmond and Hercules stations.

Concept B  
Regional Rail STC via Port of Oakland

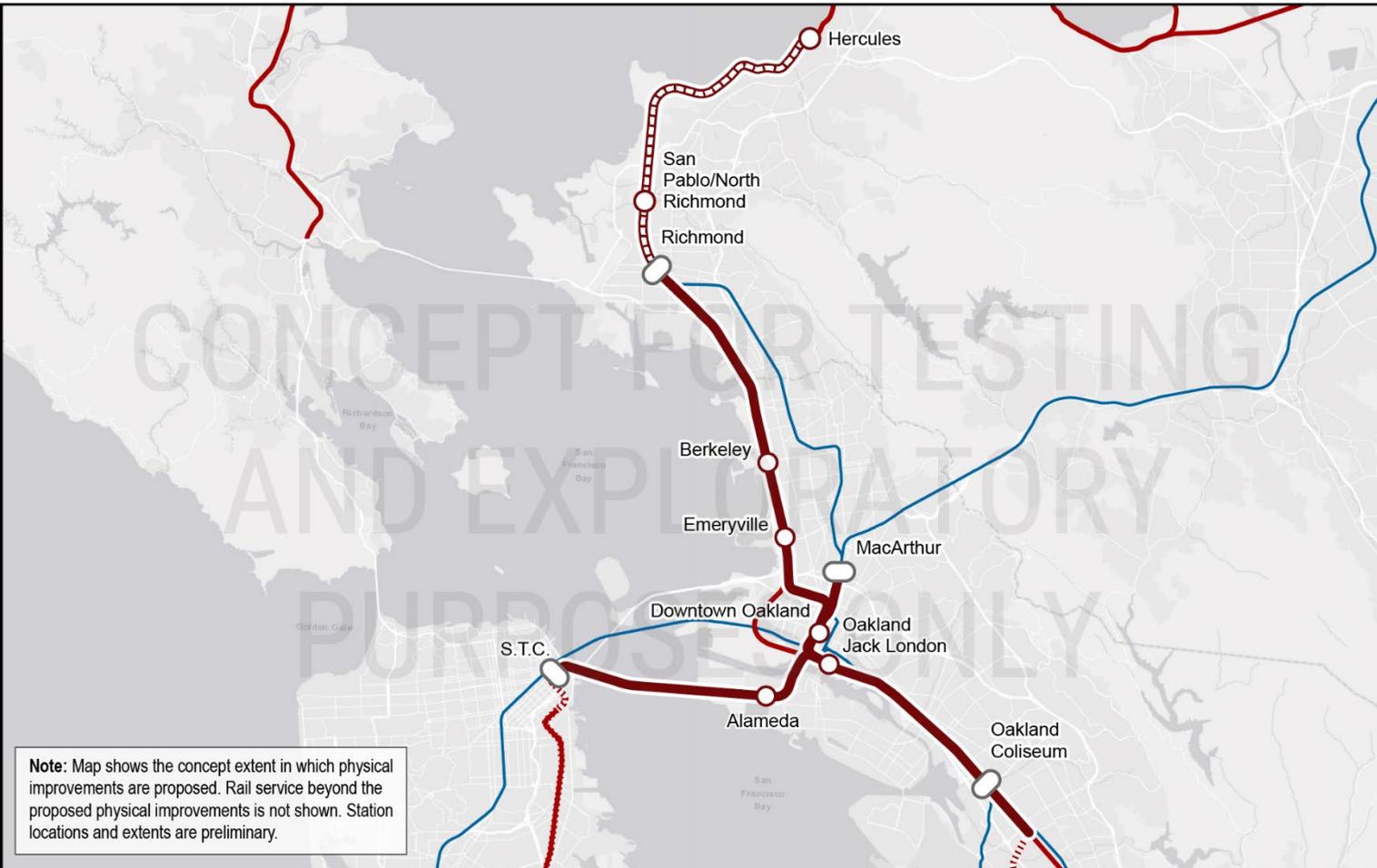


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Figure ES-3. Concept E: Regional Rail STC to MacArthur via Alameda



LEGEND

- Exploratory Concept Infrastructure
- Existing Rail
- BART
- Regional Rail
- - - Regional Rail
- - - Richmond to Hercules Optional Extension
- Regional Rail
- Transfer

The Regional Rail northern endpoint could be anywhere between the potential Richmond and Hercules stations.



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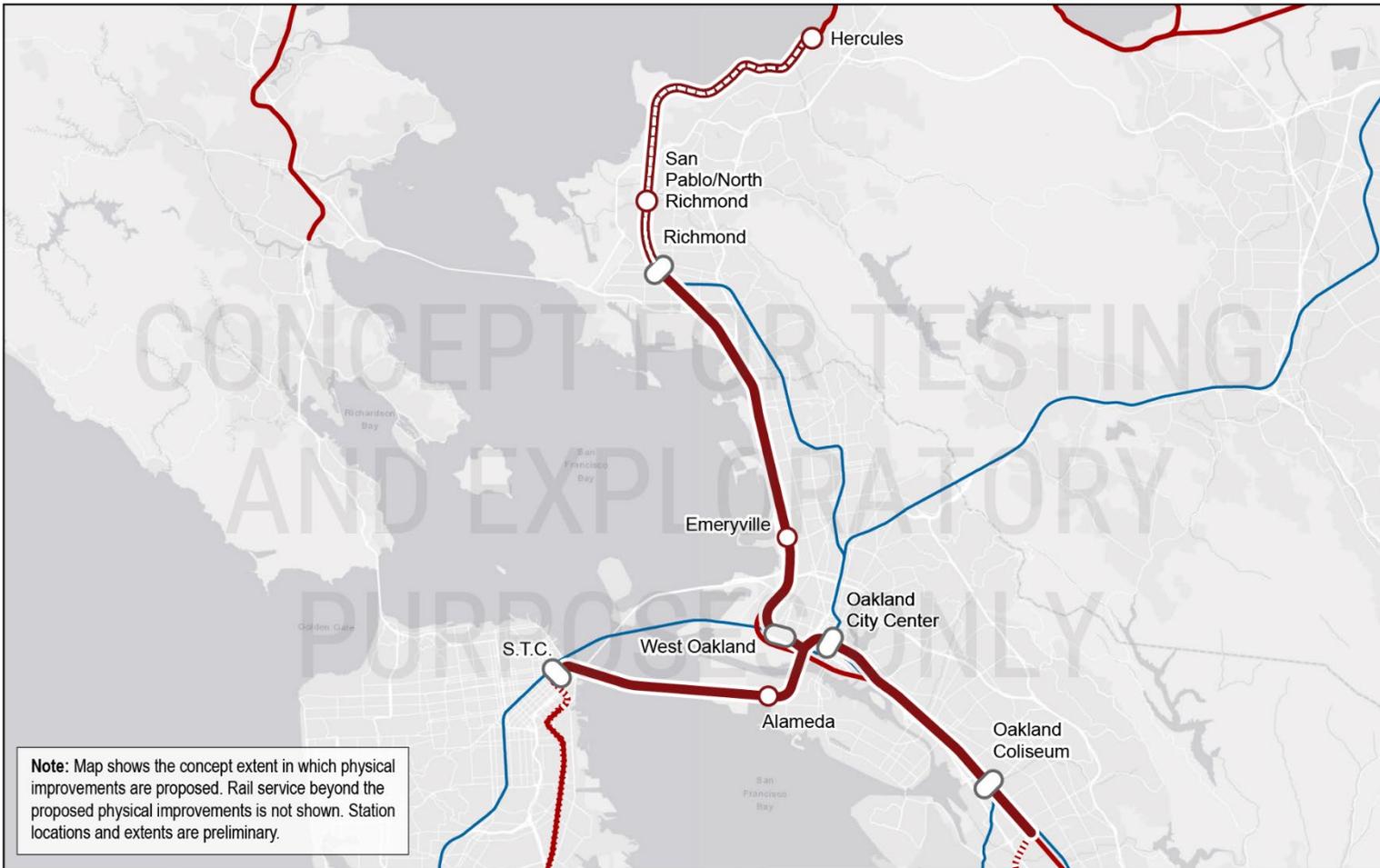
Concept E

Regional Rail STC to MacArthur via Alameda

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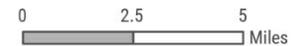
Figure ES-4. Concept F: Regional Rail STC to Oakland City Center via Alameda



LEGEND

- Exploratory Concept Infrastructure
- Existing Rail
- BART
- Regional Rail
- - - Richmond to Hercules Optional Extension
- - - Baseline Projects
- - - Regional Rail
- Stations
- Regional Rail
- Transfer

The Regional Rail northern endpoint could be anywhere between the potential Richmond and Hercules stations.



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Concept F  
Regional Rail STC to Oakland City Center via Alameda

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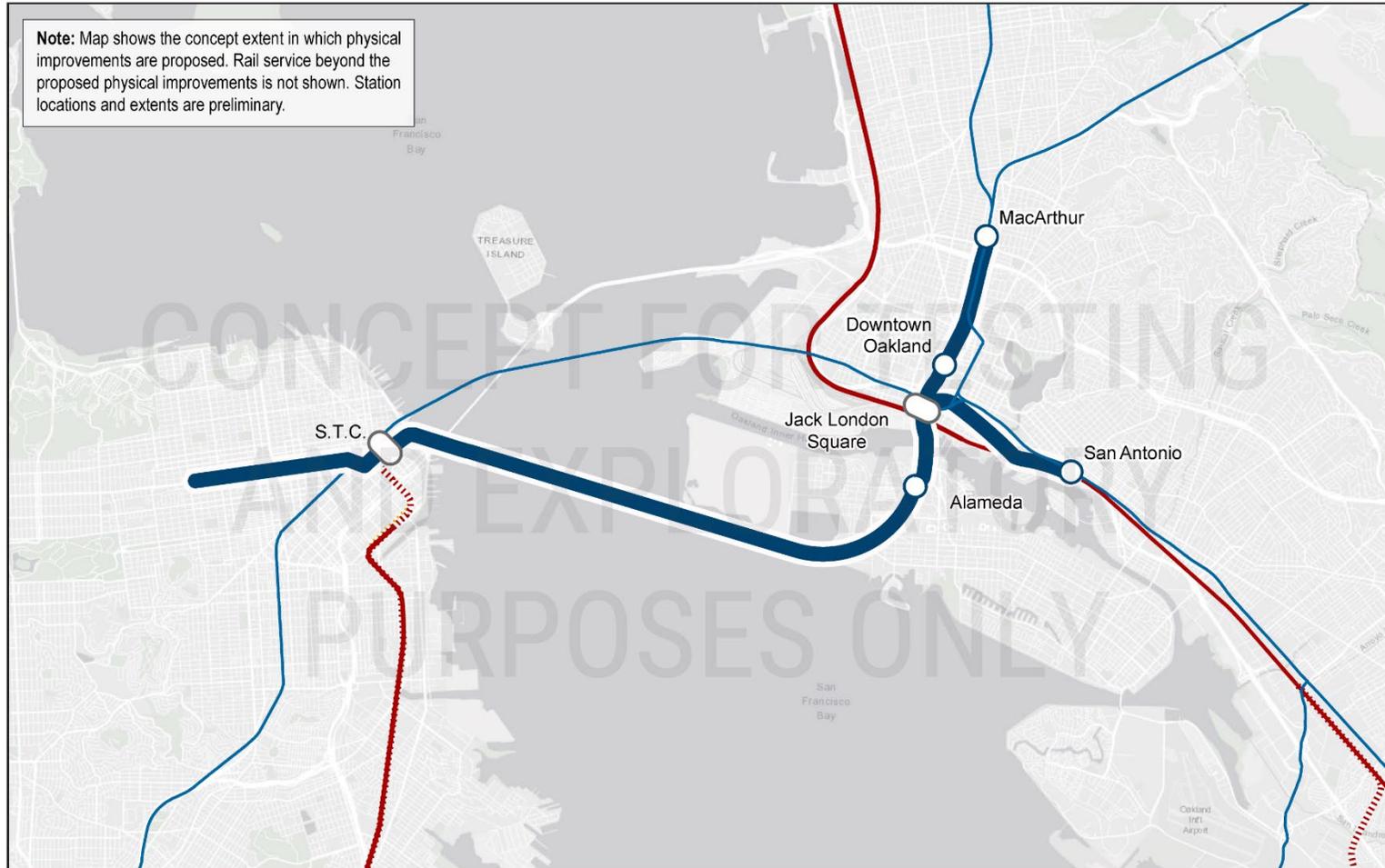


## **BART — Concepts C and D**

Concept C begins underground at Geary Boulevard and Divisadero Street, first surfacing at the potential new STC-adjacent Howard Street Station before tunneling under the San Francisco Bay toward Alameda. Concept D includes multiple new San Francisco stations before tunneling under the bay to Alameda: 3<sup>rd</sup> & Mission, 4<sup>th</sup> & Townsend, and Mission Bay/University of California, San Francisco (UCSF). The BART concepts converge just west of Alameda Island and share stations throughout Oakland, including the new San Antonio Station. The two BART concepts are presented in **Figures ES-5 and ES-6**.



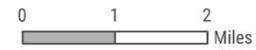
Figure ES-5. Concept C: BART Downtown San Francisco via Alameda



LEGEND

- Exploratory Concept Infrastructure
- Existing Rail
- Baseline Projects
- Regional Rail
- Stations
- BART
- Transfer

Concept C  
Downtown San Francisco via Alameda

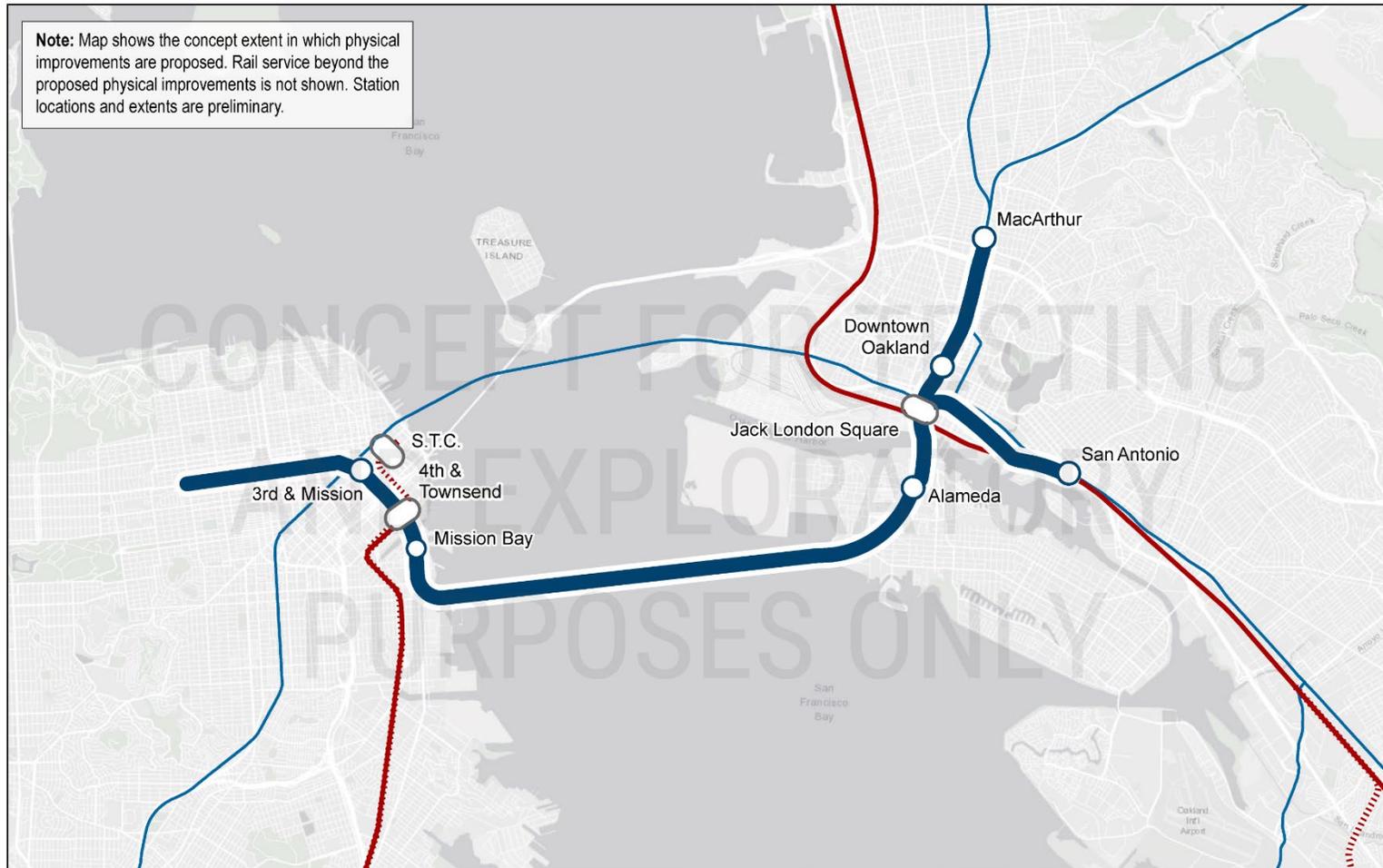


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Figure ES-6. Concept D: BART Downtown San Francisco via Mission Bay and Alameda



LEGEND

Exploratory Concept Infrastructure

Existing Rail

- BART
- Regional Rail

Baseline Projects

- Regional Rail

Stations

- BART
- Transfer

Concept D

BART Downtown San Francisco via Mission Bay and Alameda



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### **ES.3.2 Summary of Critical ECO and Yellow Flags for Round 1 Project Concepts**

The following tables summarize the critical environmental constraints, yellow flags, and critical environmental opportunities for the Round 1 project concepts. See **Section 3.3** for the full list of ECO and yellow flags for each concept. **Table ES-1** presents environmental constraints and yellow flags for the Round 1 concepts, and **Table ES-2** presents environmental opportunities for Round 1 concepts.

