Fort Bragg
Coastal Restoration and Trail Project

MENDOCINO COUNTY, CALIFORNIA
City of Fort Bragg

Subsequent Environmental Impact Report (EIR)

Prepared by the
City of Fort Bragg

October 2013

Fort Bragg

Coastal Restoration and Trail Project

Draft Subsequent Environmental Impact Report

(EIR SCH No 2009112071)

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Acronyms

The following acronyms are used extensively in the EIR. The acronyms are spelled out the first time they are used in a section or chapter, but are also provided in Table 1-1-1 below.

Table 1-2 Acronyms and Abbreviations

Acronym/ Abbreviation	Term
A	absent
AB 32	Assembly Bill 32
ac	Acre
ACHP	Advisory Council on Historic Preservation
ADI	Area of Direct Impact
APE	Area of Potential Affect
APN	Assessor's Parcel Number
BA	Biological Assessment
BMPs	Best Management Practices
BP	before present
BSA	Biological Study Area
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CBSC	California Building Standards Code
CCA	California Coastal Act of 1976
CCC	California Coastal Commission
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife

Acronym/ Abbreviation	Term
CDP	Coastal Development Permit
CEQA	California Environmental Quality Act of 1970
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act of 1980
CERFA	Community Environmental Response Facilitation Act of 1992
CESA	California Endangered Species Act of 1984
CFR	Code of Federal Regulations
CH_4	methane
City	City of Fort Bragg
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CO	carbon monoxide
CO_2	carbon dioxide
Coastal Trail	Fort Bragg Coastal Restoration and Trail Project
CRHR	California Register of Historical Resources
CWA	Clean Water Act
cy	cubic yards
Dbh	diameter at breast height
DPR / State Parks	California Department of Parks and Recreation
DTSC	Department of Toxic Substances Control
EIR	Environmental Impact Report
EPA	Environmental Protection Agency
ESA	Environmentally Sensitive Area

Acronym/ Abbreviation	Term
ESHA	Environmentally Sensitive Habitat Area
FESA	Federal Endangered Species Act of 1973
FHWA	Federal Highway Administration
ft	Feet
ft^2	square feet
GHG	greenhouse gas
H	horizontal
HFCs	hydrofluorocarbons
HMMP	Habitat Mitigation and Monitoring Plan
HPSR	Historic Properties Survey Report
HRER	Historic Resources Evaluation Report
IARAP	Interim Action Remedial Action Plan and Feasibility Study
in	Inches
Inventory	GHG Emissions Inventory
IS	Initial Study
IT	Timber Resources Industrial land use designation
KVAs	Key Viewing Areas
lbs	Pounds
lbs/ac	pounds per acre
LCP	Local Coastal Program
LOS	levels of service
MCAQMD	Mendocino County Air Quality Management District

Acronym/ Abbreviation	Term
mi	miles
Mill Site	Georgia-Pacific lumber mill site
MMPA	Marine Mammal Protection Act of 1972
MOA	Memorandum of Agreement
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NCAB	North Coast Air Basin
NCBS	Northern Coastal Bluff Scrub
NEPA	National Environmental Policy Act of 1969
NES	Natural Environment Study
NHPA	National Historic Preservation Act of 1966
NO_2	nitrogen dioxide
NOAA Fisheries	National Marine Fisheries Service
NOP	Notice of Preparation
NOx	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NPPA	Native Plant Protection Act of 1977
NPS	National Park Service
NRHP	National Register of Historic Places
NRLF	Northern red-legged frog
O_3	ozone

Acronym/ Abbreviation	Term
OHWM	ordinary high water mark
OSHA	Occupational Safety and Health Act
P	present
Pb	lead
PCBs	Polychlorinated Biphenyls
PFCs	perfluorocarbons
PM	particulate matter
PM-10	particulate matter less than 10 microns in size
PM-2.5	particulate matter less than 2.5 microns in size
PRAR	Paleontological Resources Assessment Report
PRC	Public Resources Code
proposed project	Fort Bragg Coastal Restoration and Trail Project
RAC	Russian American Company
RAP	Remedial Action Plan
RCRA	Resource Conservation and Recovery Act of 1976
ROW	public right-of-way
RSP	rock slope protection
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SF_6	sulfur hexafluoride
SHPO	State Historic Preservation Officers
SO_2	sulfur dioxide

Acronym/ Abbreviation	Term
SR-1	State Route 1
SSC	California Species of Special Concern
SWMP	Storm Water Management Program
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TMP	Transportation Management Plans
UBC	Uniform Building Code
UNIPCC	United Nations Intergovernmental Panel on Climate Change
URBEMIS	urban emissions software
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
V	vertical
VOCs	volatile organic compounds
WDRs	waste discharge requirements

Chapter 1 – Executive Summary

1.1 Purpose of the Subsequent EIR

The purpose of this Subsequent Environmental Impact Report (EIR) is to identify the potential significant impacts of the revised design of the Fort Bragg Coastal Restoration and Trail Project (proposed project or Coastal Trail) on the environment, indicate the manner in which such significant impacts will be mitigated or avoided, and identify alternatives to the proposed project that avoid or reduce these impacts. An EIR was certified for this project in 2011, however the project design has been modified through a consultation process between the City of Fort Bragg and Sherwood Valley Rancheria in order to minimize impacts to cultural resources. Additionally, the project description has been modified to reflect the fact that State Parks has completed the restoration of Glass Beach Headlands under the certified EIR and therefore the State Parks component of the project is not included in the Subsequent EIR.

This Subsequent EIR analyzes the revised project and is intended to serve as an informational document for use by the City of Fort Bragg (City), the California Environmental Quality Act (CEQA) lead agency; the other responsible agencies; and the general public in their consideration and evaluation of the environmental consequences associated with the implementation of the proposed redesigned project. The EIR addresses potentially significant impacts to Aesthetics, Air Quality, Biological Resources, Climate Change and Energy, Cultural Resources, Geology and Soils, Hazards and Hazardous Materials, Transportation and Circulation, and Water Quality and Stormwater. Significant impacts identified and the measures recommended to avoid them are shown in Table ES-1.

1.2 Project Location

The project is located on the Mendocino Coast, within the city of Fort Bragg (refer to Figure ES-1). The project site includes three parcels and a portion of a public right-of-way (ROW). Two of the parcels are located along the coastline immediately adjacent to the approximately 320-acre (ac) former Georgia-Pacific lumber mill (Mill Site). Each parcel and the ROW are described in detail below and shown in Figure ES-2.