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**Table ES-1. Round 1 Project Concepts Critical Environmental Constraints and Yellow Flags**

TOPIC	CONCEPT A: REGIONAL RAIL STC TO JACK LONDON DISTRICT VIA ALAMEDA	CONCEPT B: REGIONAL RAIL STC VIA PORT OF OAKLAND	CONCEPT E: REGIONAL RAIL STC TO MACARTHUR VIA ALAMEDA	CONCEPT F: REGIONAL RAIL STC TO OAKLAND CITY CENTER VIA ALAMEDA	CONCEPT C: BART DOWNTOWN SAN FRANCISCO VIA ALAMEDA	CONCEPT D: BART DOWNTOWN SAN FRANCISCO VIA MISSION BAY AND ALAMEDA
Biological Resources	<ul style="list-style-type: none"> <li>▫ Biological resources at the San Francisco Bay floor (1)<sup>1</sup></li> <li>▫ Aquatic Park in Berkeley</li> <li>▫ Critical habitat for soft bird's beak near the aboveground alignment at Point Pinole</li> <li>▫ Adjacent wetlands and eelgrass in San Pablo Bay (Pinole to Hercules) (96, 97, 98)</li> <li>▫ Creeks such as Wildcat Creek and Codornices Creek</li> </ul>	<ul style="list-style-type: none"> <li>▫ Biological resources at the San Francisco Bay floor (1)</li> <li>▫ Eelgrass near the aboveground disturbance within Middle Harbor Shoreline Park</li> <li>▫ Aquatic Park in Berkeley</li> <li>▫ Critical habitat for soft bird's beak near the aboveground alignment at Point Pinole</li> <li>▫ Adjacent wetlands and eelgrass in San Pablo Bay (Pinole to Hercules) (96, 97, 98)</li> <li>▫ Creeks such as Wildcat Creek and Codornices Creek</li> </ul>	<ul style="list-style-type: none"> <li>▫ Biological resources at the San Francisco Bay floor (1)</li> <li>▫ Tunnel bore launch area within the Alameda Nature Reserve, which provides habitat for the endangered California least tern (83)</li> <li>▫ Aquatic Park in Berkeley</li> <li>▫ Critical habitat for soft bird's beak near the aboveground alignment at Point Pinole</li> <li>▫ Adjacent wetlands and eelgrass in San Pablo Bay (Pinole to Hercules) (96, 97, 98)</li> <li>▫ Creeks such as Wildcat Creek and Codornices Creek</li> </ul>	<ul style="list-style-type: none"> <li>▫ Biological resources at the San Francisco Bay floor (1)</li> <li>▫ Tunnel bore launch area within the Alameda Nature Reserve, which provides habitat for the endangered California least tern (83)</li> <li>▫ Aquatic Park in Berkeley</li> <li>▫ Critical habitat for soft bird's beak near the aboveground alignment at Point Pinole</li> <li>▫ Adjacent wetlands and eelgrass in San Pablo Bay (Pinole to Hercules) (96, 97, 98)</li> <li>▫ Creeks such as Wildcat Creek and Codornices Creek</li> </ul>	None	None
Cultural Resources	<ul style="list-style-type: none"> <li>▫ Potential station areas in San Francisco and Oakland are within the Port of San Francisco Embarcadero (2) and Oakland Waterfront Warehouse (3) historic districts</li> <li>▫ Individual built-environment properties are present near the potential modified STC (4) and Oakland Jack London (5) stations</li> <li>▫ NRHP-listed USS Hornet is in Alameda</li> <li>▫ NRHP-eligible Hegenberger Road Overcrossing intersects south of the existing Oakland Coliseum Station (6)</li> <li>▫ Hercules Village Historic District south of the potential new Hercules Station (99)</li> <li>▫ Buried archaeological resources are present near</li> </ul>	<ul style="list-style-type: none"> <li>▫ Potential station areas in San Francisco and Oakland are within the Port of San Francisco Embarcadero (2) and Oakland Waterfront Warehouse (3) historic districts</li> <li>▫ Individual built-environment properties are present near the potential modified STC (4) and Oakland Jack London (5) stations</li> <li>▫ NRHP-eligible Hegenberger Road Overcrossing intersects south of the existing Oakland Coliseum Station (6)</li> <li>▫ Hercules Village Historic District south of the potential new Hercules Station (99)</li> <li>▫ Buried archaeological resources are present near areas of surface disturbance.</li> </ul>	<ul style="list-style-type: none"> <li>▫ The potential station areas in San Francisco, Alameda, and Oakland are within the Port of San Francisco Embarcadero (2), NAS Alameda, and Oakland Waterfront Warehouse (3) historic districts</li> <li>▫ Individual built-environment properties are present near the potential modified STC (4) and Oakland Jack London (5) stations and the potential new Downtown Oakland Station (86, 87)</li> <li>▫ The potential new Downtown Oakland Station overlaps one individual built-environment property (85)</li> <li>▫ NRHP-eligible Hegenberger Road Overcrossing intersects south of the existing Oakland Coliseum Station (6)</li> </ul>	<ul style="list-style-type: none"> <li>▫ The potential station areas in San Francisco and Alameda, and Oakland are within the Port of San Francisco Embarcadero (2), NAS Alameda, Harrison and 15<sup>th</sup> Street, and Downtown Oakland (66) historic districts</li> <li>▫ An individual built-environment is near the potential modified STC Station (4), near the potential modified 12<sup>th</sup> Street/Oakland City Center Station, and within a wye box near I-980 (67)</li> <li>▫ NRHP-eligible Hegenberger Road Overcrossing intersects south of the existing Oakland Coliseum Station (6)</li> <li>▫ Hercules Village Historic District south of the potential new Hercules Station (99)</li> </ul>	<ul style="list-style-type: none"> <li>▫ Historic district is near the potential new STC-adjacent Howard Street Station: 2<sup>nd</sup> and Howard Streets Historic District</li> <li>▫ NRHP-listed USS Hornet is in Alameda</li> <li>▫ Individual built-environment properties are present near the potential new Downtown Oakland Station (85, 86)</li> <li>▫ Buried archaeological resources are present near areas of surface disturbance.</li> </ul>	<ul style="list-style-type: none"> <li>▫ Two of the potential station areas in San Francisco (3<sup>rd</sup> &amp; Mission Station and 4<sup>th</sup> &amp; Townsend Station) are within or adjacent to the Uptown Tenderloin (205), San Francisco Cable Cars (206), Lower Nob Hill Apartment Hotel (207), Aronson (208), and South End (209) historic districts</li> <li>▫ Individual built-environment properties are present near surface disturbance in downtown San Francisco (204) and the potential new Downtown Oakland Station (85, 86)</li> <li>▫ Buried archaeological resources are present near areas of surface disturbance.</li> </ul>

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**Table ES-1. Round 1 Project Concepts Critical Environmental Constraints and Yellow Flags**

TOPIC	CONCEPT A: REGIONAL RAIL STC TO JACK LONDON DISTRICT VIA ALAMEDA	CONCEPT B: REGIONAL RAIL STC VIA PORT OF OAKLAND	CONCEPT E: REGIONAL RAIL STC TO MACARTHUR VIA ALAMEDA	CONCEPT F: REGIONAL RAIL STC TO OAKLAND CITY CENTER VIA ALAMEDA	CONCEPT C: BART DOWNTOWN SAN FRANCISCO VIA ALAMEDA	CONCEPT D: BART DOWNTOWN SAN FRANCISCO VIA MISSION BAY AND ALAMEDA
	<ul style="list-style-type: none"> <li>areas of surface disturbance.</li> </ul>		<ul style="list-style-type: none"> <li>Hercules Village Historic District south of the potential new Hercules Station (99)</li> <li>Buried archaeological resources are present near areas of surface disturbance.</li> </ul>	<ul style="list-style-type: none"> <li>Buried archaeological resources are present near areas of surface disturbance.</li> </ul>		
Community Resources	<ul style="list-style-type: none"> <li>Civicorps Job Training Center (15) and the WOEIP office (16) intersect with a potential wye box just south of the potential new West Oakland Station</li> <li>College of Alameda parking lot and tennis courts intersect with the potential new Alameda Station</li> <li>Three schools near or intersecting the aboveground alignment in Oakland: Community School for Creative Education, Epic Charter, and Latitude 37.8 High</li> <li>Oakland Fire Department Station 13 and Richmond Fire Department Station 64 near the aboveground alignment</li> <li>Two police station parking lots intersect with the aboveground alignment: Alameda County Sheriff's Office — AC Transit (7) and Oakland Housing Authority Police Department (8)</li> <li>Stanford Health Care in Emeryville near the potential modified Emeryville Station</li> <li>The aboveground alignment intersects with UC Berkeley land south of the existing Berkeley Station</li> </ul>	<ul style="list-style-type: none"> <li>Three schools near or intersecting the aboveground alignment in Oakland: Community School for Creative Education, Epic Charter, and Latitude 37.8 High</li> <li>Academy of Art University near the potential modified STC Station</li> <li>Civicorps Job Training Center (15) and the WOEIP office (16) intersect with a potential wye box just south of the potential new West Oakland Station</li> <li>Two police station parking lots intersect with the aboveground alignment: Alameda County Sheriff's Office — AC Transit (7) and Oakland Housing Authority Police Department (8)</li> <li>Oakland Fire Department Station 13 and Richmond Fire Department Station 64 near the aboveground alignment</li> <li>Stanford Health Care in Emeryville near the potential modified Emeryville Station</li> <li>The aboveground alignment intersects with UC Berkeley land south of the existing Berkeley Station</li> </ul> <p>Faith-based facilities:</p>	<ul style="list-style-type: none"> <li>Three schools near or intersecting the aboveground alignment in Oakland: Community School for Creative Education, Epic Charter, and Latitude 37.8 High</li> <li>Oakland Fire Department Station 13 and Richmond Fire Department Station 64 near the aboveground alignment</li> <li>Oakland Fire Department Station 1 overlaps with surface disturbance associated with the potential new Downtown Oakland Station (88)</li> <li>Two police station parking lots intersect with the aboveground alignment: Alameda County Sheriff's Office — AC Transit (7) and Oakland Housing Authority Police Department (8)</li> <li>Stanford Health Care in Emeryville near the potential modified Emeryville Station</li> <li>The aboveground alignment intersects with UC Berkeley land south of the existing Berkeley Station</li> </ul> <p>Faith-based facilities:</p> <ul style="list-style-type: none"> <li>The New St. Paul Community Baptist Church</li> </ul>	<ul style="list-style-type: none"> <li>Civicorps Job Training Center (15) and the WOEIP office (16) intersect with a potential wye box just south of the potential new West Oakland Station</li> <li>Three schools near or intersecting the aboveground alignment in Oakland: Community School for Creative Education, Epic Charter, and Latitude 37.8 High</li> <li>Oakland Fire Department Station 13 and Richmond Fire Department Station 64 near the aboveground alignment</li> <li>Two police station parking lots intersect with the aboveground alignment: Alameda County Sheriff's Office — AC Transit (7) and Oakland Housing Authority Police Department (8)</li> <li>Stanford Health Care in Emeryville near the potential modified Emeryville Station</li> <li>The aboveground alignment intersects with UC Berkeley land south of the existing Berkeley Station</li> </ul> <p>Faith-based facilities:</p> <ul style="list-style-type: none"> <li>East Bay Gospel Mission and California Buddhist Association Inc. near the</li> </ul>	<ul style="list-style-type: none"> <li>Oakland Fire Department Station 1 adjacent to the potential new Downtown Oakland Station (88)</li> <li>College of Alameda recreational and parking facilities near the potential new Alameda Station-City College</li> </ul> <p>Faith-based facilities:</p> <ul style="list-style-type: none"> <li>First Unitarian Church of Oakland near and Pilgrim Rest Baptist Church (89) adjacent to the potential new Downtown Oakland Station</li> </ul> <p>Residential areas:</p> <ul style="list-style-type: none"> <li>Near the potential new Alameda Station-City College</li> <li>Near the potential new Jack London Square (Howard Terminal) Station (189)</li> <li>Overlap with the potential new Downtown Oakland Station from 18<sup>th</sup> Street to 14<sup>th</sup> Street (190)</li> <li>Overlap with the cut-and-cover surface disturbance on I-980 (191)</li> <li>Near the potential new San Antonio Station from East 12<sup>th</sup> Street northwest towards I-880</li> </ul>	<ul style="list-style-type: none"> <li>Academy of Art University near the potential new Downtown San Francisco-3<sup>rd</sup> &amp; Mission Station and University of San Francisco adjacent to the potential new Mission Bay/UCSF Station (212)</li> <li>UCSF Medical Center (210) and UCSF Benioff (211) adjacent to the potential new Mission Bay/UCSF Station</li> <li>San Francisco Fire Department Station 8 near the potential new 4<sup>th</sup> &amp; Townsend Station; Oakland Fire Department Station 1 adjacent to the potential new Downtown Oakland Station (88)</li> <li>College of Alameda recreational and parking facilities near the potential new Alameda Station-City College</li> </ul> <p>Faith-based facilities:</p> <ul style="list-style-type: none"> <li>Church of Prayer near Geary Street surface disturbance and Contemporary Jewish Museum near the potential new Downtown San Francisco-3<sup>rd</sup> &amp; Mission Station</li> </ul>

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**Table ES-1. Round 1 Project Concepts Critical Environmental Constraints and Yellow Flags**

TOPIC	CONCEPT A: REGIONAL RAIL STC TO JACK LONDON DISTRICT VIA ALAMEDA	CONCEPT B: REGIONAL RAIL STC VIA PORT OF OAKLAND	CONCEPT E: REGIONAL RAIL STC TO MACARTHUR VIA ALAMEDA	CONCEPT F: REGIONAL RAIL STC TO OAKLAND CITY CENTER VIA ALAMEDA	CONCEPT C: BART DOWNTOWN SAN FRANCISCO VIA ALAMEDA	CONCEPT D: BART DOWNTOWN SAN FRANCISCO VIA MISSION BAY AND ALAMEDA
	<p>Faith-based facilities:</p> <ul style="list-style-type: none"> <li>▫ Center Street Missionary Church, near the potential new West Oakland Station</li> <li>▫ Kingdom Hall of Jehovah’s Witness near the potential modified Richmond Station</li> <li>▫ Samoan Methodist Church within the concept extent in Richmond (100)</li> </ul> <p>Residential areas:</p> <ul style="list-style-type: none"> <li>▫ Potential new Alameda Station overlaps residences (53, 54, 55)</li> <li>▫ Aboveground section surrounding the existing Oakland Coliseum Station overlaps from 33<sup>rd</sup> to 37<sup>th</sup> Avenue and on Wattling Street (11, 12)</li> <li>▫ Potential overlap with residences adjacent to the potential new West Oakland Station (56, 57)</li> <li>▫ Potential overlap with aboveground alignment approaching Emeryville on Hubbard Street and Horton Street (13, 14) and on Powell and 65<sup>th</sup> streets</li> <li>▫ Near the existing Berkeley Station: on Addison Street (101) and Essex Way (102)</li> <li>▫ Within the concept extent: residences off Cleveland Avenue from Buchanan Avenue north to Washington Avenue (103); on Columbia Avenue (104)</li> <li>▫ Near Crescent Park and along Carlson Blvd. to Cutting Blvd.; from Pullman Avenue to Ohio Avenue in Richmond</li> </ul>	<ul style="list-style-type: none"> <li>▫ Zion First Church of God in Christ and Olivet Oakland Church near the potential new West Oakland Station</li> <li>▫ East Bay First Korean Baptist Church northwest of the existing Oakland Coliseum Station</li> <li>▫ Kingdom Hall of Jehovah’s Witness near the potential modified Richmond Station</li> <li>▫ Samoan Methodist Church within the concept extent in Richmond (100)</li> </ul> <p>Residential areas:</p> <ul style="list-style-type: none"> <li>▫ Overlapping the potential new West Oakland Station Chester Street between 5<sup>th</sup> Street and 7<sup>th</sup> Street (9) and at the intersection of Wood Street and West Grand Avenue in West Oakland (10)</li> <li>▫ Other residences near the potential new West Oakland Station</li> <li>▫ Near the potential wye box in West Oakland (near Raimondi Park): 16<sup>th</sup> Street &amp; Willow Street, 16<sup>th</sup> Street &amp; Campbell Street in Oakland</li> <li>▫ Near aboveground alignment: Vantage Point Park</li> <li>▫ Near aboveground alignment: From 33<sup>rd</sup> Avenue to 37<sup>th</sup> Avenue (11) and on Wattling Street (12) in Oakland</li> <li>▫ Potential overlap with aboveground alignment approaching Emeryville on Hubbard Street and Horton</li> </ul>	<p>south of the potential new Downtown Oakland Station</p> <ul style="list-style-type: none"> <li>▫ Pilgrim Rest Baptist Church overlaps with the surface disturbance associated with the potential new Downtown Oakland Station (89)</li> <li>▫ Kingdom Hall of Jehovah’s Witness near the potential modified Richmond Station</li> <li>▫ Samoan Methodist Church within the concept extent in Richmond (100)</li> </ul> <p>Residential areas:</p> <ul style="list-style-type: none"> <li>▫ Near the potential modified STC Station</li> <li>▫ Near the potential wye box in northern Alameda (90)</li> <li>▫ Adjacent to the potential new Downtown Oakland Station on Martin Luther King, Jr. Way (91)</li> <li>▫ The aboveground section overlaps residential development from 33<sup>rd</sup> to 37<sup>th</sup> Avenue and on Wattling Street (11, 12)</li> <li>▫ Potential overlap with aboveground alignment approaching Emeryville on Hubbard Street and Horton Street (13, 14) and on Powell and 65<sup>th</sup> streets</li> <li>▫ Near the existing Berkeley Station: on Addison Street (101) and Essex Way (102)</li> <li>▫ Within the concept extent: residences off Cleveland Avenue from Buchanan Avenue north to Washington Avenue (103); on Columbia Avenue (104)</li> <li>▫ Near Crescent Park and along Carlson Blvd. to</li> </ul>	<p>potential modified 12<sup>th</sup> Street/Oakland City Center Station</p> <ul style="list-style-type: none"> <li>▫ East Bay First Korean Baptist Church northwest of the existing Oakland Coliseum Station</li> <li>▫ Kingdom Hall of Jehovah’s Witness near the potential modified Richmond Station</li> <li>▫ Samoan Methodist Church within the concept extent in Richmond (100)</li> </ul> <p>Residential Areas:</p> <ul style="list-style-type: none"> <li>▫ On West Atlantic Avenue adjacent to the potential new Alameda-Main/Atlantic Station (68)</li> <li>▫ Overlapping the potential new West Oakland Station Chester Street between 5<sup>th</sup> Street and 7<sup>th</sup> Street (9) and at the intersection of Wood Street and West Grand Avenue in West Oakland (10)</li> <li>▫ Overlap with the potential modified 12<sup>th</sup> Street/Oakland City Center Station from Broadway to Harrison Street (69)</li> <li>▫ The aboveground section overlaps residential development from 33<sup>rd</sup> to 37<sup>th</sup> Avenue and on Wattling Street (11, 12)</li> <li>▫ Potential overlap with aboveground alignment approaching Emeryville on Hubbard Street and Horton Street (13, 14) and on Powell and 65<sup>th</sup> streets</li> </ul>		<ul style="list-style-type: none"> <li>▫ City Crossroads Ministries near potential new 4<sup>th</sup> &amp; Townsend Station</li> <li>▫ First Unitarian Church of Oakland near and Pilgrim Rest Baptist Church (89) adjacent to the potential new Downtown Oakland Station</li> </ul> <p>Residential areas:</p> <ul style="list-style-type: none"> <li>▫ Near the potential new 4<sup>th</sup> &amp; Townsend (213) and Mission Bay/UCSF stations</li> <li>▫ Near the potential new Alameda Station-City College</li> <li>▫ Near the potential new Jack London Square (Howard Terminal) Station (189)</li> <li>▫ Overlap with the potential new Downtown Oakland Station from 18<sup>th</sup> Street to 14<sup>th</sup> Street (190)</li> <li>▫ Overlap with the cut-and-cover surface disturbance on I-980 (191)</li> <li>▫ Near the potential new San Antonio Station from East 12<sup>th</sup> Street northwest towards I-880</li> </ul>

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**Table ES-1. Round 1 Project Concepts Critical Environmental Constraints and Yellow Flags**

TOPIC	CONCEPT A: REGIONAL RAIL STC TO JACK LONDON DISTRICT VIA ALAMEDA	CONCEPT B: REGIONAL RAIL STC VIA PORT OF OAKLAND	CONCEPT E: REGIONAL RAIL STC TO MACARTHUR VIA ALAMEDA	CONCEPT F: REGIONAL RAIL STC TO OAKLAND CITY CENTER VIA ALAMEDA	CONCEPT C: BART DOWNTOWN SAN FRANCISCO VIA ALAMEDA	CONCEPT D: BART DOWNTOWN SAN FRANCISCO VIA MISSION BAY AND ALAMEDA
	<ul style="list-style-type: none"> <li>▫ Within the concept extent on the approach to the potential modified Richmond Station on Espee Avenue (105) and north of the potential modified Richmond Station on Village Way (106)</li> <li>▫ Along the aboveground alignment north of Barrett Avenue, Roosevelt Avenue, and 13<sup>th</sup> Street to Pennsylvania Avenue in Richmond (107)</li> <li>▫ Triangle Court Development: a public housing development managed by Richmond Housing Authority is within the concept extent (108)</li> <li>▫ Near the extent from Sanford Avenue to Chesley Avenue in Richmond, south of the potential new San Pablo/North Richmond Station (109)</li> <li>▫ Within the extent from Morton Way to Banks Drive (along Jenkins Way) (110)</li> <li>▫ Within the extent along Cypress Avenue in San Pablo (111)</li> <li>▫ Potentially within the concept extent on Orleans Drive</li> </ul>	<ul style="list-style-type: none"> <li>Street (13, 14) and on Powell and 65<sup>th</sup> streets</li> <li>▫ Near the existing Berkeley Station: on Addison Street (101) and Essex Way (102)</li> <li>▫ Within the extent: residences off Cleveland Avenue from Buchanan Avenue north to Washington Avenue (103); on Columbia Avenue (104)</li> <li>▫ Near Crescent Park and along Carlson Blvd. to Cutting Blvd.; from Pullman Avenue to Ohio Avenue in Richmond</li> <li>▫ Within the concept extent on the approach to the potential modified Richmond Station on Espee Avenue (105) and north of the potential modified Richmond Station on Village Way (106)</li> <li>▫ Along the aboveground alignment north of Barrett Avenue, Roosevelt Avenue, and 13<sup>th</sup> Street to Pennsylvania Avenue in Richmond (107)</li> <li>▫ Triangle Court Development: a public housing development managed by Richmond Housing Authority is within the concept extent (108)</li> <li>▫ Near the extent from Sanford Avenue to Chesley Avenue in Richmond, south of the potential new San Pablo/North Richmond Station (109)</li> <li>▫ Within the extent from Morton Way to Banks Drive (along Jenkins Way) (110)</li> </ul>	<ul style="list-style-type: none"> <li>Cutting Blvd.; from Pullman Avenue to Ohio Avenue in Richmond</li> <li>▫ Within the extent on the approach to the potential modified Richmond Station on Espee Avenue (105) and north of the potential modified Richmond Station on Village Way (106)</li> <li>▫ Along the aboveground alignment north of Barrett Avenue, Roosevelt Avenue, and 13<sup>th</sup> Street to Pennsylvania Avenue in Richmond (107)</li> <li>▫ Triangle Court Development: a public housing development managed by Richmond Housing Authority is within the concept extent (108)</li> <li>▫ Near the extent from Sanford Avenue to Chesley Avenue in Richmond, south of the potential new San Pablo/North Richmond Station (109)</li> <li>▫ Within the extent from Morton Way to Banks Drive (along Jenkins Way) (110)</li> <li>▫ Within the extent along Cypress Avenue in San Pablo (111)</li> <li>▫ Potentially within the concept extent on Orleans Drive</li> </ul>	<ul style="list-style-type: none"> <li>▫ Near the existing Berkeley Station: on Addison Street (101) and Essex Way (102)</li> <li>▫ Within the extent: residences off Cleveland Avenue from Buchanan Avenue north to Washington Avenue (103); on Columbia Avenue (104)</li> <li>▫ Near Crescent Park and along Carlson Blvd. to Cutting Blvd.; from Pullman Avenue to Ohio Avenue in Richmond</li> <li>▫ Within the concept extent on the approach to the potential modified Richmond Station on Espee Avenue (105) and north of the potential modified Richmond Station on Village Way (106)</li> <li>▫ Along the aboveground alignment north of Barrett Avenue, Roosevelt Avenue, and 13<sup>th</sup> Street to Pennsylvania Avenue in Richmond (107)</li> <li>▫ Triangle Court Development: a public housing development managed by Richmond Housing Authority is within the concept extent (108)</li> <li>▫ Near the extent from Sanford Avenue to Chesley Avenue in Richmond, south of the potential new San Pablo/North Richmond Station (109)</li> <li>▫ Within the extent from Morton Way to Banks Drive (along Jenkins Way) (110)</li> </ul>		

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**Table ES-1. Round 1 Project Concepts Critical Environmental Constraints and Yellow Flags**

TOPIC	CONCEPT A: REGIONAL RAIL STC TO JACK LONDON DISTRICT VIA ALAMEDA	CONCEPT B: REGIONAL RAIL STC VIA PORT OF OAKLAND	CONCEPT E: REGIONAL RAIL STC TO MACARTHUR VIA ALAMEDA	CONCEPT F: REGIONAL RAIL STC TO OAKLAND CITY CENTER VIA ALAMEDA	CONCEPT C: BART DOWNTOWN SAN FRANCISCO VIA ALAMEDA	CONCEPT D: BART DOWNTOWN SAN FRANCISCO VIA MISSION BAY AND ALAMEDA
		<ul style="list-style-type: none"> <li>Within the extent along Cypress Avenue in San Pablo (111)</li> <li>Potentially within the concept extent on Orleans Drive</li> </ul>		<ul style="list-style-type: none"> <li>Within the extent along Cypress Avenue in San Pablo (111)</li> <li>Potentially within the concept extent on Orleans Drive</li> </ul>		
Hazardous Waste or Materials Sites	<ul style="list-style-type: none"> <li>NPL Superfund site near the potential new West Oakland Station (AMCO Chemical) (17)</li> </ul>	<ul style="list-style-type: none"> <li>NPL Superfund site near the potential new West Oakland Station (AMCO Chemical) (17)</li> </ul>	None	<ul style="list-style-type: none"> <li>NPL Superfund site near the potential new West Oakland Station (AMCO Chemical) (17)</li> </ul>	None	None
SLR and Hydrology	<p>Aboveground features within a FEMA 100-year floodplain:</p> <ul style="list-style-type: none"> <li>Alignment near 5<sup>th</sup> Avenue Marina</li> <li>Alignment near the existing Oakland Coliseum Station</li> <li>Alignment near Berkeley Aquatic Park, parts of Golden Gate Fields and Albany State Marine Reserve</li> <li>John Christopher Hopkins University Park/Point Isabel Regional Shoreline</li> <li>Corner of Tehama Avenue &amp; Monterey Street in Richmond</li> <li>Wildcat Creek intersecting with the potential new San Pablo/North Richmond Station</li> <li>Alignment along San Pablo Creek and Pinole Creek</li> <li>Alignment heading towards and around the potential new Hercules Station</li> </ul> <p>Aboveground features subject to SLR vulnerability:</p> <ul style="list-style-type: none"> <li>At surface disturbance near the potential modified STC Station, some of which is within BCDC jurisdiction (18)</li> </ul>	<p>Aboveground features within a FEMA 100-year floodplain:</p> <ul style="list-style-type: none"> <li>Alignment near the existing Oakland Coliseum Station</li> <li>Alignment near Berkeley Aquatic Park, parts of Golden Gate Fields and Albany State Marine Reserve</li> <li>John Christopher Hopkins University Park/Point Isabel Regional Shoreline</li> <li>Corner of Tehama Avenue &amp; Monterey Street in Richmond</li> <li>Wildcat Creek intersecting with the potential new San Pablo/North Richmond Station</li> <li>Alignment along San Pablo Creek and Pinole Creek</li> <li>Alignment heading towards and around the potential new Hercules Station</li> </ul> <p>Aboveground features subject to SLR vulnerability:</p> <ul style="list-style-type: none"> <li>At surface disturbance near the potential modified STC Station, some of which is within BCDC jurisdiction (18)</li> <li>At the potential new West Oakland Station (19)</li> </ul>	<p>Aboveground features within a FEMA 100-year floodplain:</p> <ul style="list-style-type: none"> <li>West of the potential new Alameda-Main/Atlantic Station</li> <li>Near Bay Street in Emeryville</li> </ul> <p>Aboveground features subject to SLR vulnerability:</p> <ul style="list-style-type: none"> <li>Surface disturbance near the potential modified STC Station, some of which is in BCDC jurisdiction (18)</li> <li>Surface disturbance in the Alameda Nature Reserve (70) and at the potential new Alameda-Main/Atlantic Station (71)</li> <li>Surface disturbance and the aboveground alignment south of Lake Merritt (22)</li> <li>Alignment near Melrose neighborhood (23) and near the existing Oakland Coliseum Station from the north and south, some of which is within BCDC jurisdiction (24, 25)</li> <li>In southern Richmond/northern Albany (113)</li> <li>Near Point Pinole Regional Shoreline (114), some of</li> </ul>	<p>Aboveground features within a FEMA 100-year floodplain</p> <ul style="list-style-type: none"> <li>West of the potential new Alameda-Main/Atlantic Station</li> <li>Along the western Oakland shoreline and around Lake Merritt and the Merritt Channel</li> </ul> <p>Aboveground features subject to SLR vulnerability:</p> <ul style="list-style-type: none"> <li>Surface disturbance near the potential modified STC Station, some of which is within BCDC jurisdiction (18)</li> <li>Surface disturbance in the Alameda Nature Reserve (70)</li> <li>Potential surface disturbance near Raimondi Park (20) and near the Oakland-Emeryville border surrounding I-80/I-880/I-580 (the maze) interchange (21)</li> <li>Alignment near Melrose neighborhood (23) and near the existing Oakland Coliseum Station from the north and south, some of which is within BCDC jurisdiction (24, 25)</li> </ul>	<p>Aboveground features within a FEMA 100-year floodplain</p> <ul style="list-style-type: none"> <li>Near the potential new Jack London Square (Howard Terminal) Station</li> <li>Potential surface disturbance south of Lake Merritt and alignment on the approach to the potential new San Antonio Station</li> </ul> <p>Aboveground features subject to SLR vulnerability:</p> <ul style="list-style-type: none"> <li>The potential new Jack London Square (Howard Terminal) Station (194)</li> <li>Near the potential new San Antonio Station (23)</li> </ul>	<p>Aboveground features in Oakland exist within a FEMA 100-year floodplain</p> <ul style="list-style-type: none"> <li>Near the potential new Jack London Square (Howard Terminal) Station</li> <li>Potential surface disturbance south of Lake Merritt and alignment on the approach to the potential new San Antonio Station</li> </ul> <p>Aboveground features subject to SLR vulnerability:</p> <ul style="list-style-type: none"> <li>The potential new Jack London Square (Howard Terminal) Station (192)</li> <li>Near the potential new San Antonio Station (22)</li> </ul>

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**Table ES-1. Round 1 Project Concepts Critical Environmental Constraints and Yellow Flags**

TOPIC	CONCEPT A: REGIONAL RAIL STC TO JACK LONDON DISTRICT VIA ALAMEDA	CONCEPT B: REGIONAL RAIL STC VIA PORT OF OAKLAND	CONCEPT E: REGIONAL RAIL STC TO MACARTHUR VIA ALAMEDA	CONCEPT F: REGIONAL RAIL STC TO OAKLAND CITY CENTER VIA ALAMEDA	CONCEPT C: BART DOWNTOWN SAN FRANCISCO VIA ALAMEDA	CONCEPT D: BART DOWNTOWN SAN FRANCISCO VIA MISSION BAY AND ALAMEDA
	<ul style="list-style-type: none"> <li>▫ At the potential new West Oakland Station (19)</li> <li>▫ Potential surface disturbance and alignment south of Lake Merritt (22)</li> <li>▫ Alignment near Melrose neighborhood (23) and near the existing Oakland Coliseum Station from the north and south, some of which is within BCDC jurisdiction (24, 25)</li> <li>▫ In southern Richmond/northern Albany (113)</li> <li>▫ Near Point Pinole Regional Shoreline (114), some of which is in BCDC jurisdiction</li> <li>▫ Montara Bay Community Center and along San Pablo Bay Regional Shoreline and near Garrity Creek (115, 116)</li> <li>▫ Alignment near Pinole Bayfront Park (117)</li> <li>▫ South of the potential new Hercules Station (118) and overlapping the potential new Hercules Station (119)</li> <li>▫ Some of the alignment through Pinole and Hercules, including the potential new Hercules Station, is also within BCDC jurisdiction</li> </ul>	<ul style="list-style-type: none"> <li>▫ The potential surface disturbance near Raimondi Park (20) and the alignment near the I-80/I-880/I-580 (the maze) interchange (21) in western Oakland</li> <li>▫ Potential surface disturbance and alignment south of Lake Merritt (22)</li> <li>▫ Alignment near Melrose neighborhood (23) and near the existing Oakland Coliseum Station from the north and south, some of which is within BCDC jurisdiction (24, 25)</li> <li>▫ In southern Richmond/northern Albany (113)</li> <li>▫ Near Point Pinole Regional Shoreline (114), some of which is in BCDC jurisdiction</li> <li>▫ Montara Bay Community Center and along San Pablo Bay Regional Shoreline and near Garrity Creek (115, 116)</li> <li>▫ Alignment near Pinole Bayfront Park (117)</li> <li>▫ South of the potential new Hercules Station (118) and overlapping the potential new Hercules Station (119)</li> <li>▫ Some of the alignment through Pinole and Hercules, including the potential new Hercules Station, is also within BCDC jurisdiction</li> </ul>	<ul style="list-style-type: none"> <li>▫ which is in BCDC jurisdiction</li> <li>▫ Montara Bay Community Center and along San Pablo Bay Regional Shoreline and near Garrity Creek (115, 116)</li> <li>▫ Alignment near Pinole Bayfront Park (117)</li> <li>▫ South of the potential new Hercules Station (118) and overlapping the potential new Hercules Station (119)</li> <li>▫ Some of the alignment through Pinole and Hercules, including the potential new Hercules Station, is also within BCDC jurisdiction</li> </ul>	<ul style="list-style-type: none"> <li>▫ In southern Richmond/northern Albany (113)</li> <li>▫ Near Point Pinole Regional Shoreline (114), some of which is in BCDC jurisdiction</li> <li>▫ Montara Bay Community Center and along San Pablo Bay Regional Shoreline and near Garrity Creek (115, 116)</li> <li>▫ Alignment near Pinole Bayfront Park (117)</li> <li>▫ South of the potential new Hercules Station (118) and overlapping the potential new Hercules Station (119)</li> <li>▫ Some of the alignment through Pinole and Hercules, including the potential new Hercules Station, is also within BCDC jurisdiction</li> </ul>		
Section 4(f) Resources (non-Cultural)	<ul style="list-style-type: none"> <li>▫ Public school play areas (Epic Charter and Latitude 37.8 High) intersect the aboveground alignment north of the existing</li> </ul>	<ul style="list-style-type: none"> <li>▫ Public school play areas (Epic Charter and Latitude 37.8 High) intersect the aboveground alignment north of the existing</li> </ul>	<ul style="list-style-type: none"> <li>▫ Public school play areas (Epic Charter and Latitude 37.8 High) intersect the aboveground alignment north of the existing</li> </ul>	<ul style="list-style-type: none"> <li>▫ Public school play areas (Epic Charter and Latitude 37.8 High) intersect the aboveground alignment north of the existing</li> </ul>	<ul style="list-style-type: none"> <li>▫ Aboveground alignment near 25<sup>th</sup> Street Mini Park in San Francisco</li> </ul>	<ul style="list-style-type: none"> <li>▫ Aboveground alignment near Union Square (214), Mariposa Park (215), and</li> </ul>

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**Table ES-1. Round 1 Project Concepts Critical Environmental Constraints and Yellow Flags**

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	<p>Oakland Coliseum Station (32, 33)</p> <ul style="list-style-type: none"> <li>▫ Potential new Alameda Station could affect College of Alameda recreation fields and parking (60)</li> <li>▫ The potential new West Oakland Station overlaps Mandela Parkway (59)</li> <li>▫ Aboveground alignment near Channel Park (30), and Vantage Point Park (31) in Oakland</li> <li>▫ Other parks: South Prescott Park, Wade Johnson Park, Cypress Freeway Memorial Park</li> <li>▫ UC Berkeley play fields (142)</li> <li>▫ Parks near or overlapping the aboveground alignment from Berkeley to Richmond: Berkeley Aquatic Park (127), Harrison Park (128), Crescent Park (129), Eastshore Park (130), Boorman Park (131), Central Richmond Greenway (132), Lucas Park (133), Rumrill Park, and Waterfront Park (Railroad Park), Montara Bay Community Center (136), Shoreline Park (140), Lone Tree Point (141)</li> <li>▫ Point Pinole Regional Shoreline (134, 135)</li> <li>▫ San Pablo Bay Regional Shoreline (137, 138, 139)</li> </ul> <p>San Francisco Bay Trail:</p> <ul style="list-style-type: none"> <li>▫ Near the potential modified STC Station (26) and the potential new West Oakland Station (27)</li> </ul>	<p>Oakland Coliseum Station (32, 33)</p> <ul style="list-style-type: none"> <li>▫ Aboveground alignment near Middle Harbor Shoreline Park, Raimondi Park (29), Channel Park (30), and Vantage Point Park (31) in Oakland</li> <li>▫ UC Berkeley play fields (142)</li> <li>▫ Parks near or overlapping the aboveground alignment from Berkeley to Richmond: Berkeley Aquatic Park (127), Harrison Park (128), Crescent Park (129), Eastshore Park (130), Boorman Park (131), Central Richmond Greenway (132), Lucas Park (133), Rumrill Park, and Waterfront Park (Railroad Park), Montara Bay Community Center (136), Shoreline Park (140), Lone Tree Point (141)</li> <li>▫ Point Pinole Regional Shoreline (134, 135)</li> <li>▫ San Pablo Bay Regional Shoreline (137, 138, 139)</li> </ul> <p>San Francisco Bay Trail:</p> <ul style="list-style-type: none"> <li>▫ Near the potential modified STC Station (26) and the potential new West Oakland Station (27)</li> <li>▫ Aboveground alignment south of the potential modified Emeryville Station (28)</li> <li>▫ Near Point Pinole Regional Shoreline (120, 121)</li> <li>▫ Near Montara Bay Community Center (122)</li> </ul>	<p>Oakland Coliseum Station (32, 33)</p> <ul style="list-style-type: none"> <li>▫ Aboveground alignment near Channel Park (30) and Vantage Point Park (31) in Oakland</li> <li>▫ Other parks: Alameda Waterfront Park, Alameda Nature Reserve, Lafayette Square</li> <li>▫ UC Berkeley play fields (142)</li> <li>▫ Parks near or overlapping the aboveground alignment from Berkeley to Richmond: Berkeley Aquatic Park (127), Harrison Park (128), Crescent Park (129), Eastshore Park (130), Boorman Park (131), Central Richmond Greenway (132), Lucas Park (133), Rumrill Park, and Waterfront Park (Railroad Park), Montara Bay Community Center (136), Shoreline Park (140), Lone Tree Point (141)</li> <li>▫ Point Pinole Regional Shoreline (134, 135)</li> <li>▫ San Pablo Bay Regional Shoreline (137, 138, 139)</li> </ul> <p>San Francisco Bay Trail:</p> <ul style="list-style-type: none"> <li>▫ Near the potential modified STC Station (26) and the potential new Alameda-Main/Atlantic Station (72)</li> <li>▫ Aboveground alignment south of the potential modified Emeryville Station (28)</li> <li>▫ Near Point Pinole Regional Shoreline (120, 121)</li> </ul>	<p>Oakland Coliseum Station (32, 33)</p> <ul style="list-style-type: none"> <li>▫ Aboveground alignment near Alameda Waterfront Park, Main Street Linear Park, Woodstock Park, Main Street Soccer Field, South Prescott Park, Mandela Parkway, Lincoln Square Park, Lafayette Square</li> <li>▫ Oakland City Hall Plaza (Frank H. Ogawa Plaza) (73)</li> <li>▫ Aboveground alignment near Raimondi Park (29) and Vantage Point Park (31) in Oakland</li> <li>▫ UC Berkeley play fields (142)</li> <li>▫ Parks near or overlapping the aboveground alignment from Berkeley to Richmond: Berkeley Aquatic Park (127), Harrison Park (128), Crescent Park (129), Eastshore Park (130), Boorman Park (131), Central Richmond Greenway (132), Lucas Park (133), Rumrill Park, and Waterfront Park (Railroad Park), Montara Bay Community Center (136), Shoreline Park (140), Lone Tree Point (141)</li> <li>▫ Point Pinole Regional Shoreline (134, 135)</li> <li>▫ San Pablo Bay Regional Shoreline (137, 138, 139)</li> </ul> <p>San Francisco Bay Trail:</p> <ul style="list-style-type: none"> <li>▫ Near the potential modified STC Station (26), the potential new Alameda-Main/Atlantic Station (60),</li> </ul>	<ul style="list-style-type: none"> <li>▫ Aboveground alignment near Channel Park (30) and Vantage Point Park (31) in Oakland</li> </ul> <p>San Francisco Bay Trail:</p> <ul style="list-style-type: none"> <li>▫ Near surface disturbance in western Alameda</li> <li>▫ Potential new Jack London Square (Howard Terminal) Station (193)</li> </ul>	<p>Yerba Buena Gardens in San Francisco</p> <ul style="list-style-type: none"> <li>▫ Aboveground alignment near Jefferson Park, Channel Park (30), and Vantage Point Park (31) in Oakland</li> </ul> <p>San Francisco Bay Trail:</p> <ul style="list-style-type: none"> <li>▫ Near surface disturbance in western Alameda</li> <li>▫ Potential new Jack London Square Station (193)</li> </ul>