1.2.1 Glass Beach Headlands

The Glass Beach Headlands, owned by the California Department of Parks and Recreation (State Parks), is a 37-ac day use area. It is the southernmost portion of MacKerricher State Park. The site is currently used by pedestrians for beach and ocean access and includes populations of sensitive plants and coastal habitats. Only the southernmost 100 feet of this parcel and the easternmost 10 feet of this parcel would be affected by the proposed project and discussions about these effects are incorporated into the discussions about the Elm Street Extension (North Parkland) and Glass Beach Drive sections of the EIR respectively.

Glass Beach Headlands – gravel road proposed for multi-use trail

1.2.2 North Parkland

The North Parkland includes 25 ac and is located immediately south of the Glass Beach Headlands. It extends east from the Pacific Ocean and is approximately 110 feet (ft.) wide but varies in width due to the variegated bluff edge. The North Parkland also includes a 50-ft wide piece of the northernmost edge of the former Mill Site property extending from the ocean to Elm Street. The site is currently unused and was previously a finished lumber storage area. Approximately 80% of the site is covered by pavement and/or hard packed gravel, and is not open to the public.

Typical View - North Parkland

1.2.3 Glass Beach Drive Right-of-way

The Glass Beach Drive ROW, owned by the City, is a 60-ft wide ROW that extends from the end of the Pudding Creek Trestle Bridge to Elm Street (refer to Figure ES-2). The ROW is currently developed with a 5-ft wide sidewalk (east side), the 34-ft wide Glass Beach Drive, and a drainage swale and associated infrastructure. An informal parking area exists on the southern edge of the ROW, adjacent to Glass Beach Headlands, and an 18-space developed parking area is located at the northern terminus of Glass Beach Drive at the Pudding Creek Trestle Bridge.

Typical view – Glass Beach Drive ROW – Informal Parking Area

1.2.4 South Parkland

The South Parkland includes 57 ac, approximately 20% which is currently paved with asphalt or compressed gravel. This area is bordered on the north by the City's wastewater treatment plant, the west by the Pacific Ocean, the east by the former Mill Site, and the south by Noyo Bay. The area was formerly used, in part, as a lumber operations mill, fill disposal, a cemetery, an airstrip, and for log storage.

Typical View- South Parkland – during a tour.

1.3 Project Background

In 2002, the City initiated a community-based planning process that identified the Coastal Trail as the most important community goal for the re-use of the Mill Site. Subsequently, the State Coastal Conservancy awarded a $4.165 million grant to the City to purchase approximately 35 ac of parkland on the Mill Site. As part of the acquisition, Georgia Pacific donated a 110-ft wide "Coastal Trail corridor." The City acquired the property, totaling approximately 82 acres, in January of 2010.

In 2006, the Fort Bragg community participated in a three-day design charrette to create a cohesive plan for the joint parkland areas. The results of this community process and three subsequent City Council workshops form the basis for the subsequent Draft Coastal Trail Master Plan (City of Fort Bragg et al. 2008), the preliminary design plans, and the project description for the original, certified, EIR.

In 2009 and 2010, the Fort Bragg community participated in a variety of planning activities for the South Parkland parcel, including three walking workshops (attended by over 300 people), a three-hour community design charrette workshop, an open-house, and a community survey returned by 94 residents. The community input and priorities expressed through these meetings, workshops, and survey form the basis for the design for the South Parkland parcel and project description.

In 2013 the City acquired the four acre Johnson Property (adjacent to the South Parkland Parcel) with Coastal Conservancy funding for public access.

Figure ES-1. Project Vicinity Map

Figure ES-2. Project Site Map

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1.4 Proposed Project

The project has four components, each with individual characteristics. They include: 1) Glass Beach Drive, 2) Elm Street access road, multi-use trail and parking area, 3) the North Mill Site Parkland, and 4) the South Mill Site Parkland parcel. The proposed project is summarized by component below and shown in Figure ES-2.

1.4.1 Glass Beach Drive Right-of-Way

This component would extend from the Pudding Creek Trestle Bridge south to the Elm Street Extension (refer to Figure ES-2). To allow for trail development, the Glass Beach Drive component would be constructed on the City's ROW along Glass Beach Drive and an adjacent 10 to 15 feet wide strip of land located immediately west of the City's ROW on the Glass Beach Headlands would be utilized temporarily during construction. Stormwater improvements (a culvert with tree boxes) would also be necessary to provide sufficient space for the construction of a trail in an area currently occupied by a drainage ditch.

1.4.2 Elm Street Extension and Welcome Area

This component of the project would extend from the corner of Glass Beach Drive and Elm Street west on the current multi-use trail located on State Parks' property to the proposed new multi-use trail on the Mill Site. Elm Street would be extended by approximately 50 ft. to the west onto the City's North Parkland parcel. The road would be 24 ft. wide and would terminate at a new 36-space linear parking area, which would also include a welcome plaza, bicycle parking, a restroom/maintenance building, and welcome kiosk. This component of the project also includes the extension of the multiuse trail along the southern edge of State Park's Glass Beach Parcel from east to west.

1.4.3 North Parkland

Restoration of the North Parkland would encompass approximately 20 ac. between the bluff edge and the City's property line. Restoration efforts would focus on creating locally appropriate native habitats and include the installation of a restoration and cultural resources cap of approximately 12,000 cubic yards of a mix of sand, soil and composted grain/woodchips.

The North Parkland multi-use trail would consist of a primary trail of approximately 3,455 linear ft., and secondary trails including two short viewing loops, a "short cut" on the southern portion of the trail, and a short boardwalk. These secondary trails comprise approximately 1,750 linear ft. The primary trail extends from the parking area south to a turnaround bulb overlooking Soldier Bay and Soldier Beach. The primary trail on the North Parkland would be 8 ft. wide and include a 4-ft wide gravel shoulder on its western edge. The secondary trails would be 5 ft. wide and for pedestrian use only. This component would also include the installation of eight benches and ten interpretive signs along the trail and in the parking area.

The North Parkland is currently almost entirely surfaced with pavement or packed gravel. There are three small existing culverts that drain portions of the Mill Site in the project area, but much of the stormwater sheet flows over the impervious surfaces and to the bluff edge, where it is intercepted by a set of existing small berms (6 in to 1 ft. in height), which direct and concentrate stormwater runoff to various locations along the bluff edge.

The proposed stormwater management improvements to the North Parkland would include:

1. Removal of the existing bluff-top berms.

2. Construction of new three-foot high earthen berms with geotextile fabrics and planted vegetation to the east of the Coastal Trail in order to capture and direct the significant stormwater flows from the mill site into the proposed project detention basins and culverts (see L-9 through L-11)

3. Development of two bioswales and a detention basin near Otsuchi Point to collect and temporarily detain stormwater which would outfall through a new culvert to the Pacific Ocean. These detention basins would accommodate a significant volume of stormwater from the paved portions of the Mill Site area (see L-9).

4. Stormwater would be collected at two small existing detention basins and outfall through two existing culverts, which will be up-sized as part of the project, into the Pacific Ocean.

5. Additionally two new above ground stormwater conveyance bio-swales will be constructed on the project site to transport stormwater from the mill site to the bottom of the bluff. They would be constructed with a clay lining within two 2-foot high berms, and through an above grade culvert over the bluff edge to the base-rock below.

1.4.4 South Parkland

Restoration of the South Parkland would encompass approximately 5 ac. on either end of the former runway and the area of City property between Highway 1 and the small blufftop cemetery. Restoration efforts would focus on creating locally appropriate native habitats.

The trail network would consist of a multi-use primary trail of approximately 6,100 linear ft. It would be 8 ft. wide with a 4-ft wide gravel shoulder on the west side. The primary trail extends the length of the property from Noyo Point Road with a turnaround bulb at the terminus near the City's wastewater treatment facility. A series of 5-ft wide pedestrian only trail connections of 5,900 ft. would also be constructed. The existing dirt road through the Soldier Point area is proposed to provide pedestrian access. This existing dirt road will be bound on both sides by symbolic fencing to keep people from treading on special status plants in this area: no new surfacing is proposed for this area. The trail system in the South Parkland also includes the installation of eight benches and nine interpretive signs.

Vehicular access to the South Parkland area would extend west from the Cypress Street gate along an existing unnamed dirt road that would terminate in a 63-space double-loaded asphalt surface parking area at the southern end of the abandoned runway.

The boundary between the parkland parcel and Noyo Point Road would include construction of a six foot high concrete wall to establish a barrier/buffer between the park and the residences on Noyo Point Road, as requested by the residents.

Access to the Noyo Headlands Preserve would be permitted to Native Americans, particularly tribal members of the Sherwood Valley Rancheria, for cultural purposes and to scientists for scientific study only.

1.5 Scoping and Notice of Preparation Process

In compliance with CEQA Guidelines, the City has taken steps to maximize opportunities to participate in the environmental process. During the initial Environmental Impact Report (EIR) process federal, state, regional, and local governmental agencies and other interested parties were contacted to solicit comments and inform the public of the proposed project. This included holding agency scoping meetings and two well-attended public scoping meetings on December 2, 2009, and January 14, 2010. The Notice of Preparation (NOP) for the initial EIR was distributed on December 2, 2009. A revised NOP, which included the South Parkland component, was distributed on March 2, 2010. The proposed project was described, the scope of the environmental review was identified, and agencies and the public were invited to review and comment on the NOP. The original close of the NOP review period was January 2, 2010 and the revised date was April 5, 2010. The Draft EIR was circulated on May 11, 2012. A Final EIR was prepared responding to all comments received. The Final EIR was certified and the MMRP approved by the Council on August 8, 2011. The Planning Commission approved the Coastal Development Permit and Design Review Permit for the Coastal Trail project on August 24, 2011. That CDP was extended on July 24, 2013 and is effective until July 24, 2015.Agencies, organizations, and interested parties not contacted or who did not respond to the request for comments about the project during the preparation of the Initial Draft EIR had the opportunity to comment during a 45-day public review period on the Draft EIR and an initial 45 days comment periods on the Final EIR.

On September 30, 2013, a revised NOP was distributed for this Subsequent EIR to all agencies and the State Clearinghouse. This Subsequent Draft EIR includes a 45 day comment period as well.

1.6 Significant Environmental Impacts Identified

Table ES-1 shows each impact identified and all mitigation measures recommended to reduce or avoid impacts. The most significant impacts identified in the EIR include:

- Biological Resource impacts to Environmentally Sensitive Habitat Areas (ESHA), jurisdictional features including wetlands, riparian habitat, and sensitive wildlife and plant species.

- Cultural Resource impacts to the Fort Bragg Native American Archaeological District, and historic resources due to trail construction and stormwater improvements.

- Water Quality and Stormwater impacts related to the significant changes to the existing stormwater system proposed and potential for erosion and sedimentation. It should be noted that the proposed system would potentially have a beneficial impact to the long-term stormwater management within the Mill Site.

The EIR determined that all impacts identified can be reduced to a level of insignificance with mitigation.

1.7 Project Alternatives

Two alternatives to the proposed project were brought forward for substantial review and comparison in the EIR:

1. No Project Alternative

2. Reduced Trail Alternative

Neither the proposed project nor any of the alternatives would result in significant, unavoidable impacts. Despite the smaller scale of the Reduced Project Alternative it only marginally reduces the intensity of the cultural resource, biological resource, and hydrology impacts. Significant mitigation for each of these resources would still be required. The Reduced Trail Alternative would avoid disturbance of the wetlands along Glass Beach Drive, and would avoid direct disturbance of five of the individual cultural resource sites which compose the Fort Bragg Native American Archaeological District. This would be accomplished by removing many of the secondary trails, and the cable stairs, and by placing the parking area closer to the current end of Elm Street.

At the same time, because any coastal trail project inherently suggests coastal access is provided, removal of the secondary trails and cable stairs in the Reduced Trail Alternative may invite trail users to access the coast through the use of unauthorized trails. As is seen at the Glass Beach Headlands, this type of activity, which can result in trampling of vegetation, accelerated erosion, and introduction of invasive species, can have significant impacts on sensitive biological resources. The HPSR (Van Bueren 2011) prepared for the project notes that cultural resources would be impacted from unauthorized trail development as well: "by eliminating some planned trails, for example, informal trails are more likely to be propagated. That would result in uncontrolled impacts to many sites."

The "No Project" alternative could result in some impacts, primarily related to opening a disturbed site to public access without public improvements, such as parking lots, established trails and restrooms. This alternative could result in accelerated bluff erosion with impacts to native plants, cultural resources and water quality. It would also likely impact parking in adjacent neighborhoods. Additionally the no project alternative would have none of the beneficial effects of the project which include 25 acres of restoration, re-establishment of native plant populations, and various protective measures for cultural resources.

Based strictly on an analysis of the relative environmental impacts, neither the proposed project nor the alternatives is clearly the environmentally superior alternative. However, by default, the proposed project would most effectively meet all of the project objectives. As a result, the proposed project is considered the Environmentally Superior Alternative.

1.8 Impact Summary Table

The table on the following pages provides a summary of the potential impacts of the proposed project. Also summarized in these tables are the mitigation measures associated with each impact that are to be implemented by the project applicant in order to reduce the environmental impacts to a level of insignificance. In accordance with CEQA, the Summary Tables identify the following types of potential impacts associated with the proposed development:

Significant, but Mitigatable Impacts—Significant environmental impacts that can be feasibly mitigated or avoided. The decision maker must issue "Findings" under CEQA Guidelines §15091(a) if the project is approved.