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**Table ES-1. Round 1 Project Concepts Critical Environmental Constraints and Yellow Flags**

TOPIC	CONCEPT A: REGIONAL RAIL STC TO JACK LONDON DISTRICT VIA ALAMEDA	CONCEPT B: REGIONAL RAIL STC VIA PORT OF OAKLAND	CONCEPT E: REGIONAL RAIL STC TO MACARTHUR VIA ALAMEDA	CONCEPT F: REGIONAL RAIL STC TO OAKLAND CITY CENTER VIA ALAMEDA	CONCEPT C: BART DOWNTOWN SAN FRANCISCO VIA ALAMEDA	CONCEPT D: BART DOWNTOWN SAN FRANCISCO VIA MISSION BAY AND ALAMEDA
	<ul style="list-style-type: none"> <li>▫ Aboveground alignment south of the potential modified Emeryville Station (28)</li> <li>▫ Near Point Pinole Regional Shoreline (120, 121)</li> <li>▫ Near Montara Bay Community Center (122)</li> <li>▫ In San Pablo Bay Regional Shoreline (123)</li> <li>▫ Near Pinole Creek (124)</li> <li>▫ At the potential new Hercules Station (125) and south of Lone Tree Point (126)</li> </ul>	<ul style="list-style-type: none"> <li>▫ In San Pablo Bay Regional Shoreline (123)</li> <li>▫ Near Pinole Creek (124)</li> <li>▫ At the potential new Hercules Station (125) and south of Lone Tree Point (126)</li> </ul>	<ul style="list-style-type: none"> <li>▫ Near Montara Bay Community Center (122)</li> <li>▫ In San Pablo Bay Regional Shoreline (123)</li> <li>▫ Near Pinole Creek (124)</li> <li>▫ At the potential new Hercules Station (125) and south of Lone Tree Point (126)</li> </ul>	<ul style="list-style-type: none"> <li>▫ and the potential new West Oakland Station</li> <li>▫ Aboveground alignment near the potential modified Emeryville Station (27) and the potential new West Oakland Station (28)</li> <li>▫ Near Point Pinole Regional Shoreline (120, 121)</li> <li>▫ Near Montara Bay Community Center (122)</li> <li>▫ In San Pablo Bay Regional Shoreline (123)</li> <li>▫ Near Pinole Creek (124)</li> <li>▫ At the potential new Hercules Station (125) and south of Lone Tree Point (126)</li> </ul>		
Transportation	<ul style="list-style-type: none"> <li>▫ Within San Francisco and Oakland ports, anchorage areas, and navigable waterways</li> </ul>	<ul style="list-style-type: none"> <li>▫ Within the Port of San Francisco, anchorage areas, and navigable waterways</li> <li>▫ Within the Port of Oakland, storage container terminal surface disturbance may affect one port building</li> </ul>	<ul style="list-style-type: none"> <li>▫ Within the San Francisco and Oakland ports, anchorage areas, and navigable waterways</li> </ul>	<ul style="list-style-type: none"> <li>▫ Within the San Francisco and Oakland ports, anchorage areas, and navigable waterways</li> <li>▫ Phased closures of I-980 due to potential construction of a wye box (74)</li> </ul>	<ul style="list-style-type: none"> <li>▫ Within the San Francisco and Oakland ports, anchorage areas, and navigable waterways</li> <li>▫ Subsurface alignment overlaps with the proposed San Francisco Central Subway</li> </ul>	<ul style="list-style-type: none"> <li>▫ Within the San Francisco and Oakland ports, anchorage areas, and navigable waterways</li> </ul>
Major Utilities	<ul style="list-style-type: none"> <li>▫ Passes under natural gas and water pipelines in Alameda and Oakland</li> <li>▫ Natural gas pipeline intersecting with aboveground surface disturbance area south of Lone Tree Point</li> <li>▫ Pinole-Hercules Water Pollution Control Plant near the aboveground alignment, including a connecting pipeline under the aboveground alignment</li> </ul>	<ul style="list-style-type: none"> <li>▫ Water pipeline near the potential modified Oakland Jack London Station</li> <li>▫ Alameda-North Bay Farm Island Water Pipeline near the potential modified Oakland Jack London Station</li> <li>▫ Natural gas pipeline intersecting with aboveground surface disturbance area south of Lone Tree Point</li> <li>▫ Pinole-Hercules Water Pollution Control Plant near the aboveground alignment, including a connecting</li> </ul>	<ul style="list-style-type: none"> <li>▫ Natural gas pipeline intersects with underground extent west of the potential new Alameda-Main/Atlantic Station</li> <li>▫ The Alameda-North Bay Farm Island Water Pipeline crosses through the potential modified Oakland Jack London Station extent</li> <li>▫ Natural gas pipeline intersecting with aboveground surface disturbance area south of Lone Tree Point</li> </ul>	<ul style="list-style-type: none"> <li>▫ Trans Bay Cable crosses the alignment in San Francisco Bay near the Bay Bridge</li> <li>▫ High-voltage transmission lines in San Francisco</li> <li>▫ Natural gas pipeline and east of the potential new Alameda-Main/Atlantic Station</li> <li>▫ Natural gas pipeline intersecting with aboveground surface disturbance area south of Lone Tree Point</li> </ul>	<ul style="list-style-type: none"> <li>▫ Natural gas pipeline south of the potential new Alameda Station-City College</li> <li>▫ A power plant overlaps the potential new Jack London Square (Howard Terminal) Station (194)</li> </ul>	<ul style="list-style-type: none"> <li>▫ Extra high- and high-voltage transmission line near the potential new Downtown San Francisco-3<sup>rd</sup> &amp; Mission Station</li> <li>▫ A power plant overlaps the potential new Jack London Square (Howard Terminal) Station (194)</li> </ul>

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**Table ES-1. Round 1 Project Concepts Critical Environmental Constraints and Yellow Flags**

TOPIC	CONCEPT A: REGIONAL RAIL STC TO JACK LONDON DISTRICT VIA ALAMEDA	CONCEPT B: REGIONAL RAIL STC VIA PORT OF OAKLAND	CONCEPT E: REGIONAL RAIL STC TO MACARTHUR VIA ALAMEDA	CONCEPT F: REGIONAL RAIL STC TO OAKLAND CITY CENTER VIA ALAMEDA	CONCEPT C: BART DOWNTOWN SAN FRANCISCO VIA ALAMEDA	CONCEPT D: BART DOWNTOWN SAN FRANCISCO VIA MISSION BAY AND ALAMEDA
		<p>pipeline under the aboveground alignment</p>	<ul style="list-style-type: none"> <li>Pinole-Hercules Water Pollution Control Plant near the aboveground alignment, including a connecting pipeline under the aboveground alignment</li> </ul>	<ul style="list-style-type: none"> <li>Pinole-Hercules Water Pollution Control Plant near the aboveground alignment, including a connecting pipeline under the aboveground alignment</li> </ul>		
<p>Equity Communities</p>	<p>Presence of PP:</p> <ul style="list-style-type: none"> <li>Near potential surface disturbance in western Alameda (195) and at the potential new Alameda Station (61)</li> <li>At the potential modified Oakland Jack London Station (62) and the potential new West Oakland Station (63)</li> <li>Aboveground alignment in the San Antonio (38, 311), Fruitvale (313), and Melrose (39) neighborhoods of Oakland</li> <li>Surrounding the existing Oakland Coliseum Station (40, 315)</li> <li>Surface disturbance near the I-80/I-880/I-580 (the maze) interchange (308)</li> <li>Aboveground alignment at UC Berkeley Village near Buchanan Street in Albany (143)</li> <li>Aboveground alignment near Point Isabel Regional Shoreline in Richmond (318)</li> <li>In Richmond (144, 145), including the potential modified Richmond Station (146)</li> <li>In Richmond (144, 145), including the potential modified Richmond Station (146)</li> <li>North of the potential modified Richmond Station (147) and around the potential new San</li> </ul>	<p>Presence of PP:</p> <ul style="list-style-type: none"> <li>Near the potential new West Oakland Station (34) and Oakland International Container Terminal (35)</li> <li>At the potential modified Oakland Jack London Station (36, 37)</li> <li>Aboveground alignment in the San Antonio (38), Fruitvale (313), and Melrose (39) neighborhoods of Oakland</li> <li>At the existing Oakland Coliseum Station (40, 315)</li> <li>Surface disturbance near the I-80/I-880/I-580 (the maze) interchange (308)</li> <li>Aboveground alignment at UC Berkeley Village near Buchanan Street in Albany (143)</li> <li>Aboveground alignment near Point Isabel Regional Shoreline in Richmond (318)</li> <li>In Richmond (144, 145), including the potential modified Richmond Station (146)</li> <li>North of the potential modified Richmond Station (147) and at the potential new San Pablo/North Richmond Station (148)</li> <li>Aboveground alignment north of the potential new San Pablo/North Richmond</li> </ul>	<p>Presence of PP:</p> <ul style="list-style-type: none"> <li>At the potential new Alameda-Main/Atlantic Station (75) and the wye box on northern Alameda Island (317)</li> <li>At the potential modified Oakland Jack London Station (62) and the potential new Downtown Oakland Station (93)</li> <li>Aboveground alignment in the San Antonio (199, 38), Fruitvale (313), and Melrose (39) neighborhoods of Oakland</li> <li>At the existing Oakland Coliseum Station (40, 315)</li> <li>Overlaps surface disturbance near the I-80/I-880/I-580 (the maze) interchange (94, 308)</li> <li>Aboveground alignment at UC Berkeley Village near Buchanan Street in Albany (143)</li> <li>Aboveground alignment near Point Isabel Regional Shoreline in Richmond (318)</li> <li>In Richmond (144, 145), including the potential modified Richmond Station (146)</li> <li>North of the potential modified Richmond Station (147) and at the potential</li> </ul>	<p>Presence of PP:</p> <ul style="list-style-type: none"> <li>At the potential new Alameda-Main/Atlantic Station (75) and surface disturbance north of the station (76)</li> <li>Near the potential new West Oakland Station (77)</li> <li>At potential surface disturbance near Raimondi Park in Oakland (35)</li> <li>Overlaps with surface disturbance west of the potential modified 12<sup>th</sup> Street/Oakland City Center Station) (78)</li> <li>Overlaps with the potential modified 12<sup>th</sup> Street/Oakland City Center Station (79)</li> <li>Aboveground alignment in the San Antonio (38), Fruitvale (313), and Melrose (39) neighborhoods of Oakland</li> <li>Overlaps with the existing Oakland Coliseum Station (40, 315)</li> <li>Surface disturbance near the I-80/I-880/I-580 (the maze) interchange (308)</li> <li>Aboveground alignment at UC Berkeley Village near Buchanan Street in Albany (143)</li> <li>Aboveground alignment near Point Isabel Regional Shoreline in Richmond (318)</li> </ul>	<p>Presence of PP:</p> <ul style="list-style-type: none"> <li>Surface disturbance near the USS Hornet in western Alameda (195) and at the potential new Alameda Station-City College (196)</li> <li>At the potential new Downtown Oakland Station (93) and surface disturbance north of the station (197, 198)</li> <li>At potential surface disturbance near Laney College in Oakland (320)</li> <li>At the potential new San Antonio Station (199)</li> </ul> <p>Presence of EJ communities:</p> <ul style="list-style-type: none"> <li>At the potential new STC-adjacent Howard Street Station (200)</li> <li>At potential surface disturbance east of the USS Hornet (201)</li> <li>At the potential new Downtown Oakland Station (95) and surface disturbance north of the station (202)</li> <li>At potential surface disturbance near Laney College in Oakland (321)</li> <li>At the potential new San Antonio Station (203)</li> </ul>	<p>Presence of PP:</p> <ul style="list-style-type: none"> <li>Surface disturbance in downtown San Francisco (216)</li> <li>Surface disturbance near the USS Hornet in western Alameda (195) and at the potential new Alameda Station-City College (196)</li> <li>At the potential new Downtown Oakland Station (93) and surface disturbance north of the station (197, 198)</li> <li>At potential surface disturbance near Laney College in Oakland (320)</li> <li>At the potential new San Antonio Station (199)</li> </ul> <p>Presence of EJ communities:</p> <ul style="list-style-type: none"> <li>Surface disturbance in downtown San Francisco (217) and at the potential new Downtown San Francisco-3<sup>rd</sup> &amp; Mission Station (218)</li> <li>Overlaps with the potential new 4<sup>th</sup> &amp; Townsend Station (322)</li> <li>At the potential new STC-adjacent Howard Street Station (200)</li> <li>At potential surface disturbance east of the USS Hornet (201)</li> <li>At the potential new Downtown Oakland Station</li> </ul>

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**Table ES-1. Round 1 Project Concepts Critical Environmental Constraints and Yellow Flags**

TOPIC	CONCEPT A: REGIONAL RAIL STC TO JACK LONDON DISTRICT VIA ALAMEDA	CONCEPT B: REGIONAL RAIL STC VIA PORT OF OAKLAND	CONCEPT E: REGIONAL RAIL STC TO MACARTHUR VIA ALAMEDA	CONCEPT F: REGIONAL RAIL STC TO OAKLAND CITY CENTER VIA ALAMEDA	CONCEPT C: BART DOWNTOWN SAN FRANCISCO VIA ALAMEDA	CONCEPT D: BART DOWNTOWN SAN FRANCISCO VIA MISSION BAY AND ALAMEDA
	<p>Pablo/North Richmond Station (148)</p> <ul style="list-style-type: none"> <li>▫ Aboveground alignment north of the potential new San Pablo/North Richmond Station to Pinon Avenue in Pinole (149, 150, 151, 152, 153, 154, 155, 156)</li> <li>▫ Where the alignment terminates south of Lone Tree Point (157)</li> </ul> <p>Presence of EJ communities:</p> <ul style="list-style-type: none"> <li>▫ At the potential modified STC Station (41)</li> <li>▫ Near the potential surface disturbance in western Alameda (201) and at the potential new Alameda Station (64)</li> <li>▫ At the potential new West Oakland Station (65)</li> <li>▫ Aboveground alignment in the San Antonio (45, 312), Fruitvale (314), and Melrose (46) neighborhoods of Oakland</li> <li>▫ Surrounding the existing Oakland Coliseum Station (47, 316)</li> <li>▫ Near Hubbard Street (309) and south of the potential modified Emeryville Station (310)</li> <li>▫ From the existing Berkeley Station (158) to Buchanan Street in Albany (159, 160)</li> <li>▫ Aboveground alignment near Point Isabel Regional Shoreline in Richmond (319)</li> <li>▫ Aboveground alignment from Crescent Park in Richmond (161), through Richmond (162, 163) to the</li> </ul>	<p>Station to Pinon Avenue in Pinole (149, 150, 151, 152, 153, 154, 155, 156)</p> <ul style="list-style-type: none"> <li>▫ Where the alignment terminates south of Lone Tree Point (157)</li> </ul> <p>Presence of EJ communities:</p> <ul style="list-style-type: none"> <li>▫ At the potential modified STC Station (41)</li> <li>▫ North of the potential new West Oakland Station (42)</li> <li>▫ Overlaps with an area with potential surface disturbance near Raimondi Park in Oakland (43)</li> <li>▫ Overlaps with an area with potential surface disturbance near 5<sup>th</sup> Avenue Marina and Channel Park (44)</li> <li>▫ Aboveground alignment crosses in the San Antonio (45), Fruitvale (314), and Melrose neighborhoods (46) of Oakland</li> <li>▫ Surrounding the existing Oakland Coliseum Station (47, 316)</li> <li>▫ Near Hubbard Street (309) and south of the potential modified Emeryville Station (310)</li> <li>▫ From the existing Berkeley Station (158) to Buchanan Street in Albany (159, 160)</li> <li>▫ Aboveground alignment near Point Isabel Regional Shoreline in Richmond (319)</li> <li>▫ Aboveground alignment from Crescent Park in Richmond (161), through Richmond (162, 163) to the potential modified Richmond Station (164)</li> </ul>	<p>new San Pablo/North Richmond Station (148)</p> <ul style="list-style-type: none"> <li>▫ Aboveground alignment north of the potential new San Pablo/North Richmond Station to Pinon Avenue in Pinole (149, 150, 151, 152, 153, 154, 155, 156)</li> <li>▫ Where the alignment terminates south of Lone Tree Point (157)</li> </ul> <p>Presence of EJ communities:</p> <ul style="list-style-type: none"> <li>▫ At the potential modified STC Station (41)</li> <li>▫ At the potential new Alameda-Main/Atlantic Station (80)</li> <li>▫ Overlaps with the potential new Downtown Oakland Station and associated surface disturbance (95)</li> <li>▫ Aboveground alignment in the San Antonio (203, 45), Fruitvale (314), and Melrose (46) neighborhoods of Oakland</li> <li>▫ Surrounding the existing Oakland Coliseum Station (47, 316)</li> <li>▫ Near Hubbard Street (309) and south of the potential modified Emeryville Station (310)</li> <li>▫ From the existing Berkeley Station (158) to Buchanan Street in Albany (159, 160)</li> <li>▫ Aboveground alignment near Point Isabel Regional Shoreline in Richmond (319)</li> <li>▫ Aboveground alignment from Crescent Park in Richmond (161), through Richmond (162, 163) to the</li> </ul>	<ul style="list-style-type: none"> <li>▫ In Richmond (144, 145), including the potential modified Richmond Station (146)</li> <li>▫ North of the potential modified Richmond Station (147) and at the potential new San Pablo/North Richmond Station (148)</li> <li>▫ Aboveground alignment north of the potential new San Pablo/North Richmond Station to Pinon Avenue in Pinole (149, 150, 151, 152, 153, 154, 155, 156)</li> <li>▫ Where the alignment terminates south of Lone Tree Point (157)</li> </ul> <p>Presence of EJ communities:</p> <ul style="list-style-type: none"> <li>▫ At the potential modified STC Station (41), the potential new Alameda-Main/Atlantic Station (80), and the potential new West Oakland Station (81)</li> <li>▫ At an area of potential surface disturbance near Raimondi Park in Oakland (43)</li> <li>▫ At the potential modified 12<sup>th</sup> Street/Oakland City Center Station (82)</li> <li>▫ The aboveground alignment in the San Antonio (45), Fruitvale (314), and Melrose (46) neighborhoods of Oakland</li> <li>▫ Surrounding the existing Oakland Coliseum Station (47, 316)</li> <li>▫ Near Hubbard Street (309) and south of the potential modified Emeryville Station (310)</li> </ul>		<p>(95) and surface disturbance north of the station (202)</p> <ul style="list-style-type: none"> <li>▫ At potential surface disturbance near Laney College in Oakland (321)</li> <li>▫ At the potential new San Antonio Station (203)</li> </ul>