Less Than Significant Impacts—Environmental impacts that are adverse but not significant and for which the decision maker does not have to adopt "Findings" under CEQA.

Beneficial Effect—An effect that would be beneficial, and would reduce existing environmental impacts or hazards. These have not been quantified in the following table. However, potential Beneficial Effects have been described qualitatively in the applicable issue area discussion in the EIR.

Table ES-1-1: Significant Environmental Impacts that can be Feasibly Mitigated or Avoided

(Decision-maker must issue "Findings" under CEQA Guidelines §15091(a) if the project is approved)

Description of Impact	Short/ Long-term	Mitigation Measure Summary	Residual Impact
Air Quality			
AQ Impact 1 The proposed project would potentially contribute to the continued non-attainment of the local PM-10 standard.	Short-term	**AQ/mm-1**The project contractor, on behalf of the project applicant, shall prepare a dust control plan for construction activities at the project site pursuant to the requirements of the MCAQMD. The project contractor shall be responsible for ensuring that all adequate dust control measures are implemented in a timely manner during all phases of construction and maintenance activities at the project site. The dust control plan shall include the following measures: a. Water shall be applied by means of truck(s), hoses, and/or sprinklers as needed prior to any land clearing or earth movement to minimize dust emissions. b. All material excavated, stockpiled, or graded shall be sufficiently watered to prevent fugitive dust from leaving the property boundaries or causing a public nuisance of an ambient air standard. Watering should occur at least twice daily, however frequency of watering shall be based on the type of operation, soil, and wind exposure. c. All on-site vehicle traffic shall be limited to a speed of 15 miles per hour on unpaved roads. d. All trucks hauling soil, sand, or other loose materials on public roads will be covered or required to maintain at least two feet of freeboard. e. All land clearing, grading, earth moving, and/or excavation activities shall be suspended as necessary, based on site conditions, to prevent excessive windblown dust when winds are expected to exceed 20 miles per hour. f. Excavation and grading activities shall be suspended when	Less than Significant

Table ES-1-1: Significant Environmental Impacts that can be Feasibly Mitigated or Avoided

(Decision-maker must issue "Findings" under CEQA Guidelines §15091(a) if the project is approved)

Description of Impact	Short/ Long-term	Mitigation Measure Summary	Residual Impact
		sustained winds exceed 25 mph, instantaneous gusts exceed 35 mph, or dust from construction might obscure driver visibility on public roads. g. All inactive portions of the construction site, including soil stockpiles, shall be covered, seeded, or watered until a suitable cover is established. Alternatively, apply City approved nontoxic soil stabilizers (according to manufacturers' specifications) to all inactive construction areas (previously graded areas that remain inactive for four consecutive days). Acceptable materials that may be used for chemical soil stabilization include petroleum resins, asphaltic emulsions, acrylics, and adhesives that do not violate Regional Water Quality Control Board (RWQCB) or California Air Resources Board (CARB) standards. h. Paved areas adjacent to construction sites (the abandoned runway) shall be swept or washed as required to remove excess accumulations of silt and/or mud, which may have resulted from grading and construction activities at the project site. i. The project proponent shall re-establish ground cover on all disturbed portions of the project site through seeding and watering in accordance with the City of Fort Bragg Grading Ordinance and Local Coastal Program, which requires the application of native seed or terminal seed. j. A publicly visible sign shall be posted with the telephone number and person to contact regarding dust complaints. This person shall respond and take corrective action within 24-hours. The telephone number of the MCAQMD shall also be visible to ensure compliance with the Fugitive Dust Emissions requirements. k. Construction workers shall park in designated parking area(s) to	

Table ES-1-1: Significant Environmental Impacts that can be Feasibly Mitigated or Avoided

(Decision-maker must issue "Findings" under CEQA Guidelines §15091(a) if the project is approved)

Description of Impact	Short/ Long-term	Mitigation Measure Summary	Residual Impact
		help reduce dust emissions.	
Land Use			
LU Impact 1: Opening the use of the Fort Bragg Coastal Trail project to public access may impact cultural uses of the site by Native Americans.	Long-term	LU/mm-1: Site access to the Noyo Headlands Preserve shall be limited through a locked gate to: 1) people of Native American descent who are tribal members of Sherwood Valley Rancheria; 2) scientists that are studying the coastal prairie, marine environment or intertidal environment and who require access to this Noyo Headlands Preserve to conduct scientific research; and 3) City staff engaged in site maintenance, restoration or patrol. The City shall change the combination lock on the gate if non-authorized people access the site. Additionally, SVR Rancheria members will be allowed to continue tribal gathering of plant material, feathers and marine resources as provided by law. The City will undertake a long term (5 year) monitoring plan for cultural resources	Less than Significant
LU Impact 2: The use of the Noyo Headlands Preserve for cultural purposes could potentially impact botanical and biological resources.		LU/mm-2: Site access during the marine mammal pupping season shall be prohibited if marine mammal pups are in evidence, unless the appropriate federal permits have been obtained. During the Marine Mammal Pupping season, City staff shall complete a marine mammal survey to determine if pups are present and shall prohibit all Native American and City Staff access if pups are present and install a sign warning of that condition. LU/mm-3: In order to protect the botanical resources on the site, access shall be limited to twenty people at one time. No camping,	

Table ES-1-1: Significant Environmental Impacts that can be Feasibly Mitigated or Avoided

(Decision-maker must issue "Findings" under CEQA Guidelines §15091(a) if the project is approved)

Description of Impact	Short/ Long-term	Mitigation Measure Summary	Residual Impact
		picnicking, games, or other activities that would result in excessive trampling of the vegetation is permitted. Use shall be limited to walking, collecting, gathering and small gatherings of twenty or fewer people. No vehicular access is permitted.	
Cultural Resources			
AR Impact 1: The construction of one below ground drainage feature and the replacement of two existing culverts will have unavoidable impacts on cultural resources.	Long-term	AR/mm- 1 The City shall hire an archaeologist to prepare a Data Collection Plan for unavoidable impacts to cultural resources. The City will consult with Sherwood Valley Rancheria on the Data Collection Plan contents and protective measures. The Data Collection Plan will be followed prior to, during and after construction. All protective measures identified within the Data Collection Plan, including presence of tribal monitors during all data collection activities shall be incorporated into the plans, specifications and estimates for the project. The City and its contractors will follow the Environmentally Sensitive Action Plan Post Discovery Action Plan and the Monitoring Plan prepared for this project as part of the Data Collection Plan.	
AR Impact 2: Project construction and restoration activities have the potential to impact cultural resources.	Short-term	AR/mm-2 The City of Fort Bragg's cultural resources consultant (archaeologist) shall assist in implementation of all cultural resources mitigation measures. AR/mm-3 To protect cultural resources the City of Fort Bragg shall prepare an Environmentally Sensitive Area (ESA) action plan prior to construction. The plan shall be implemented prior to, during and after construction, as applicable. The plan shall include the following measures: Prior to Construction	Less than Significant

Table ES-1-1: Significant Environmental Impacts that can be Feasibly Mitigated or Avoided

(Decision-maker must issue "Findings" under CEQA Guidelines §15091(a) if the project is approved)

Description of Impact	Short/ Long-term	Mitigation Measure Summary	Residual Impact
		1) ESA action plans for the significant historic and archaeological resources identified shall be clearly described and illustrated in the final construction plans and specifications prepared to guide construction of the project. Protective measures shall be adequately specified and appropriately scheduled in construction document specifications. 2) A qualified cultural resources consultant shall review all construction plans to ensure ESA locations and protective measures are correctly identified on project plans and specifications. The City will consult with SVR at the 90% design stage to ensure that this mitigation measure is carried out. 3) Cultural resources specialists (including tribal monitors) shall attend relevant hand-off meetings with construction contractors to ensure that ESA commitments are addressed. 4) ESA action plans will be discussed during the preconstruction meeting. The importance of ESA action plans will be discussed with construction personnel and it will be stressed that no native soil disturbing construction activity should occur within the ESAs. Additionally, construction personnel will be informed of historic preservation laws that protect archaeological sites against any disturbance or removal of artifacts. 5) The archaeologist will be notified at least three weeks in advance of ground disturbing construction activities within ESAs to ensure they will be available to monitor/review installation of ESA protection and ensure they are in proper locations. A construction schedule will be provided to the archaeological monitor detailing when grading and other	

Table ES-1-1: Significant Environmental Impacts that can be Feasibly Mitigated or Avoided

(Decision-maker must issue "Findings" under CEQA Guidelines §15091(a) if the project is approved)

Description of Impact	Short/ Long-term	Mitigation Measure Summary	Residual Impact
		excavations will occur within ESAs three weeks before such activities begin. 6) One week prior to initiating any native soils disturbance within an ESA, the archaeologist will: 1) perform a field review of completed installation of ESA protections (permanent and/or temporary plastic fencing, chalk marks, staking as feasible); and 2) provide a site tour, project overview and required training (e.g. safety) for Native American Monitors that will work on the project. During Construction 7) The archaeologist will be notified when native ground disturbing activities will begin and will inspect the construction area as necessary during excavation work to ensure that the ESAs are not violated. Inspections shall occur at least weekly, with daily checks preferred in areas of known cultural resources, with reports provided to relevant agencies. 8) Archaeologist will notify the City of Fort Bragg and the State Historic Preservation Officer within 48 hours of any ESA violation or unanticipated discovery to determine how it will be addressed. Consultation with Native Americans shall also be included. After Construction 9) The Archaeologist shall supervise removal of the temporary fencing after construction. 10) The City of Fort Bragg shall prepare a fouryear monitoring plan that includes an annual review of the sites in the project ADI to assess cumulative impacts, measures to address impacts, and an annual report of findings, which would be available for review	

Table ES-1-1: Significant Environmental Impacts that can be Feasibly Mitigated or Avoided

(Decision-maker must issue "Findings" under CEQA Guidelines §15091(a) if the project is approved)

Description of Impact	Short/ Long-term	Mitigation Measure Summary	Residual Impact
		by the public and resource agencies. That plan shall be implemented for at minimum four years, or until it is clear that resources are no longer impacted by the project. AR/mm-4: The project will implement the "post Review Discovery Plan if cultural materials are discovered during construction. AR/mm-5: If human remains are discovered, State Health and Safety Code Section 7050.5 states that further disturbances and activities shall cease in any area or nearby area suspected to overlie remains, and the County Coroner contacted. Pursuant to Public Resources Code Section 5097.98, if the remains are thought to be Native American, the coroner will notify the Native American Heritage Commission (NAHC) who will then notify the Most Likely Descendent (MLD). At this time, the person who discovered the remains will contact the project archaeologist so that they may work with the MLD on the respectful treatment and disposition of the remains. Further provisions of PRC 5097.98 are to be followed as applicable. AR/mm-6: The City shall require Native American monitoring of all construction activities that will result in grading or movement of native soils in cultural resource areas as identified in the Data Collection Plan and in areas not previously cleared for cultural resources where native soils will be disturbed.	
AR Impact 3: The project could potentially impact Culturally Significant Places.	Long-term	AR/mm-7 The City shall complete an ethnographic study of the project site prior to completion of construction to mitigate for non-archaeological impacts of the project to cultural resources and places of cultural significance. AR/mm-8 The City shall provide for Sherwood Valley Rancheria Tribal Member access of the Noyo Headlands Preserve for limited	Less than Significant

Table ES-1-1: Significant Environmental Impacts that can be Feasibly Mitigated or Avoided

(Decision-maker must issue "Findings" under CEQA Guidelines §15091(a) if the project is approved)

Description of Impact	Short/ Long-term	Mitigation Measure Summary	Residual Impact
		cultural activities that will not impact the botanical resources of the site. General public access of the Noyo Headlands Preserve shall be prohibited through the installation of a fence and signage.	
Hazardous Waste/Materials			
HM Impact 1: The proposed project has the potential to impact human health for construction workers unless the Soil Management Plan for the site is followed.		HM/mm-1 DTSC requires that any construction projects which involve grading shall comply with the Soil Management Plan (SMP) prepared for the site. Compliance with the SMP will also be a condition of approval for the grading permit for the site. A copy of the SMP is attached in Appendix B.	
Biological Resources			
BR Impact 1: ESHA natural communities would be temporarily impacted during construction and restoration activities.	Long-term	BR/mm-1 During construction, permanent and temporary impacts to ESHA natural communities shall be avoided/minimized to the extent feasible. The ESHA natural communities which have the potential to be disturbed by the project shall be shown on site plans. Areas in which grading or other disturbance is to occur shall be defined on-site by readily identifiable barriers that will protect the surrounding native habitat areas. Construction equipment and other vehicles shall be prevented from entering ESHA natural communities to be avoided through the use of exclusion zones or other barriers. BR/mm-2 During and following construction, drainage control methods shall be incorporated into the project in a manner that	Less than Significant