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**Table ES-1. Round 1 Project Concepts Critical Environmental Constraints and Yellow Flags**

TOPIC	CONCEPT A: REGIONAL RAIL STC TO JACK LONDON DISTRICT VIA ALAMEDA	CONCEPT B: REGIONAL RAIL STC VIA PORT OF OAKLAND	CONCEPT E: REGIONAL RAIL STC TO MACARTHUR VIA ALAMEDA	CONCEPT F: REGIONAL RAIL STC TO OAKLAND CITY CENTER VIA ALAMEDA	CONCEPT C: BART DOWNTOWN SAN FRANCISCO VIA ALAMEDA	CONCEPT D: BART DOWNTOWN SAN FRANCISCO VIA MISSION BAY AND ALAMEDA
	<ul style="list-style-type: none"> <li>potential modified Richmond Station (164)</li> <li>▫ Leading up to (165) and surrounding the potential new San Pablo/North Richmond Station (166)</li> <li>▫ Aboveground alignment near Montara Bay Community Center (167, 168, 169, 170, 171)</li> <li>▫ In Pinole (172)</li> </ul>	<ul style="list-style-type: none"> <li>▫ Leading up to (165) and surrounding the potential new San Pablo/North Richmond Station (166)</li> <li>▫ Aboveground alignment near Montara Bay Community Center (167, 168, 169, 170, 171)</li> <li>▫ In Pinole (172)</li> </ul>	<ul style="list-style-type: none"> <li>potential modified Richmond Station (164)</li> <li>▫ Leading up to (165) and surrounding the potential new San Pablo/North Richmond Station (166)</li> <li>▫ Aboveground alignment near Montara Bay Community Center (167, 168, 169, 170, 171)</li> <li>▫ In Pinole (172)</li> </ul>	<ul style="list-style-type: none"> <li>▫ From the existing Berkeley Station (158) to Buchanan Street in Albany (159, 160)</li> <li>▫ Aboveground alignment near Point Isabel Regional Shoreline in Richmond (319)</li> <li>▫ Aboveground alignment from Crescent Park in Richmond (161), through Richmond (162, 163) to the potential modified Richmond Station (164)</li> <li>▫ Leading up to (165) and surrounding the potential new San Pablo/North Richmond Station (166)</li> <li>▫ Aboveground alignment near Montara Bay Community Center (167, 168, 169, 170, 171)</li> <li>▫ In Pinole (172)</li> </ul>		

<sup>1</sup> Yellow flags are indicated by their corresponding map identification numbers.

<sup>2</sup> BCDC has jurisdiction over projects located within San Francisco Bay, within 100 feet of the Bay, and within the tidal reach of streams flowing into the Bay. . All improvements within BCDC jurisdiction will require BCDC permitting. While other environmental regulatory agencies are not discussed by name in this report, sensitive resources such as wildlife refuges, wetlands, or the San Francisco Bay that are within jurisdictional areas for regulatory agencies are discussed as physical constraints and where they occur within a concept extent, they are identified as yellow flags.

AC Transit = Alameda-Contra Costa Transit District

FEMA = Federal Emergency Management Agency

BCDC = San Francisco Bay Conservation and Development Commission

I- = Interstate

UC Berkeley = University of California, Berkeley

ROW = right-of-way

SLR = sea level rise

WOEIP = West Oakland Environmental Indicators Project

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**Table ES-2. Round 1 Project Concepts Critical Environmental Opportunities**

TOPIC	CONCEPT A: REGIONAL RAIL STC TO JACK LONDON DISTRICT VIA ALAMEDA	CONCEPT B: REGIONAL RAIL STC VIA PORT OF OAKLAND	CONCEPT E: REGIONAL RAIL STC TO MACARTHUR VIA ALAMEDA	CONCEPT F: REGIONAL RAIL STC TO OAKLAND CITY CENTER VIA ALAMEDA	CONCEPT C: BART DOWNTOWN SAN FRANCISCO VIA ALAMEDA	CONCEPT D: BART DOWNTOWN SAN FRANCISCO VIA MISSION BAY AND ALAMEDA
Transportation	<ul style="list-style-type: none"> <li>▫ Higher equity-weighted unmet transbay rail potential near the potential modified STC and the potential modified Emeryville station areas</li> <li>▫ Medium equity-weighted unmet transbay rail potential near the potential new Alameda and the potential modified Richmond station areas</li> <li>▫ Multimodal connection with ferry terminals in San Francisco, Oakland, and Alameda</li> <li>▫ Rail maintenance facilities: near South Prescott Park along the UPRR/BNSF line in Oakland and near Rheem Avenue in Richmond</li> </ul>	<ul style="list-style-type: none"> <li>▫ Higher equity-weighted unmet transbay rail potential near the potential modified STC and the potential modified Emeryville station areas</li> <li>▫ Medium equity-weighted unmet transbay rail potential near the potential modified STC and the potential modified Richmond station areas</li> <li>▫ Multimodal connections with ferry terminals in San Francisco and Oakland</li> <li>▫ Rail maintenance facilities: near South Prescott Park along the UPRR/BNSF line in Oakland and near Rheem Avenue in Richmond</li> </ul>	<ul style="list-style-type: none"> <li>▫ Higher equity-weighted unmet transbay rail potential near the potential modified STC and the potential modified Emeryville station areas.</li> <li>▫ Medium equity-weighted unmet transbay rail potential near the potential modified STC, the potential new Alameda-Main/Atlantic, the potential new Downtown Oakland, the existing MacArthur, and the potential modified Richmond station areas</li> <li>▫ Multimodal connection with ferry terminals in San Francisco, Alameda, and Oakland</li> <li>▫ Rail maintenance facility near Rheem Avenue in Richmond</li> </ul>	<ul style="list-style-type: none"> <li>▫ Higher equity-weighted unmet transbay rail potential near the potential modified STC and the potential modified Emeryville station areas.</li> <li>▫ Medium equity-weighted unmet transbay rail potential near the potential new Alameda-Main/Atlantic, the potential modified 12<sup>th</sup> Street/Oakland City Center, and the potential modified Richmond station areas</li> <li>▫ Multimodal connection with ferry terminals in San Francisco and Alameda</li> <li>▫ Rail maintenance facilities: near South Prescott Park along the UPRR/BNSF line in Oakland and near Rheem Avenue in Richmond</li> </ul>	<ul style="list-style-type: none"> <li>▫ Higher equity-weighted unmet transbay rail potential near the potential new STC-adjacent Howard Street Station area</li> <li>▫ Medium equity-weighted unmet transbay rail potential near the potential new San Antonio Station area</li> <li>▫ Multimodal connection with ferry terminals in San Francisco and Oakland.</li> </ul>	<ul style="list-style-type: none"> <li>▫ Higher equity-weighted unmet transbay rail potential near the potential new STC-adjacent Howard Street Station and the potential new 3<sup>rd</sup> &amp; Mission Station areas</li> <li>▫ Medium equity-weighted unmet transbay rail potential near the potential new 3<sup>rd</sup> &amp; Mission, the potential new 4<sup>th</sup> &amp; Townsend, and the potential new San Antonio station areas</li> <li>▫ Potential for multimodal connection with ferry terminals in Oakland.</li> </ul>
Community Resources	<ul style="list-style-type: none"> <li>▫ Major public universities: California State University, East Bay and UC Berkeley</li> <li>▫ Stanford Health Care in Emeryville</li> <li>▫ Future Veterans Affairs Alameda Point Development</li> </ul>	<ul style="list-style-type: none"> <li>▫ Major public universities: California State University, East Bay and UC Berkeley</li> <li>▫ Stanford Health Care in Emeryville</li> </ul>	<ul style="list-style-type: none"> <li>▫ Major public universities: California State University, East Bay and UC Berkeley</li> <li>▫ Stanford Health Care in Emeryville</li> <li>▫ Future Veterans Affairs Alameda Point Development</li> </ul>	<ul style="list-style-type: none"> <li>▫ Major public universities: California State University, East Bay and UC Berkeley</li> <li>▫ Stanford Health Care in Emeryville</li> <li>▫ Future Veterans Affairs Alameda Point Development</li> </ul>	<ul style="list-style-type: none"> <li>▫ Major public university: California State University, East Bay Future Veterans Affairs Alameda Point Development</li> </ul>	<ul style="list-style-type: none"> <li>▫ Major public universities: California Pacific Medical Center Van Ness Campus, UCSF Medical Center at Mission Bay, UCSF Benioff Hospital, and California State University, East Bay</li> <li>▫ Future Veterans Affairs Alameda Point Development</li> </ul>
Section 4(f) Resources (non-Cultural)	<ul style="list-style-type: none"> <li>▫ Middle Harbor Shoreline Park, Mandela Parkway, and Channel Park</li> <li>▫ Berkeley Aquatic Park, Point Isabel Dog Park, Eastshore Park, John Herbert Davis Park, Point Pinole Regional Park, and San Pablo Bay Regional Park</li> </ul>	<ul style="list-style-type: none"> <li>▫ Middle Harbor Shoreline Park, Mandela Parkway, and Channel Park</li> <li>▫ Berkeley Aquatic Park, Point Isabel Dog Park, Eastshore Park, John Herbert Davis Park, Point Pinole Regional Park, and San Pablo Bay Regional Park</li> </ul>	<ul style="list-style-type: none"> <li>▫ Lake Merritt Channel Park, Mandela Parkway, and Mosswood Park</li> <li>▫ Berkeley Aquatic Park, Point Isabel Dog Park, Eastshore Park, John Herbert Davis Park, Point Pinole Regional Park, and San Pablo Bay Regional Park</li> </ul>	<ul style="list-style-type: none"> <li>▫ Lakeside Park, Mandela Parkway, and Lake Merritt Channel Park</li> <li>▫ Berkeley Aquatic Park, Point Isabel Dog Park, Eastshore Park, John Herbert Davis Park, Point Pinole Regional Park, and San Pablo Bay Regional Park</li> </ul>	<ul style="list-style-type: none"> <li>▫ Hamilton Recreation Center, San Antonio Park</li> </ul>	<ul style="list-style-type: none"> <li>▫ Mission Creek Park, San Antonio Park</li> </ul>

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**Table ES-2. Round 1 Project Concepts Critical Environmental Opportunities**

TOPIC	CONCEPT A: REGIONAL RAIL STC TO JACK LONDON DISTRICT VIA ALAMEDA	CONCEPT B: REGIONAL RAIL STC VIA PORT OF OAKLAND	CONCEPT E: REGIONAL RAIL STC TO MACARTHUR VIA ALAMEDA	CONCEPT F: REGIONAL RAIL STC TO OAKLAND CITY CENTER VIA ALAMEDA	CONCEPT C: BART DOWNTOWN SAN FRANCISCO VIA ALAMEDA	CONCEPT D: BART DOWNTOWN SAN FRANCISCO VIA MISSION BAY AND ALAMEDA
SLR	<p>Potential SLR resiliency partnership opportunities for potentially inundated areas:</p> <ul style="list-style-type: none"> <li>▫ City and County of San Francisco</li> <li>▫ Cities of Oakland, Emeryville, and Alameda</li> <li>▫ Alameda County</li> <li>▫ CHARG</li> <li>▫ Bay Adapt</li> <li>▫ Alameda Climate Action and Resiliency Plan</li> <li>▫ Resilient Oakland</li> <li>▫ East Bay Regional Park District</li> <li>▫ California State Parks</li> <li>▫ Save the Bay</li> <li>▫ Cities of Emeryville, Berkeley, Albany, El Cerrito, Richmond, San Pablo, Pinole, and Hercules</li> <li>▫ Contra Costa County</li> </ul>	<p>Potential SLR resiliency partnership opportunities for potentially inundated areas:</p> <ul style="list-style-type: none"> <li>▫ City and County of San Francisco</li> <li>▫ Cities of Oakland and Emeryville</li> <li>▫ Alameda County</li> <li>▫ CHARG</li> <li>▫ Bay Adapt</li> <li>▫ Resilient Oakland</li> <li>▫ San Leandro Bay/Oakland-Alameda Adaptation Working Group</li> <li>▫ East Bay Regional Park District</li> <li>▫ California State Parks</li> <li>▫ Save the Bay</li> <li>▫ Cities of Emeryville, Berkeley, Albany, El Cerrito, Richmond, San Pablo, Pinole, and Hercules</li> <li>▫ Contra Costa County</li> </ul>	<p>Potential SLR resiliency partnership opportunities for potentially inundated areas:</p> <ul style="list-style-type: none"> <li>▫ City and County of San Francisco</li> <li>▫ Cities of Oakland, Emeryville, and Alameda</li> <li>▫ Alameda County</li> <li>▫ CHARG</li> <li>▫ Bay Adapt</li> <li>▫ Alameda Climate Action and Resiliency Plan</li> <li>▫ Resilient Oakland</li> <li>▫ East Bay Regional Park District</li> <li>▫ California State Parks</li> <li>▫ Save the Bay</li> <li>▫ Cities of Emeryville, Berkeley, Albany, El Cerrito, Richmond, San Pablo, Pinole, and Hercules</li> <li>▫ Contra Costa County</li> </ul>	<p>Potential SLR resiliency partnership opportunities for potentially inundated areas:</p> <ul style="list-style-type: none"> <li>▫ City and County of San Francisco</li> <li>▫ Cities of Oakland and Alameda</li> <li>▫ Alameda County</li> <li>▫ CHARG</li> <li>▫ Bay Adapt</li> <li>▫ Alameda Climate Action and Resiliency Plan</li> <li>▫ Resilient Oakland</li> <li>▫ East Bay Regional Park District</li> <li>▫ California State Parks</li> <li>▫ Save the Bay</li> <li>▫ Cities of Emeryville, Berkeley, Albany, El Cerrito, Richmond, San Pablo, Pinole, and Hercules</li> <li>▫ Contra Costa County</li> </ul>	<p>Potential SLR resiliency partnership opportunities for potentially inundated areas:</p> <ul style="list-style-type: none"> <li>▫ City and County of San Francisco</li> <li>▫ Cities of Oakland and Alameda</li> <li>▫ Alameda County</li> <li>▫ CHARG</li> <li>▫ Bay Adapt</li> <li>▫ Alameda Climate Action and Resiliency Plan</li> <li>▫ Resilient Oakland</li> </ul>	<p>Potential SLR resiliency partnership opportunities for potentially inundated areas:</p> <ul style="list-style-type: none"> <li>▫ City and County of San Francisco</li> <li>▫ Cities of Oakland and Alameda</li> <li>▫ Alameda County</li> <li>▫ CHARG</li> <li>▫ Bay Adapt</li> <li>▫ Mission Creek Conservancy</li> <li>▫ Alameda Climate Action and Resiliency Plan</li> <li>▫ Resilient Oakland</li> </ul>
Serving Equity Communities	<p>PP communities are located near the following stations:</p> <ul style="list-style-type: none"> <li>▫ Potential modified STC Station</li> <li>▫ Potential new Alameda Station</li> <li>▫ Potential new West Oakland Station and potential modified Oakland Jack London Station</li> <li>▫ Existing Oakland Coliseum Station</li> <li>▫ Potential modified Emeryville Station</li> <li>▫ Existing Berkeley Station</li> <li>▫ Potential modified Richmond Station and potential new</li> </ul>	<p>PP communities are located near the following stations:</p> <ul style="list-style-type: none"> <li>▫ Potential modified STC Station</li> <li>▫ Potential new West Oakland Station and potential modified Oakland Jack London Station</li> <li>▫ Existing Oakland Coliseum Station</li> <li>▫ Potential modified Emeryville Station</li> <li>▫ Existing Berkeley Station</li> <li>▫ Potential modified Richmond Station and potential new</li> </ul>	<p>PP communities are located near the following stations:</p> <ul style="list-style-type: none"> <li>▫ Potential modified STC Station</li> <li>▫ Potential new Alameda-Main/Atlantic Station</li> <li>▫ Potential new Downtown Oakland Station and potential modified Oakland Jack London Station</li> <li>▫ Potential modified Emeryville Station</li> <li>▫ Existing Oakland Coliseum Station</li> <li>▫ Existing Berkeley Station</li> <li>▫ Potential modified Richmond Station and potential new</li> </ul>	<p>PP communities are located near the following stations:</p> <ul style="list-style-type: none"> <li>▫ Potential modified STC Station</li> <li>▫ Potential new Alameda-Main/Atlantic Station</li> <li>▫ Potential new Downtown Oakland Station and potential modified Oakland Jack London Station</li> <li>▫ Potential modified 12<sup>th</sup> Street/Oakland City Center Station</li> <li>▫ Existing Oakland Coliseum Station</li> <li>▫ Potential modified Emeryville Station</li> <li>▫ Existing Berkeley Station</li> </ul>	<p>PP communities are located near the following potential new stations:</p> <ul style="list-style-type: none"> <li>▫ Alameda Station-City College</li> <li>▫ Jack London Square (Howard Terminal) Station</li> <li>▫ Downtown Oakland Station</li> <li>▫ San Antonio Station</li> </ul> <p>EJ communities exist near the following potential new stations:</p> <ul style="list-style-type: none"> <li>▫ STC-adjacent Howard Street Station</li> <li>▫ Alameda Station-City College</li> <li>▫ Jack London Square (Howard Terminal) Station</li> </ul>	<p>PP communities are near the following potential new stations:</p> <ul style="list-style-type: none"> <li>▫ Alameda Station-City College</li> <li>▫ Downtown Oakland Station</li> <li>▫ Jack London Square (Howard Terminal) Station</li> <li>▫ San Antonio Station</li> </ul> <p>EJ communities are near the following potential new stations:</p> <ul style="list-style-type: none"> <li>▫ 3<sup>rd</sup> &amp; Mission Station</li> <li>▫ 4<sup>th</sup> &amp; Townsend Station</li> <li>▫ Mission Bay/UCSF Station</li> <li>▫ San Antonio Station</li> <li>▫ Downtown Oakland Station</li> </ul>

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**Table ES-2. Round 1 Project Concepts Critical Environmental Opportunities**

TOPIC	CONCEPT A: REGIONAL RAIL STC TO JACK LONDON DISTRICT VIA ALAMEDA	CONCEPT B: REGIONAL RAIL STC VIA PORT OF OAKLAND	CONCEPT E: REGIONAL RAIL STC TO MACARTHUR VIA ALAMEDA	CONCEPT F: REGIONAL RAIL STC TO OAKLAND CITY CENTER VIA ALAMEDA	CONCEPT C: BART DOWNTOWN SAN FRANCISCO VIA ALAMEDA	CONCEPT D: BART DOWNTOWN SAN FRANCISCO VIA MISSION BAY AND ALAMEDA
	<p>San Pablo/North Richmond Station</p> <p>EJ communities exist near the following potential stations:</p> <ul style="list-style-type: none"> <li>▫ Potential modified STC Station</li> <li>▫ Potential new Alameda Station</li> <li>▫ Potential new West Oakland Station and potential modified Oakland Jack London Station</li> <li>▫ Potential modified Emeryville Station</li> <li>▫ Existing Berkeley Station</li> <li>▫ Potential modified Richmond Station and potential new San Pablo/North Richmond Station</li> <li>▫ Potential new Hercules Station</li> </ul>	<p>EJ communities exist near the following potential stations:</p> <ul style="list-style-type: none"> <li>▫ Potential modified STC Station</li> <li>▫ Potential new West Oakland Station and potential modified Oakland Jack London Station</li> <li>▫ Potential modified Emeryville Station</li> <li>▫ Existing Berkeley Station</li> <li>▫ Potential modified Richmond Station and potential new San Pablo/North Richmond Station</li> <li>▫ Potential new Hercules Station</li> </ul>	<p>San Pablo/North Richmond Station</p> <p>EJ communities exist near the following potential stations:</p> <ul style="list-style-type: none"> <li>▫ Potential modified STC Station</li> <li>▫ Potential new Alameda-Main/Atlantic Station</li> <li>▫ Potential new West Oakland Station and potential modified Oakland Jack London Station</li> <li>▫ Potential modified Emeryville Station</li> <li>▫ Existing Berkeley Station</li> <li>▫ Potential modified Richmond Station and potential new San Pablo/North Richmond Station</li> <li>▫ Potential new Hercules Station</li> </ul>	<ul style="list-style-type: none"> <li>▫ Potential modified Richmond Station and potential new San Pablo/North Richmond Station</li> </ul> <p>EJ communities exist near the following potential stations:</p> <ul style="list-style-type: none"> <li>▫ Potential modified STC Station</li> <li>▫ Potential modified Emeryville Station</li> <li>▫ Existing Berkeley Station</li> <li>▫ Potential modified Richmond Station and potential new San Pablo/North Richmond Station</li> <li>▫ Potential new Hercules Station</li> </ul>	<ul style="list-style-type: none"> <li>▫ Downtown Oakland Station</li> <li>▫ San Antonio Station</li> </ul>	<ul style="list-style-type: none"> <li>▫ Jack London Square (Howard Terminal) Station</li> </ul>
Land Use	<p>Targeted growth areas are present in the following areas:</p> <ul style="list-style-type: none"> <li>▫ Downtown San Francisco</li> <li>▫ West Oakland</li> <li>▫ Downtown Oakland</li> <li>▫ Emeryville</li> <li>▫ Alameda</li> <li>▫ Melrose and Elmhurst neighborhoods (Oakland)</li> <li>▫ Potential modified Emeryville Station</li> <li>▫ Existing Berkeley Station</li> <li>▫ Potential modified Richmond Station</li> <li>▫ Potential new San Pablo/North Richmond Station</li> </ul>	<p>Targeted growth areas are present in the following areas:</p> <ul style="list-style-type: none"> <li>▫ Downtown San Francisco</li> <li>▫ Downtown and West Oakland</li> <li>▫ Emeryville</li> <li>▫ Alameda</li> <li>▫ Melrose and Elmhurst neighborhoods (Oakland)</li> <li>▫ Potential modified Emeryville Station</li> <li>▫ Existing Berkeley Station</li> <li>▫ Potential modified Richmond Station</li> <li>▫ Potential new San Pablo/North Richmond Station</li> </ul>	<p>Targeted growth areas are present in the following areas:</p> <ul style="list-style-type: none"> <li>▫ Downtown San Francisco</li> <li>▫ Potential new Alameda-Main/Atlantic Station</li> <li>▫ Potential modified Oakland Jack London Station</li> <li>▫ Potential new Downtown and West Oakland stations</li> <li>▫ Near the potential modified Emeryville Station</li> <li>▫ Melrose neighborhood (Oakland)</li> <li>▫ Potential modified Emeryville Station</li> <li>▫ Existing Berkeley Station</li> <li>▫ Potential modified Richmond Station</li> </ul>	<p>Targeted growth areas are present in the following areas:</p> <ul style="list-style-type: none"> <li>▫ Downtown San Francisco</li> <li>▫ West Oakland</li> <li>▫ Downtown Oakland</li> <li>▫ Oakland Coliseum</li> <li>▫ Potential modified Emeryville Station</li> <li>▫ Existing Berkeley Station</li> <li>▫ Potential modified Richmond Station</li> <li>▫ Potential new San Pablo/North Richmond Station</li> </ul>	<p>Targeted growth areas are present in the following areas:</p> <ul style="list-style-type: none"> <li>▫ Downtown San Francisco</li> <li>▫ Potential new STC-adjacent Howard Street Station</li> <li>▫ Potential new Alameda Station-City College</li> <li>▫ West Oakland, downtown Oakland, and Lake Merritt</li> <li>▫ Emeryville</li> <li>▫ Alameda</li> </ul>	<p>Targeted growth areas are present in the following areas:</p> <ul style="list-style-type: none"> <li>▫ San Francisco near Western Addition and the Potrero District near Mission Bay</li> <li>▫ Potential new STC-adjacent Howard Street Station</li> <li>▫ Potential new Alameda Station-City College</li> <li>▫ In Alameda near College of Alameda</li> <li>▫ Jack London Square and Lake Merritt (Oakland)</li> </ul>

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**Table ES-2. Round 1 Project Concepts Critical Environmental Opportunities**

TOPIC	CONCEPT A: REGIONAL RAIL STC TO JACK LONDON DISTRICT VIA ALAMEDA	CONCEPT B: REGIONAL RAIL STC VIA PORT OF OAKLAND	CONCEPT E: REGIONAL RAIL STC TO MACARTHUR VIA ALAMEDA	CONCEPT F: REGIONAL RAIL STC TO OAKLAND CITY CENTER VIA ALAMEDA	CONCEPT C: BART DOWNTOWN SAN FRANCISCO VIA ALAMEDA	CONCEPT D: BART DOWNTOWN SAN FRANCISCO VIA MISSION BAY AND ALAMEDA
			<ul style="list-style-type: none"> <li>▫ Potential new San Pablo/North Richmond Station</li> </ul>			

*BNSF = BNSF Railway Company*

*UPRR = Union Pacific Railroad*

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## **ES.4 Round 2 Representative Concept Evaluation**

### **ES.4.1 Round 2 Representative Concepts Considered**

Two Regional Rail Concepts and one BART Representative Concept were considered as part of Round 2. Overview maps and descriptions of the Representative Concepts can be found in **Chapter 4**.

#### **RR Representative Concepts**

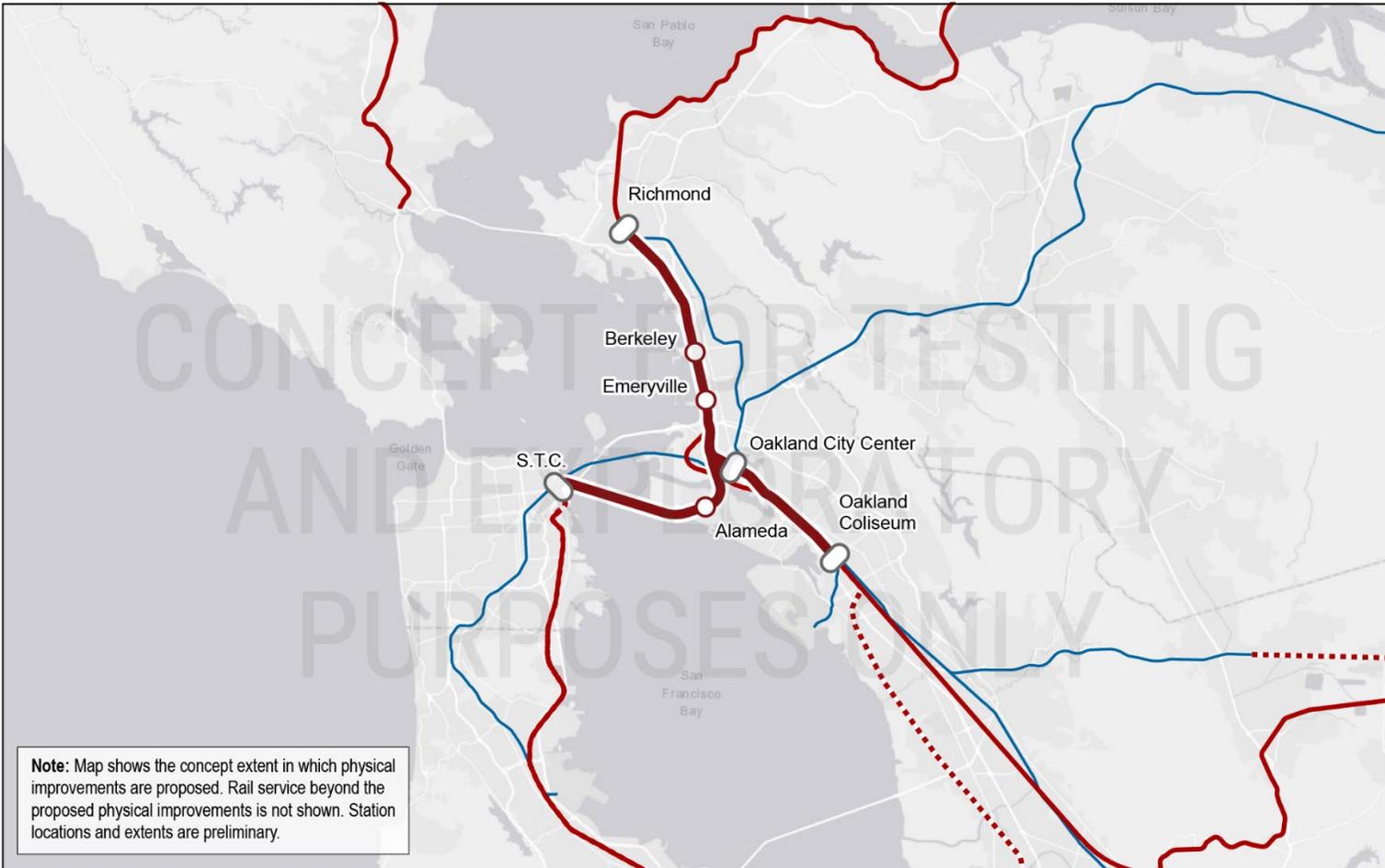
The two RR Representative Concepts begin at the STC and tunnel under the San Francisco Bay to a potential new station in Alameda. They then continue to Oakland with transfer service at the potential station 12<sup>th</sup> Street/Oakland City Center Station and then continues south to the existing Oakland Coliseum Station. In the north, the concepts would use a potential modified station at Emeryville, the existing Berkeley Station, and a potential modified Richmond Station, terminating in San Pablo.

The RR to Millbrae Representative Concept includes all the features of the RR Representative Concept and also includes improvements between San Francisco and Millbrae from the existing San Francisco Caltrain Station at 4<sup>th</sup> and King south to Millbrae. This portion includes the Pennsylvania Avenue Extension (PAX) in planning by the City and County of San Francisco; several station platform extensions, a four-track section from South San Francisco to Millbrae and four grade separations along the four-track section as proposed in the Caltrain Business Plan. The extent for turnback tracks at the southern terminus of this concept in Millbrae was developed by the Link21 Team.

**Figures ES-7 and ES-8** show the two RR Representative Concepts.



Figure ES-7. RR to STC Representative Concept: RR STC to Oakland City Center via Alameda



**Legend**

Exploratory Concept Infrastructure

**Existing Rail**

BART  
 Regional Rail

**Baseline Projects**

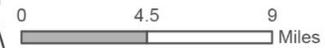
Regional Rail

**Stations**

Regional Rail  
 Transfer

**Regional Rail Representative Concept**

*Regional Rail to STC*

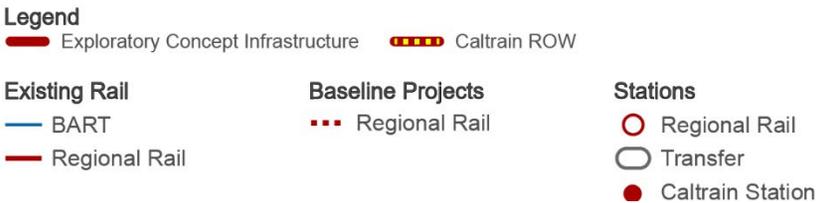
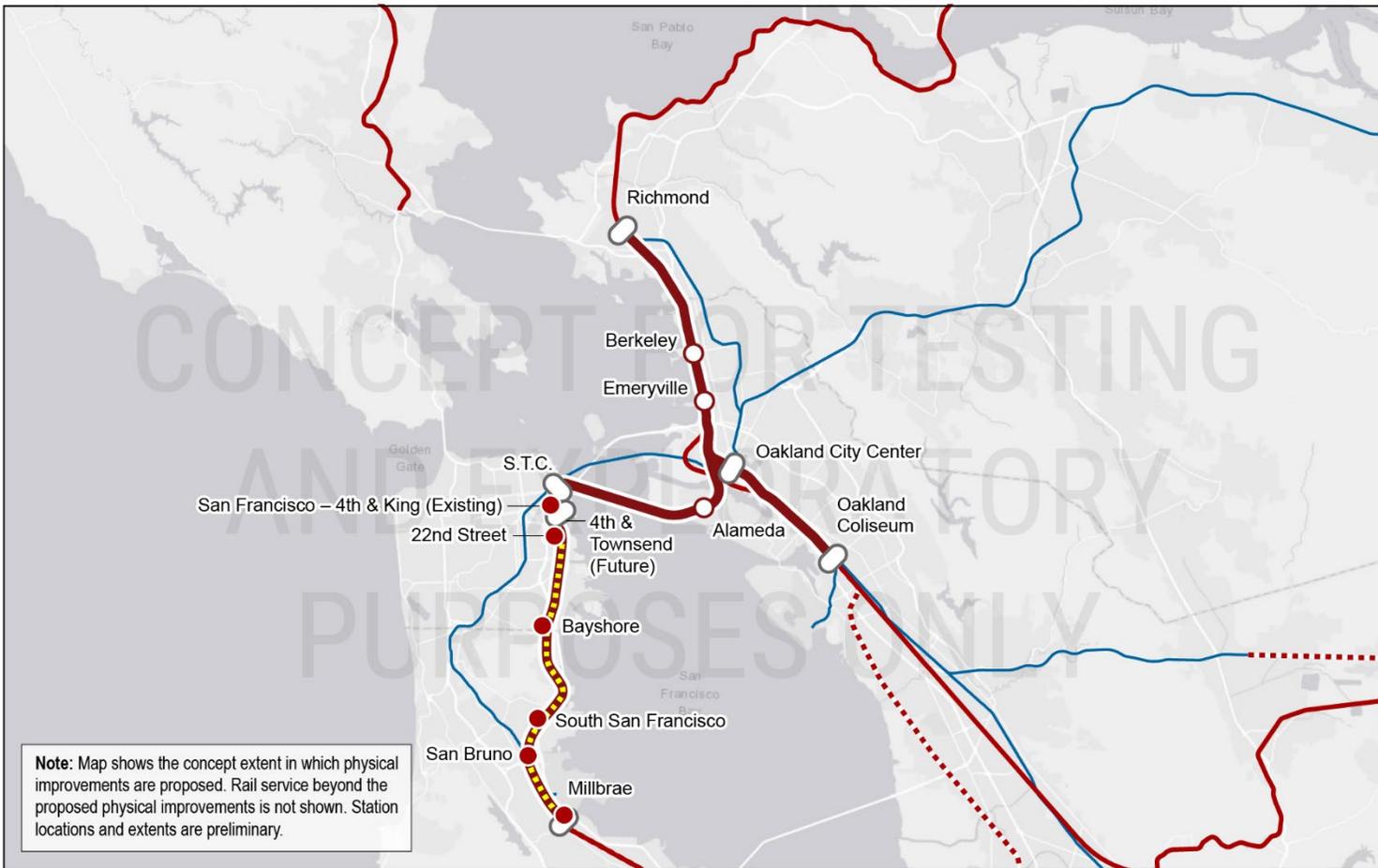


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Figure ES-8. RR to Millbrae Representative Concept: RR Millbrae to Oakland City Center via Alameda



RR to Millbrae Representative Concept

RR Millbrae to Oakland City Center via Alameda



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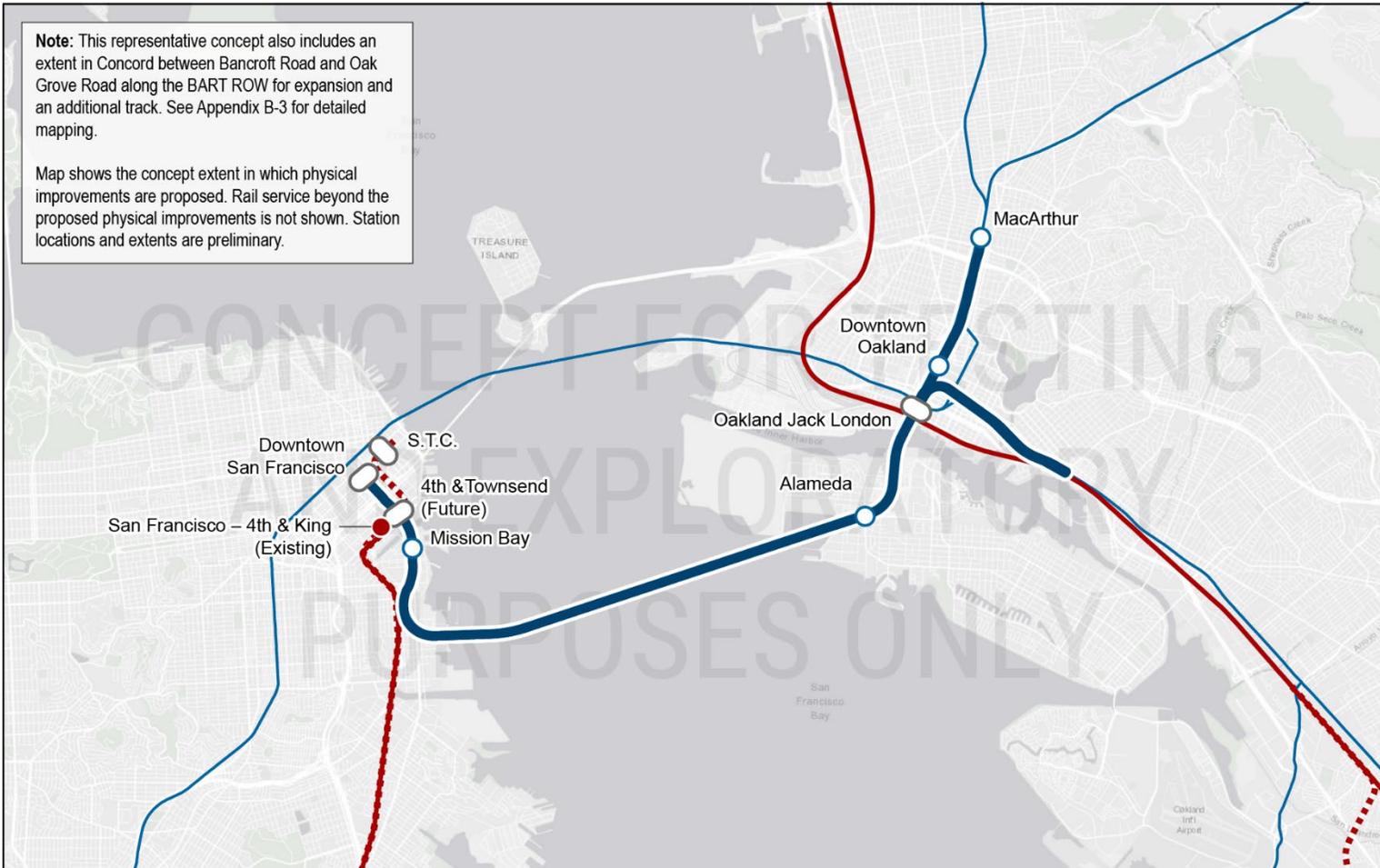
### **BART Representative Concept**

The BART Representative Concept begins at a potential new Downtown San Francisco Station (near STC) and travels south to potential new stations at 4<sup>th</sup> and Townsend and Mission Bay. The concept tunnels under the San Francisco Bay to a potential new station at Alameda. In Oakland, there would be potential stations in Jack London Square and downtown Oakland leading to the existing MacArthur Station. An aboveground alignment would travel southeast to the San Antonio neighborhood. This concept also includes BART track improvements at the Concord/Walnut Creek border in the Bancroft neighborhood.