Table ES-1-1: Significant Environmental Impacts that can be Feasibly Mitigated or Avoided

(Decision-maker must issue "Findings" under CEQA Guidelines §15091(a) if the project is approved)

Description of Impact	Short/ Long-term	Mitigation Measure Summary	Residual Impact
		minimizes erosion, sedimentation, and the discharge of harmful substances into aquatic habitats during and after construction. BRmm-3 Prior to construction, the applicant will prepare a Hazardous Materials Response Plan or equivalent to allow for a prompt and effective response to any accidental spills. All workers will be informed of the importance of preventing spills and of the appropriate measures to take should a spill occur. All project-related hazardous materials spills within the project site will be cleaned up immediately by the contractor. Spill prevention and cleanup materials will be on-site at all times during construction. BR/mm-4 During construction, to control erosion during and after project implementation, the applicant and contractors will implement standard California Department of Transportation (Caltrans) Best Management Practices (BMPs). BR/mm-5 During construction, the cleaning and refueling of equipment will occur only within a designated staging area and at least 65 ft. from wetlands, other waters, or other aquatic areas. This staging area will conform to BMPs applicable to attaining zero discharge of stormwater runoff. At a minimum, all equipment and vehicles will be checked and maintained on a daily basis to ensure proper operation and avoid potential leaks or spills. BR/mm-6 During construction, trash will be contained, removed from the work site, and disposed of regularly by the contractor. Following construction, all trash and construction debris will be removed from work areas.	
BR Impact 2: Construction of trails within the North Parkland and South Parkland would permanently impact ESHA.	Short	BRmm/7 To limit unauthorized access into ESHA natural communities on the North and South Parkland, after construction, the City of Fort Bragg shall incorporate an ESHA natural community	Less than Significant

Table ES-1-1: Significant Environmental Impacts that can be Feasibly Mitigated or Avoided

(Decision-maker must issue "Findings" under CEQA Guidelines §15091(a) if the project is approved)

Description of Impact	Short/ Long-term	Mitigation Measure Summary	Residual Impact
		fencing plan in the final restoration plan. To avoid cultural resource impact and aesthetic resource impacts, the fencing plan shall be limited in scope and focus on those areas of the project where ESHA natural communities would most likely be subject to unauthorized access (i.e. trail termini, the blowhole, etc.).	
BR Impact 3: Construction of the multi-use trail along Glass Beach Drive will result in temporary impacts to Coastal Act wetland.	Short	BR/mm-8 During construction, any disturbance within jurisdictional wetlands or other waters will take place between June 15 and October 31 in any given year, when the surface water is likely to be dry or at seasonal minimum. Deviations from this work window are not permitted by the City's Certified LCP.	Less than Significant
BR Impact 4: The proposed project could potentially impact state and federally listed species, including Menzies' wallflower within the North and South Parklands.	Short	BR/mm-9: Prior to construction, State Parks and the City of Fort Bragg shall coordinate with CDFW to determine if a Section 2081 Incidental Take Permit (or a Section 2080.1 Consistency Determination) will be required for potential impacts to Menzies' wallflower. BR/mm-10: The following measures shall be implemented to avoid/and or minimize impacts to Menzies' wallflower: a) Prior to construction, the applicant shall implement planning to avoid impacts to the Menzies' wallflower populations consistent with State Parks' vegetation management policy. Federally listed plant species in areas to be impacted shall be mapped during the appropriate flowering season prior to construction. Specific areas with federally listed plant species to be avoided shall be mapped and marked with exclusion zones. Brightly colored exclusion fencing shall be implemented and maintained throughout construction to prevent unauthorized access into environmentally sensitive areas. b) Prior to and during construction, the applicant will retain a	Less than Significant

Table ES-1-1: Significant Environmental Impacts that can be Feasibly Mitigated or Avoided

(Decision-maker must issue "Findings" under CEQA Guidelines §15091(a) if the project is approved)

Description of Impact	Short/ Long-term	Mitigation Measure Summary	Residual Impact
		qualified biological monitor (or monitors) approved by all involved regulatory agencies to ensure compliance with avoidance and minimization measures within the project environmental documents. Monitoring will occur throughout the length of construction or as directed by the regulatory agencies. Full-time monitoring will occur during vegetation removal and erosion control installation. Monitoring may be reduced to part time once construction activities are underway and the potential for additional impacts are reduced. The qualified biological monitor(s) shall have expertise in the botany of the region, be familiar with the identification and distribution of all native and non-native plants within the project area. The biological monitor(s) shall have the authority to halt construction or other ground disturbance in areas where such activity is to be avoided. c) Prior to construction, Menzies' wallflower population boundaries will be flagged or fenced by the contractor under the supervision of a qualified biologist to delineate the limits of allowable site access and disturbance. Areas within the designated project site that do not require regular access will be clearly flagged as off-limit areas to avoid/discourage unnecessary damage to sensitive habitats or existing vegetation within the project site. Within the flagged areas, herbicides will only be used by people trained by State Parks personnel in the identification of rare plants. d) During construction, where there is a risk of herbicide being accidentally applied to rare plants, non-native plants/weeds will be pulled by hand or sprayed with a low-emitting spray nozzle used in conjunction with cardboard shields against the rare plants. Care will be given to ensure that root systems of rare plants are not dislodged. e) During construction, work in new areas will commence only after a rare plant survey is completed.	

Table ES-1-1: Significant Environmental Impacts that can be Feasibly Mitigated or Avoided

(Decision-maker must issue "Findings" under CEQA Guidelines §15091(a) if the project is approved)

Description of Impact	Short/ Long-term	Mitigation Measure Summary	Residual Impact
		f) All people engaged in restoration activities that could harm rare plants will be instructed by City personnel in the identification of such rare plants. g) Prior to construction, the applicant will prepare a final Habitat Mitigation and Monitoring Plan (HMMP) to detail restoration methods, success goals, and monitoring criteria for vegetation and natural habitats. The HMMP will be consistent with Federal regulatory requirements and will be amended with any regulatory permit conditions, as required. The applicant will implement the HMMP during construction and following project completion. h) Prior to and during construction, a component including Menzies' wallflower conservation shall be integrated into an environmental training session for construction personnel working on the project, to be conducted by a qualified biologist. Topics covered shall include site specific environmental issues and sensitive natural resources, avoidance of disturbance, relevant environmental regulations, and standard Best Management Practices (BMPs) identified for the project. All construction personnel shall be required to attend the environmental training session for sensitive biological resources and sign an attendance sheet indicating their agreement to comply with all applicable environmental regulations. i) During construction, the applicant shall appropriately sequester topsoil in areas of proposed disturbance to preserve the seed bank. The topsoil shall be redistributed during re-vegetation efforts. These activities shall be conducted under the direction of qualified biologists. j) During construction, erosion control measures will be implemented by the contractor. Silt fencing, fiber rolls, and barriers (e.g., hay bales) will be installed between the project site and adjacent wetlands and other waters. At a minimum, silt fencing will	