**Figure ES-9** shows the BART Representative Concept.



Figure ES-9. BART Representative Concept: BART Downtown San Francisco via Mission Bay and Alameda



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## **ES.4.2 Summary of Critical ECO and Yellow Flags for Round 2 Representative Concepts**

The following tables summarize the critical environmental constraints, yellow flags, and critical environmental opportunities for the Round 2 Representative Concepts. Yellow flags are listed with the corresponding yellow flag identification numbers. **Table ES-3** presents critical environmental constraints and yellow flags, and **Table ES-4** presents environmental opportunities.

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**Table ES-3. Round 2 Representative Concept Critical Environmental Constraints and Yellow Flags**

TOPIC	RR TO STC REPRESENTATIVE CONCEPT: RR STC TO OAKLAND CITY CENTER VIA ALAMEDA	RR TO MILLBRAE REPRESENTATIVE CONCEPT: RR MILLBRAE TO OAKLAND CITY CENTER VIA ALAMEDA (SF TO MILLBRAE PORTION ONLY)	BART REPRESENTATIVE CONCEPT: BART DOWNTOWN SAN FRANCISCO VIA MISSION BAY AND ALAMEDA
Biological Resources	<ul style="list-style-type: none"> <li>▫ Biological resources at the San Francisco Bay floor (1)</li> <li>▫ Biological resources at the Berkeley Aquatic Park</li> <li>▫ Aboveground alignment intersects with Codornices Creek and Cerrito Creek north of the existing Berkeley Station</li> <li>▫ The northern terminus borders Wildcat Creek in North Richmond where there are ongoing restoration efforts</li> </ul>	<ul style="list-style-type: none"> <li>▫ <i>See RR to STC Representative Concept in left column.</i></li> <li>▫ Habitat for the endangered San Francisco garter snake and the threatened California red-legged frog between San Bruno and Millbrae (279, 280)</li> </ul>	None
Cultural Resources	<ul style="list-style-type: none"> <li>▫ NRHP-listed historic districts: Port of San Francisco Embarcadero Historic District near the potential modified STC Station (2) and the Downtown Oakland Historic District (219) Built-environment resources adjacent to the potential modified STC Station (4) and near surface disturbance associated with the potential modified 12<sup>th</sup> Street/Oakland City Center Station (86)</li> <li>▫ NRHP-eligible Hegenberger Road Overcrossing intersects with the aboveground alignment south of the existing Oakland Coliseum Station (6)</li> <li>▫ Buried archaeological resources are present near areas of surface disturbance, including the West Berkeley Shellmound (278)</li> </ul>	<ul style="list-style-type: none"> <li>▫ <i>See RR to STC Representative Concept in left column.</i></li> <li>▫ Bridges and Tunnels Historic District within the PAX study area (237, 238)</li> <li>▫ Historic building within the PAX study area (239)</li> <li>▫ Historic underpass at Airport Blvd. in South San Francisco (281)</li> <li>▫ Historic Millbrae Station/Building known as the Southern Pacific Depot (282)</li> <li>▫ Buried archaeological resources are present near areas of surface disturbance.</li> </ul>	<ul style="list-style-type: none"> <li>▫ Aronson Historic District overlaps the potential new Downtown San Francisco-3<sup>rd</sup> &amp; Mission Station (208)</li> <li>▫ South End Historic District Addition overlaps the potential new 4<sup>th</sup> &amp; Townsend Station (209)</li> <li>▫ Union Iron Works Historic District overlaps surface disturbance on Potrero Point in San Francisco (267)</li> <li>▫ An individual built resource is adjacent to the potential new Downtown Oakland Station (85)</li> <li>▫ Buried archaeological resources are present near areas of surface disturbance.</li> </ul>
Community Resources	<ul style="list-style-type: none"> <li>▫ Stanford Health Care in Emeryville near the potential modified Emeryville Station</li> <li>▫ Aboveground alignment intersects with UC Berkeley land south of the existing Berkeley Station used for recreation</li> <li>▫ Fire stations: San Francisco Fire Department Station 35 near potential surface disturbance, Richmond Fire Department Station 64 near the aboveground alignment</li> <li>Faith-based facilities:               <ul style="list-style-type: none"> <li>▫ Aboveground alignment near the RCCG House of Grace Parish in Richmond (301)</li> <li>▫ Grade separation adjacent to Bethel Temple Pentecostal Church (220), East Bay New Life Worship Center (302), Resurrection AME Church (303), and Holy Trinity Church of God in Christ (304) in Richmond</li> <li>▫ Aboveground alignment and grade separation adjacent to the Samoan Methodist Church in Richmond (100)</li> </ul> </li> <li>Residential areas:               <ul style="list-style-type: none"> <li>▫ On West Atlantic Avenue adjacent to the potential new Alameda-Main/Atlantic Station (68)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>▫ <i>See RR to STC Representative Concept in left column.</i></li> <li>▫ 7SF Church near the potential modified 22<sup>nd</sup> Street Caltrain Station (240)</li> <li>▫ Hospital adjacent to the PAX study area (241)</li> <li>▫ Academy of Art University buildings adjacent to the PAX study area (242)</li> <li>Residences:               <ul style="list-style-type: none"> <li>▫ Within and adjacent to the PAX study area on King Street (243) and 7<sup>th</sup> Street (244)</li> <li>▫ Within the PAX study area on Pennsylvania Avenue from Mariposa Street to 22<sup>nd</sup> Street (245)</li> <li>▫ Adjacent to the Scott Street grade separation (246)</li> <li>▫ Near the potential modified San Bruno Caltrain Station (247)</li> <li>▫ Adjacent to the potential modified Millbrae Station (BART/Caltrain) (248)</li> <li>▫ Along the entire southwestern side of the Millbrae turnback on California Drive (249)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>▫ University lands: Academy of Art University and City College of San Francisco near the potential new Downtown San Francisco-3<sup>rd</sup> &amp; Mission Station and University of San Francisco adjacent to the potential new Mission Bay/UCSF Station (212)</li> <li>▫ Oak Grove Middle School near the track widening in Concord (296)</li> <li>▫ UCSF Medical Center at Mission Bay (210) and UCSF Benioff Hospital (211) adjacent to the potential new Mission Bay/UCSF Station</li> <li>▫ Fire stations: San Francisco Fire Department Station 8 near the potential new 4<sup>th</sup> &amp; Townsend Station and Oakland Fire Department Station 1 near the potential new Downtown Oakland Station</li> <li>▫ Yerba Buena Center for the Arts (294) and San Francisco MOMA (295) overlapping the potential new Downtown San Francisco-3<sup>rd</sup> &amp; Mission Station</li> <li>Faith-based facilities:               <ul style="list-style-type: none"> <li>▫ Epic Church overlapping the potential new 4<sup>th</sup> &amp; Townsend Station (298)</li> </ul> </li> </ul>

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**Table ES-3. Round 2 Representative Concept Critical Environmental Constraints and Yellow Flags**

TOPIC	RR TO STC REPRESENTATIVE CONCEPT: RR STC TO OAKLAND CITY CENTER VIA ALAMEDA	RR TO MILLBRAE REPRESENTATIVE CONCEPT: RR MILLBRAE TO OAKLAND CITY CENTER VIA ALAMEDA (SF TO MILLBRAE PORTION ONLY)	BART REPRESENTATIVE CONCEPT: BART DOWNTOWN SAN FRANCISCO VIA MISSION BAY AND ALAMEDA
	<ul style="list-style-type: none"> <li>▫ On Brush Street adjacent to the surface disturbance northwest of the potential modified 12<sup>th</sup> Street/Oakland City Center Station (236)</li> <li>▫ Overlap with aboveground alignment approaching Emeryville: residences present on Hubbard Street (13) and Horton Street (14)</li> <li>▫ Overlap with the existing Berkeley Station: residences on Addison Street (101) and Essex Way (102)</li> <li>▫ Overlap with aboveground alignment: residences off Cleveland Avenue from Buchanan Avenue north to Washington Avenue in Albany (103)</li> <li>▫ Overlap with aboveground alignment: residences on Columbia Blvd. in Richmond (104)</li> <li>▫ Overlap with aboveground alignment along Espee Avenue on the approach to the potential modified Richmond Station (105)</li> <li>▫ Overlap with aboveground alignment north of the potential modified Richmond Station on Village Way (106)</li> <li>▫ Overlap with aboveground alignment north of Barrett Avenue, Roosevelt Street, and to 13<sup>th</sup> Street in Richmond (107)</li> <li>▫ Overlap with aboveground alignment: public housing managed by Richmond Housing Authority (Triangle Court Development) (108)</li> <li>▫ Overlap with aboveground alignment at Sanford Avenue to Chesley Avenue in Richmond, north of the potential modified Richmond Station (109)</li> </ul>		<ul style="list-style-type: none"> <li>▫ First Unitarian Church of Oakland, New Saint Paul Community Baptist Church, and Pilgrim Rest Baptist Church (299) near the potential new Downtown Oakland Station</li> <li>▫ True Faith Baptist Church near surface disturbance north of the potential new Downtown Oakland Station (300)</li> <li>▫ Walnut Creek Church of Christ (297) and Ygnacio Valley Presbyterian Church (307) near the track widening at the Concord/Walnut Creek border</li> </ul> <p>Residential areas:</p> <ul style="list-style-type: none"> <li>▫ Adjacent to the potential new 4<sup>th</sup> &amp; Townsend Station surrounding the South End Historic District and Townsend Street (213)</li> <li>▫ Adjacent to the potential new Alameda-Main/Atlantic Station (68)</li> <li>▫ Overlap with the potential wye box for the potential new Oakland Jack London Station (189)</li> <li>▫ Adjacent to the potential new Downtown Oakland Station on Martin Luther King, Jr. Way from 18<sup>th</sup> Street to 9<sup>th</sup> Street (91)</li> <li>▫ Adjacent to the street closure on 23<sup>rd</sup> Street north of the potential new Downtown Oakland Station (268)</li> </ul>
Hazardous Waste or Materials Sites	None	None	None
SLR and Hydrology	<p>Aboveground features within a FEMA 100-year floodplain:</p> <ul style="list-style-type: none"> <li>▫ At and south of the existing Oakland Coliseum Station</li> <li>▫ Alignment near Berkeley Aquatic Park and modifications intersecting Codornices Creek in Berkeley</li> <li>▫ Alignment and culvert modifications intersecting Cerrito Creek at the Richmond-Albany city border</li> <li>▫ At John Christopher Hopkins University Park/Point Isabel Regional Shoreline</li> <li>▫ Corner of Tehama Avenue &amp; Monterey Street in Richmond</li> <li>▫ Wildcat Creek near the northern extent in Richmond</li> </ul> <p>Aboveground features subject to SLR vulnerability:</p>	<p>▫ <i>See RR to STC Representative Concept in left column.</i></p> <p>Aboveground features within a FEMA 100-year floodplain</p> <ul style="list-style-type: none"> <li>▫ At the PAX study area near Mission Creek Channel</li> <li>▫ Near the Center Street grade separation</li> <li>▫ Surrounding the potential modified Millbrae Station (BART/Caltrain)</li> <li>▫ Overlapping the Millbrae turnback</li> </ul> <p>Aboveground features subject to SLR vulnerability:</p> <ul style="list-style-type: none"> <li>▫ Overlapping the PAX study area around Mission Creek Channel, which is also within BCDC jurisdiction (250)</li> </ul>	<p>Aboveground features within a FEMA 100-year floodplain near the potential new Alameda-Main/Atlantic Station, the potential new Oakland Jack London Station, and the aboveground extent in Concord</p> <p>Aboveground features subject to SLR vulnerability:</p> <ul style="list-style-type: none"> <li>▫ Adjacent to the surface disturbance on Potrero Point in San Francisco (269)</li> <li>▫ Overlapping the potential new Alameda-Main/Atlantic Station (222)</li> <li>▫ Adjacent to the surface disturbance near the Lake Merritt outlet (in Channel Park) in Oakland (289)</li> </ul>

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**Table ES-3. Round 2 Representative Concept Critical Environmental Constraints and Yellow Flags**

TOPIC	RR TO STC REPRESENTATIVE CONCEPT: RR STC TO OAKLAND CITY CENTER VIA ALAMEDA	RR TO MILLBRAE REPRESENTATIVE CONCEPT: RR MILLBRAE TO OAKLAND CITY CENTER VIA ALAMEDA (SF TO MILLBRAE PORTION ONLY)	BART REPRESENTATIVE CONCEPT: BART DOWNTOWN SAN FRANCISCO VIA MISSION BAY AND ALAMEDA
	<ul style="list-style-type: none"> <li>▫ At and east of potential modified STC Station, some of which is within BCDC jurisdiction (221)</li> <li>▫ Overlapping the potential new Alameda-Main/Atlantic Station (222)</li> <li>▫ Surface disturbance near the Charles P. Howard Terminal (223)</li> <li>▫ Aboveground alignment in the San Antonio neighborhood (224), the Melrose neighborhood (23), and heading towards the existing Oakland Coliseum Station from the north and south (24, 25), some of which is within BCDC jurisdiction</li> <li>▫ Overlapping a cut-and-cover turnout on Mandela Parkway (225)</li> <li>▫ Adjacent to the aboveground alignment near Berkeley Aquatic Park, some of which is within BCDC jurisdiction (285)</li> <li>▫ In southern Richmond/northern Albany (113)</li> </ul>	<ul style="list-style-type: none"> <li>▫ Overlapping the Caltrain ROW at Colma Creek, which is within BCDC jurisdiction (286)</li> <li>▫ At the South Linden Avenue grade separation (251)</li> <li>▫ Overlapping the Caltrain ROW near SFO (287, 288) and along El Zanjon Creek in San Bruno, which is within BCDC jurisdiction</li> <li>▫ Near the Center Street grade separation (252)</li> <li>▫ Surrounding the potential modified Millbrae Station (BART/Caltrain), where one drainage may be within BCDC jurisdiction (253)</li> <li>▫ Overlapping two large sections of the Millbrae turnback, some of which is within BCDC jurisdiction (254, 255)</li> </ul>	<ul style="list-style-type: none"> <li>▫ Overlapping the potential new Oakland Jack London Station and associated surface disturbance (192)</li> </ul>
Section 4(f) Resources (non-Cultural)	<ul style="list-style-type: none"> <li>▫ The San Francisco Bay Trail intersects surface disturbance near the potential modified STC Station (26), the potential new Alameda-Main/Atlantic Station (72), along Mandela Parkway (226), and south of the potential modified Emeryville Station (28)</li> <li>▫ Parks/open space/nature reserves overlapping with, or in close proximity to, surface disturbance: Rincon Park (290) in San Francisco, Main Street Soccer Field (227) in Alameda, Vantage Point Park (31) and Mandela Parkway in Oakland (228), Berkeley Aquatic Park (127), Peggy Thomsen Pierce Street Park in Albany (291), Harrison Park in Berkeley (128), Crescent Park (129), Eastshore Park (130), Boorman Park (131), Central Richmond Greenway (132), and Lucas Park (133) in Richmond</li> </ul>	<ul style="list-style-type: none"> <li>▫ <i>See RR to STC Representative Concept in left column.</i></li> <li>▫ Mission Creek Park (292) and Berry Street Dog Park (293) near the PAX study area</li> <li>▫ Village Park adjacent to the Millbrae turnback (256)</li> <li>▫ The San Francisco Bay Trail intersects with the Center Street grade separation (257) and the pedestrian crossing grade separation in Millbrae (258)</li> </ul>	<ul style="list-style-type: none"> <li>▫ The San Francisco Bay Trail intersects surface disturbance near the potential new Alameda-Main/Atlantic Station (72) and surface disturbance associated with the potential new Oakland Jack London Station (193)</li> <li>▫ Yerba Buena Gardens and Mariposa Park in San Francisco (215)</li> <li>▫ Main Street Soccer Field in Alameda (227)</li> <li>▫ Channel Park (270) and Vantage Point Park (31) in Oakland</li> <li>▫ Ygnacio Valley Park in Concord</li> </ul>
Transportation	<ul style="list-style-type: none"> <li>▫ Within the San Francisco Port, the Port of Oakland, anchorage areas, and navigable waterways.</li> </ul>	<ul style="list-style-type: none"> <li>▫ <i>See RR to STC Representative Concept in left column.</i></li> <li>▫ A Caltrain rail maintenance facility is within the PAX study area</li> <li>▫ A proposed CAHSR maintenance facility is southeast of the potential modified Bayshore Caltrain Station</li> <li>▫ The PAX study area is adjacent to the San Francisco Port boundary</li> </ul>	<ul style="list-style-type: none"> <li>▫ Surface disturbance near the I-580/SR-24 interchange could cause delays or closures (277)</li> <li>▫ Aboveground alignments pass under the San Francisco and Oakland ports, navigable waterways, and anchorage areas</li> </ul>
Major Utilities	<ul style="list-style-type: none"> <li>▫ A natural gas pipeline intersects with the underground extent near the potential new Alameda-Main/Atlantic Station</li> </ul>	<ul style="list-style-type: none"> <li>▫ <i>See RR to STC Representative Concept in left column.</i></li> <li>▫ A high-voltage underground transmission line follows Dollar Avenue/Herman Street near the South Linden Avenue and Scott Street grade separations and Huntington Avenue near the potential modified San Bruno Caltrain Station</li> </ul>	<ul style="list-style-type: none"> <li>▫ Potential new Oakland Jack London Station overlaps with a power plant (194)</li> <li>▫ Extra high- and high-voltage transmission line near the potential new Downtown San Francisco-3<sup>rd</sup> &amp; Mission Station</li> <li>▫ Natural gas pipeline intersects with underground extent west of the potential new Alameda-Main/Atlantic Station</li> </ul>