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(Decision-maker must issue "Findings" under CEQA Guidelines §15091(a) if the project is approved)

Description of Impact	Short/ Long-term	Mitigation Measure Summary	Residual Impact
		be checked and maintained on a daily basis throughout the construction period. The contractor will also apply adequate dust control techniques, such as site watering, during construction. k) During construction, the cleaning and refueling of equipment will occur only within a designated staging area and at least 65 feet from wetlands, other waters, or other aquatic areas. This staging area will conform to BMPs applicable to attaining zero discharge of stormwater runoff. At a minimum, all equipment and vehicles will be checked and maintained on a daily basis to ensure proper operation and avoid potential leaks or spills. l) During construction, all project-related hazardous materials spills within the project site will be cleaned up immediately by the contractor. Spill prevention and cleanup materials will be on-site at all times during construction. m) During construction, the spread or introduction of invasive exotic plant species will be avoided to the maximum extent possible. When practicable, invasive exotic plants in the project site will be removed and properly disposed by the contractor, under direction of the biological monitor(s). All vegetation removed from the construction site shall be taken to a certified landfill to prevent the spread of invasive species. If soil from weedy areas (such as areas with poison hemlock or other invasive exotic plant species) must be removed offsite, the top six inches containing the seed layer in areas with weedy species shall be disposed of at a certified landfill. n) After construction, mitigation for impacts to Menzies' wallflower and/or the restoration component of the proposed project shall be accompanied by a monitoring program. Monitoring shall be accompanied by a qualified botanist at least twice a year (once in the spring and once in the summer) for a minimum of five years. Monitoring shall include counts of numbers of both species with	

Table ES-1-1: Significant Environmental Impacts that can be Feasibly Mitigated or Avoided

(Decision-maker must issue "Findings" under CEQA Guidelines §15091(a) if the project is approved)

Description of Impact	Short/ Long-term	Mitigation Measure Summary	Residual Impact
		projections of survival rates, along with the supervision of removal of invasive exotics that may encroach on habitat for this species. o) After construction, the applicant shall, under direction of qualified biologists, conduct weeding in areas disturbed by the original removal of non-native species on a regular basis (at least twice a year for five years).	
BR Impact 5: Implementation of the proposed project would directly and/or indirectly significantly impact non-listed, special-status plant species Blasdale's bentgrass, Mendocino paintbrush, and short-leaved evax.	Long Term	BR/mm-11: Prior to construction, the applicant shall implement planning to avoid impacts to special-status plant species to the extent feasible. Where possible, avoidance can include delay of construction/restoration until after the blooming season for special-status annual plants, to ensure that the seed bank for special status plants is retained on site. Special-status plant species in areas to be impacted shall be mapped during the appropriate flowering season prior to construction. An estimate shall be made of special-status plants that will be impacted. Specific areas with special-status plant species to be avoided shall be mapped and marked with fencing, flagging, or exclusion zones to minimize the potential for unnecessarily impacting plants. BR/mm-12 Prior to construction, if special-status plants cannot be avoided and must be impacted, seed of special-status plants onsite shall be gathered from areas to be impacted for eventual reseeding after ground disturbance has been completed. If feasible, special-status plants in areas proposed for ground disturbance may be salvaged by digging up individual plants (including roots/rhizomes) for immediate transplanting and/or planting in containers for eventual replanting. Re-vegetation success criteria/goals for special-status plants shall be at a minimum 2:1 ratio (i.e., two plants established for each plant lost or two acres of absolute cover established for each acre of absolute cover lost) or a ratio negotiated between the City	Less than Significant

Table ES-1-1: Significant Environmental Impacts that can be Feasibly Mitigated or Avoided

(Decision-maker must issue "Findings" under CEQA Guidelines §15091(a) if the project is approved)

Description of Impact	Short/ Long-term	Mitigation Measure Summary	Residual Impact
		and permitting agencies based on City proposals. Reseeding or transplanting of special-status plant taxa shall be conducted by a qualified botanist or revegetation firm. Specific methods for revegetation of special-status plants shall be detailed in the final HMMP prepared during the permitting process for the project. If transplanting or reseeding is not appropriate for a given species, a combination of habitat protection and/or improvement shall be completed by a qualified botanist and will serve as mitigation, to be detailed in a final HMMP. The final HMMP shall be approved by regulatory agencies including the USFWS and CDFW as applicable. BR/mm-13 Prior to and during construction, a component including special-status plants and conservation shall be integrated into an environmental training session for construction personnel working on the project, to be conducted by a qualified biologist. Topics covered shall include site-specific environmental issues and sensitive natural resources, avoidance of disturbance, relevant environmental regulations, and standard BMPs identified for the project. All construction personnel shall be required to attend the environmental training session for sensitive biological resources and sign an attendance sheet indicating their agreement to comply with all applicable environmental regulations. BR/mm-14 During construction, a biological monitor (or monitors) shall be present during all construction work in or near sensitive habitat areas or areas supporting special-status plant species. Monitoring will occur throughout the length of construction or as directed by the regulatory agencies. Full-time monitoring will occur during vegetation removal and erosion control installation. Monitoring may be reduced to part time with agency approval once vegetation removal has been completed and the potential for additional impacts are reduced. The qualified biological monitor(s) shall have expertise in the botany of the region, be aware of the	

Table ES-1-1: Significant Environmental Impacts that can be Feasibly Mitigated or Avoided

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Description of Impact	Short/ Long-term	Mitigation Measure Summary	Residual Impact
		identification and distribution of all sensitive plants within the BSA, and shall be familiar with the identification of all native and non-native species in the work area. The biological monitor(s) shall have the authority to halt construction or other ground disturbance in areas where such activity is to be avoided. BR/mm-15 During herbicide application, a 15-foot buffer zone shall be established around areas with special-status plant species. No herbicide application shall occur within the buffer zone. Invasive plants within the buffer area shall be removed by hand. BR/mm-16 During herbicide application, special-status plant species shall be covered with appropriate shielding, such as plastic sheeting, 5-gallon buckets, or 20-gallon plastic tubs (depending on size of plants) to protect them during herbicide applications occurring in their vicinity. Plants shall be covered for no more than two hours. BR/mm-17 After construction, mitigation for impacts to special-status plant taxa and/or the restoration component of the proposed project shall be accompanied by a monitoring program. Monitoring shall be conducted by a qualified botanist at least twice a year (once in the spring and once in the summer) for a minimum of four years. Monitoring shall include counts of numbers of sensitive species with projections of survival rates, along with the supervision of removal of invasive exotics that may encroach on rare plant habitat. BR/mm-18 After construction, the applicant shall, under direction of qualified biologists, conduct weeding in areas disturbed by the original removal of non-native species on a regular basis (at least twice a year for four years). BR/mm-19 Prior to construction, qualified biologists shall collect seed from Blasdale's bent grass and grow out enough plants to	