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**Table ES-3. Round 2 Representative Concept Critical Environmental Constraints and Yellow Flags**

TOPIC	RR TO STC REPRESENTATIVE CONCEPT: RR STC TO OAKLAND CITY CENTER VIA ALAMEDA	RR TO MILLBRAE REPRESENTATIVE CONCEPT: RR MILLBRAE TO OAKLAND CITY CENTER VIA ALAMEDA (SF TO MILLBRAE PORTION ONLY)	BART REPRESENTATIVE CONCEPT: BART DOWNTOWN SAN FRANCISCO VIA MISSION BAY AND ALAMEDA
Equity Communities	<p>Presence of PP:</p> <ul style="list-style-type: none"> <li>▫ Surrounding the potential new Alameda-Main/Atlantic Station (229)</li> <li>▫ Surrounding the potential modified 12<sup>th</sup> Street/Oakland City Center Station (230)</li> <li>▫ Aboveground alignment crosses multiple PP tracts in the San Antonio (331, 38, 311), Fruitvale (313), and Melrose (39) neighborhoods</li> <li>▫ Surrounding the existing Oakland Coliseum Station (40, 332)</li> <li>▫ Overlaps surface disturbance near the I-80/I-880/I-580 (the maze) interchange (308)</li> <li>▫ At the cut-and-cover turnout (231) and aboveground disturbance (94) south of the potential modified Emeryville Station</li> <li>▫ Where the aboveground alignment intersects at UC Berkeley Village near Buchanan Street in Albany (143)</li> <li>▫ Overlaps with the aboveground alignment near Point Isabel Regional Shoreline in Richmond (318)</li> <li>▫ In Richmond (144, 145), including the potential modified Richmond Station (146)</li> <li>▫ North of the potential modified Richmond Station (147) and around the northern concept extent terminus (148)</li> </ul> <p>Presence of EJ communities:</p> <ul style="list-style-type: none"> <li>▫ Overlaps with the potential modified STC Station (41)</li> <li>▫ Surrounding the potential new Alameda-Main/Atlantic Station (232)</li> <li>▫ Overlapping a cut-and-cover turnout (233) and adjacent to the potential modified 12<sup>th</sup> Street/Oakland City Center Station (234)</li> <li>▫ The aboveground alignment passes through EJ communities in the San Antonio (45, 312), Fruitvale (314), and Melrose (46) neighborhoods</li> <li>▫ Surrounding the existing Oakland Coliseum Station (47, 333)</li> <li>▫ Near Hubbard Street (309) and just south of the potential Emeryville Station (310)</li> <li>▫ Surrounding the existing Berkeley Station (158)</li> <li>▫ Surrounding the existing Berkeley Station to Buchanan Street in Albany (near land owned by UC Berkeley) (159, 160)</li> <li>▫ Overlaps with the aboveground alignment near Point Isabel Regional Shoreline in Richmond (319)</li> </ul>	<p>▫ See RR to STC Representative Concept in left column.</p> <p>Presence of PP:</p> <ul style="list-style-type: none"> <li>▫ North of the potential modified Bayshore Caltrain Station (259) and surrounding the potential modified South San Francisco Caltrain Station (260)</li> <li>▫ Surrounding the South Linden and Scott Street grade separations (261) and the potential modified San Bruno Caltrain Station (262)</li> <li>▫ At the Millbrae turnback (263)</li> </ul> <p>Presence of EJ communities:</p> <ul style="list-style-type: none"> <li>▫ Within the PAX study area (264)</li> <li>▫ At the potential modified 22<sup>nd</sup> Street Caltrain Station (323) and the potential modified Bayshore Caltrain Station (324)</li> <li>▫ Surrounding the potential modified South San Francisco Caltrain Station (325) and further along the Caltrain alignment near Colma Creek (334)</li> <li>▫ Along the Caltrain alignment surrounding the South Linden and Scott Street grade separations and the potential modified San Bruno Caltrain Station (326)</li> <li>▫ Along the Caltrain alignment heading towards the potential modified San Bruno Caltrain Station (327) and south of the station (328, 335)</li> <li>▫ Surrounding the Center Street grade separation (329)</li> <li>▫ At the potential modified Millbrae Caltrain Station (330)</li> </ul>	<p>Presence of PP:</p> <ul style="list-style-type: none"> <li>▫ At the tunnel boring machine retrieval shaft west of the potential new Downtown San Francisco-3<sup>rd</sup> &amp; Mission Station (271)</li> <li>▫ At the potential new Alameda-Main/Atlantic Station (229)</li> <li>▫ Surface disturbance along East 8<sup>th</sup> Street in Oakland (199)</li> <li>▫ At the potential new Downtown Oakland Station (93) and street modifications north of the potential station (197, 272)</li> <li>▫ At surface disturbance on SR-24 (198)</li> </ul> <p>Presence of EJ communities:</p> <ul style="list-style-type: none"> <li>▫ At the potential new Downtown San Francisco-3<sup>rd</sup> &amp; Mission Station (218)</li> <li>▫ At the potential new Alameda-Main/Atlantic Station (232)</li> <li>▫ Overlaps surface disturbance along East 8<sup>th</sup> Street in Oakland (203)</li> <li>▫ At the potential new Downtown Oakland Station (273)</li> <li>▫ Overlaps surface disturbance on SR-24 (202)</li> </ul>

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**Table ES-3. Round 2 Representative Concept Critical Environmental Constraints and Yellow Flags**

TOPIC	RR TO STC REPRESENTATIVE CONCEPT: RR STC TO OAKLAND CITY CENTER VIA ALAMEDA	RR TO MILLBRAE REPRESENTATIVE CONCEPT: RR MILLBRAE TO OAKLAND CITY CENTER VIA ALAMEDA (SF TO MILLBRAE PORTION ONLY)	BART REPRESENTATIVE CONCEPT: BART DOWNTOWN SAN FRANCISCO VIA MISSION BAY AND ALAMEDA
	<ul style="list-style-type: none"> <li>▫ Overlaps with the aboveground alignment from Crescent Park in Richmond (161), along Carlson Blvd. in Richmond (162, 163) to the potential modified Richmond Station (164)</li> <li>▫ North of the potential modified Richmond Station (165) and surrounding the northernmost endpoint of the concept (166)</li> </ul>		

CAHSR = California High-Speed Rail

kV = kilovolt

MOMA = San Francisco Museum of Modern Art

ROW = right-of-way

SFO = San Francisco International Airport

SR = State Route

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**Table ES-4. Round 2 Representative Concept Critical Environmental Opportunities**

TOPIC	RR TO STC REPRESENTATIVE CONCEPT: RR STC TO OAKLAND CITY CENTER VIA ALAMEDA	RR TO MILLBRAE REPRESENTATIVE CONCEPT: RR MILLBRAE TO OAKLAND CITY CENTER VIA ALAMEDA (SF TO MILLBRAE PORTION ONLY)	BART REPRESENTATIVE CONCEPT: BART DOWNTOWN SAN FRANCISCO VIA MISSION BAY AND ALAMEDA
Transportation	<ul style="list-style-type: none"> <li>▫ Higher equity-weighted unmet transbay rail potential exists near the potential modified STC and the potential modified Emeryville station areas</li> <li>▫ Medium equity-weighted unmet transbay rail potential exists near the potential modified STC, the potential new Alameda-Main/Atlantic, and the potential modified Richmond station areas</li> <li>▫ Multimodal connection with ferry terminals in San Francisco and Alameda</li> <li>▫ A BART rail maintenance facility near Rheem Avenue in Richmond</li> <li>▫ Potential CAHSR transfer opportunity at the potential modified STC Station</li> <li>▫ Cross Alameda Trail near the potential new Alameda-Main/Atlantic Station and I-80 pedestrian overcrossings at University Avenue and Gilman Avenue north of the existing Berkeley Station</li> </ul>	<ul style="list-style-type: none"> <li>▫ <i>See RR to STC Representative Concept in left column.</i></li> <li>▫ Higher equity-weighted unmet transbay rail potential exists near the potential modified Bayshore Caltrain Station area</li> <li>▫ Medium equity-weighted unmet transbay rail potential exists near the PAX study area</li> <li>▫ Multimodal connection with a ferry terminals in San Francisco</li> <li>▫ Caltrain rail maintenance facilities within the PAX study area</li> <li>▫ CAHSR proposed light maintenance facility in Brisbane</li> <li>▫ Potential CAHSR transfer opportunity at the potential modified STC Station and potential modified Millbrae Station</li> <li>▫ Transfer to SFO through the potential modified San Bruno Station and the BART/Caltrain/Future CAHSR potential modified Millbrae Station</li> </ul>	<ul style="list-style-type: none"> <li>▫ Higher equity-weighted unmet transbay rail potential exists near the potential new Downtown San Francisco-3<sup>rd</sup> &amp; Mission Station area</li> <li>▫ Medium equity-weighted unmet transbay rail potential exists near the potential new 4<sup>th</sup> &amp; Townsend, Mission Bay/UCSF, Alameda-Main/Atlantic Station, and Downtown Oakland station areas</li> <li>▫ Multimodal connection with ferry terminals in San Francisco, Alameda, and Oakland</li> <li>▫ Cross Alameda Trail near the potential new Alameda-Main/Atlantic Station</li> <li>▫ Oracle Park near the potential new 4<sup>th</sup> &amp; Townsend Station and Chase Center near the potential new Mission Bay/UCSF Station</li> </ul>
Community Resources	<ul style="list-style-type: none"> <li>▫ Stanford Health Care in Emeryville, near the potential modified Emeryville Station</li> <li>▫ Major public universities: College of Alameda, California State University, East Bay, and UC Berkeley</li> <li>▫ Future Veterans Affairs Alameda Point Development site</li> </ul>	<ul style="list-style-type: none"> <li>▫ <i>See RR to STC Representative Concept in left column.</i></li> <li>▫ UCSF Mission Bay Hospitals and UCSF Benioff Hospital</li> </ul>	<ul style="list-style-type: none"> <li>▫ Yerba Buena Center for the Arts, San Francisco MOMA, and the Moscone Center</li> <li>▫ Major public universities include UCSF Medical Center at Mission Bay, UCSF Benioff Hospital, UCSF Mission Bay Hospitals, College of Alameda, and California State University, East Bay</li> <li>▫ Future Veterans Affairs Alameda Point Development site</li> </ul>
Section 4(f) Resources (non-Cultural)	<ul style="list-style-type: none"> <li>▫ Major recreational resources include Lakeside Park (Lake Merritt), Martin Luther King, Jr. Regional Shoreline, Emeryville Crescent State Marine Reserve, Berkeley Aquatic Park, McLaughlin Eastshore State Park, and Nicholl Park</li> </ul>	<ul style="list-style-type: none"> <li>▫ <i>See RR to STC Representative Concept in left column.</i></li> <li>▫ Major recreational resources that could be served by the concept: Mission Creek Park (via the potential new 4<sup>th</sup> and Townsend Station) and Candlestick Point State Recreation Area (via the potential modified Bayshore Caltrain Station)</li> <li>▫ Oracle Park and the Chase Center are also near the concept</li> </ul>	<ul style="list-style-type: none"> <li>▫ Major recreational resources include Mission Creek Park in San Francisco</li> <li>▫ Oracle Park and the Chase Center are also near the concept</li> </ul>
SLR	<p>Potential SLR resiliency partnership opportunities for potentially inundated areas:</p> <ul style="list-style-type: none"> <li>▫ CHARG</li> <li>▫ Bay Adapt</li> <li>▫ East Bay Regional Park District</li> <li>▫ California State Parks</li> <li>▫ Save the Bay</li> <li>▫ City and County of San Francisco</li> </ul>	<ul style="list-style-type: none"> <li>▫ <i>See RR to STC Representative Concept in left column.</i></li> </ul> <p>Potential SLR resiliency partnership opportunities for potentially inundated areas :</p> <ul style="list-style-type: none"> <li>▫ City and County of San Francisco</li> <li>▫ County of San Mateo</li> <li>▫ Save the Bay</li> <li>▫ CHARG</li> <li>▫ Bay Adapt</li> <li>▫ State Coastal Conservancy</li> </ul>	<p>Potential SLR resiliency partnership opportunities exist for potentially inundated areas:</p> <ul style="list-style-type: none"> <li>▫ City and County of San Francisco</li> <li>▫ Cities of Oakland and Alameda</li> <li>▫ Alameda County</li> <li>▫ CHARG</li> <li>▫ Bay Adapt</li> <li>▫ Mission Creek Conservancy</li> <li>▫ Alameda Climate Action and Resiliency Plan</li> </ul>

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**Table ES-4. Round 2 Representative Concept Critical Environmental Opportunities**

TOPIC	RR TO STC REPRESENTATIVE CONCEPT: RR STC TO OAKLAND CITY CENTER VIA ALAMEDA	RR TO MILLBRAE REPRESENTATIVE CONCEPT: RR MILLBRAE TO OAKLAND CITY CENTER VIA ALAMEDA (SF TO MILLBRAE PORTION ONLY)	BART REPRESENTATIVE CONCEPT: BART DOWNTOWN SAN FRANCISCO VIA MISSION BAY AND ALAMEDA
	<ul style="list-style-type: none"> <li>▫ Cities of Oakland, Emeryville, Alameda, Emeryville, Berkeley, Albany, El Cerrito, Richmond, and San Pablo</li> <li>▫ Alameda County</li> <li>▫ Contra Costa County</li> <li>▫ Alameda Climate Action and Resiliency Plan</li> <li>▫ Resilient Oakland</li> </ul>		<ul style="list-style-type: none"> <li>▫ Resilient Oakland</li> </ul>
Serving Equity Communities	<p>PP communities are located near the following stations:</p> <ul style="list-style-type: none"> <li>▫ Potential new Alameda-Main/Atlantic Station</li> <li>▫ Potential modified Emeryville Station</li> <li>▫ Existing Berkeley Station</li> <li>▫ Potential modified Richmond Station</li> </ul> <p>EJ communities are located near the following potential stations:</p> <ul style="list-style-type: none"> <li>▫ Potential modified STC Station</li> <li>▫ Potential new Alameda-Main/Atlantic Station</li> <li>▫ Potential modified 12<sup>th</sup> Street/Oakland City Center Station</li> <li>▫ Existing Oakland Coliseum Station</li> <li>▫ Potential modified Emeryville Station</li> <li>▫ Existing Berkeley Station</li> <li>▫ Potential modified Richmond Station</li> </ul>	<ul style="list-style-type: none"> <li>▫ <i>See RR to STC Representative Concept in left column.</i></li> </ul> <p>PP communities are located near the following stations:</p> <ul style="list-style-type: none"> <li>▫ The potential modified Bayshore, South San Francisco, and San Bruno Caltrain stations</li> <li>▫ Potential modified Millbrae Station (BART/Caltrain)</li> </ul> <p>EJ communities are located near the following stations:</p> <ul style="list-style-type: none"> <li>▫ Within the PAX study area</li> <li>▫ The potential modified 22<sup>nd</sup> Street, Bayshore, South San Francisco, and San Bruno Caltrain stations</li> <li>▫ Potential modified Millbrae Station (BART/Caltrain)</li> </ul>	<p>PP communities are located near the following potential new stations:</p> <ul style="list-style-type: none"> <li>▫ Mission Bay/UCSF Station</li> <li>▫ Alameda-Main/Atlantic Station</li> <li>▫ Downtown Oakland Station</li> </ul> <p>EJ communities are located near the following potential new stations:</p> <ul style="list-style-type: none"> <li>▫ Downtown San Francisco-3<sup>rd</sup> &amp; Mission Station</li> <li>▫ 4<sup>th</sup> &amp; Townsend Station</li> <li>▫ Alameda-Main/Atlantic Station</li> <li>▫ Downtown Oakland Station</li> </ul>
Land Use	<p>Targeted growth areas are present in the following areas:</p> <ul style="list-style-type: none"> <li>▫ Potential modified STC Station</li> <li>▫ Potential new Alameda-Main/Atlantic Station</li> <li>▫ Horton &amp; 45<sup>th</sup> Street in Emeryville and the potential modified Emeryville Station</li> <li>▫ University Avenue and Berkeley Aquatic Park in Berkeley</li> <li>▫ Potential modified Richmond Station and North Richmond</li> </ul>	<p>Targeted growth areas are present in the following areas:</p> <ul style="list-style-type: none"> <li>▫ <i>See RR to STC Representative Concept in left column.</i></li> <li>▫ PAX study area</li> <li>▫ Potential modified 22<sup>nd</sup> Street Caltrain Station</li> <li>▫ Potential modified Bayshore Caltrain Station</li> <li>▫ Potential modified South San Francisco Caltrain Station</li> <li>▫ Potential modified San Bruno Caltrain Station</li> <li>▫ Potential modified Millbrae Station (BART/Caltrain/future CAHSR)</li> </ul>	<p>Targeted growth areas are present in the following areas:</p> <ul style="list-style-type: none"> <li>▫ Potential new Downtown San Francisco-3<sup>rd</sup> &amp; Mission, 4<sup>th</sup> &amp; Townsend, and Mission Bay/UCSF stations</li> <li>▫ Potential new Alameda-Main/Atlantic Station</li> <li>▫ Potential new Oakland Jack London and Downtown Oakland stations</li> </ul>

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## **ES.5 Other Potential Stations Not Included in the Round 2 Representative Concepts**

Two potential stations not currently included in the Round 2 Representative Concepts, Bayview Station and San Antonio Station, were also reviewed in regard to critical ECO and yellow flags. These potential stations could continue to be considered at a later time in the concept development process. They are described and evaluated in **Section 4.5**.

## **ES.6 Next Steps**

The Link21 Team will continue to review environmental input and reflect it in future iterations of its concepts. The identified environmental risks represented by yellow flags will also be considered by the Link21 Team in its Preliminary BC. Through these efforts, environmental report findings will be integrated into the overall Link21 planning process leading to Stage Gate decision-making and ultimately to the NEPA/CEQA process. This will support the goals and purpose of an integrated planning and environmental process (planning/environmental linkages [PEL] process).

In addition, opportunities for public and stakeholder review of, and input to, the potential critical ECO associated with the project concepts will be provided during future Link21 public and stakeholder outreach.

In future program phases, concept planning will advance to the point where potential project impacts can be considered. This will facilitate evaluation and comparison of proposed concepts.



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