Table ES-1-1: Significant Environmental Impacts that can be Feasibly Mitigated or Avoided

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Description of Impact	Short/ Long-term	Mitigation Measure Summary	Residual Impact
		transplant a minimum of 100 plants in the areas disturbed by construction. Any remaining seed shall be redistributed in suitable habitat within the Study Area. BR/mm-20 During construction and implementation of the restoration activities proposed, the applicant shall establish potential habitat for Blasdale's bentgrass by removing ice plant (Carpobrotus spp.), wild radish (Raphanus spp.) and by removing asphalt covered areas. The areas shall be created or restored and seeded with excess Blasdale's bentgrass seed. The restoration plan shall include a performance measure that a self-sustaining population of at least 446 new individual Blasdale's bentgrass plants (including the 100 noted above) would exist within the project area at the conclusion of restoration. BR/mm-21 The project will remove asphalt and compacted gravel in locations suitable for Mendocino paintbrush and re-vegetate with Mendocino paintbrush in combination with its host plant(s). Revegetation aspects of the proposed restoration will include the planting of suitable host plants for Mendocino paintbrush.	
BR Impact 6: Construction of the proposed project has the potential to impact shoulderband snails, and Northern Red Legged Frogs (NRLF)	Short	BR/mm-22 If any native shoulderband snails are observed during ground disturbance activities in suitable habitat, such snails shall be relocated to suitable habitat outside of the area of disturbance to avoid/minimize injury or mortality. BR/mm-23 Prior to construction, the City shall obtain a letter of permission or equivalent authorization from CDFW to relocate NRLF and other SSC species from work areas encountered during construction within the ADI as necessary. Qualified biologists shall capture and relocate any NRLF (if present) or other SSC species to suitable habitat outside of the area of impact. Observations of SSC species or other special-status species shall be documented on	Less than Significant

Table ES-1-1: Significant Environmental Impacts that can be Feasibly Mitigated or Avoided

(Decision-maker must issue "Findings" under CEQA Guidelines §15091(a) if the project is approved)

Description of Impact	Short/ Long-term	Mitigation Measure Summary	Residual Impact
		CNDDB forms and submitted to CDFW upon project completion.	
BR Impact 7: Construction during the double-crested cormorant and black oyster catcher nesting seasons could impact nesting birds.		BR/mm-24 Prior to construction, nest surveys for double-crested cormorant and oyster catchers shall be conducted by a qualified biologist in areas where construction is proposed to occur within 200 ft. of tidal and bluff habitats. BR/mm-25 Prior to and during construction, if active double-crested cormorant nests are observed, a minimum 200-ft (61-m) buffer/exclusion zone delineated by highly visible flagging/stakes shall be established by a qualified biologist around each active nest until all young have fledged; a 100-ft (30.5-m) exclusion zone is required for active black oystercatcher nests.	
BR Impact 8 Construction of the proposed project could impact protected bird species such as the northern harrier, Bryant's savannah sparrow, white-tailed kite, and other migratory birds which utilize the project site.		BR/mm-26 Prior to construction, vegetation removal along Glass Beach Drive shall be scheduled to avoid the typical nesting bird season (defined as occurring from March 15 to July 31 for most bird species), if feasible. BR/mm-27 Prior to and during construction, if project activities cannot feasibly avoid the typical nesting bird season (defined as occurring from March 15 to July 31 for most bird species), weekly bird surveys of the project areas that will be under construction shall be conducted by a qualified biologist with experience in conducting breeding bird surveys, beginning 30 days prior to the disturbance of suitable nesting habitat. If a protected native bird nest is found, clearance/construction will not occur within an appropriate buffer/exclusion zone (determined by a qualified biologist) delineated by highly visible flagging/stakes until August 1, or until any active nests are vacated and there is no evidence of a second attempt at nesting. BR/mm-28 Prior to and during construction, if active northern	

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Description of Impact	Short/ Long-term	Mitigation Measure Summary	Residual Impact
		harrier nests are observed, a minimum 300-ft buffer/exclusion zone delineated by highly visible flagging/stakes shall be established by a qualified biologist around each active nest until all young have fledged. During construction within 300 ft. of grassland and freshwater marsh habitats during the northern harrier breeding season, a qualified biologist shall conduct weekly monitoring visits to assess the present status of breeding activity and establish exclusion zones as needed. BR/mm-29 Prior to and during construction, if active white-tailed kite nests are observed, a minimum 300-ft buffer/exclusion zone delineated by highly visible flagging/stakes shall be established by a qualified biologist around each active nest until all young have fledged. BR/mm-30 Prior to construction, nest surveys for Bryant's savannah sparrow shall be conducted by a qualified biologist if construction is proposed to occur within 100 ft. of potential grassland and freshwater marsh nesting habitat during the breeding season for the species (April to July). BR/mm31 Prior to and during construction, if active Bryant's savannah sparrow nests are observed, a minimum 100-ft buffer/exclusion zone delineated by highly visible flagging/stakes shall be established by a qualified biologist around each active nest until all young have fledged. During construction within 100 ft. of grassland and freshwater marsh habitats during the Bryant's savannah sparrow breeding season, a qualified biologist shall conduct weekly monitoring visits to assess the present status of breeding activity and establish exclusion zones as needed. BR/mm-32 Prior to and during construction, a training component regarding general nesting bird protection and conservation shall be integrated into an environmental training session for construction personnel working on the project, to be	

Table ES-1-1: Significant Environmental Impacts that can be Feasibly Mitigated or Avoided

(Decision-maker must issue "Findings" under CEQA Guidelines §15091(a) if the project is approved)

Description of Impact	Short/ Long-term	Mitigation Measure Summary	Residual Impact
		conducted by a qualified biologist. Topics covered shall include site specific environmental issues and sensitive natural resources, avoidance of disturbance, relevant environmental regulations, and BMPs identified for the project. All construction personnel shall be required to attend the environmental training session for sensitive biological resources and sign an attendance sheet indicating their agreement to comply with all applicable environmental regulations.	
BR Impact 9: Construction of the proposed project could potentially impact burrowing owls.		BR/mm-33 Prior to construction, nest surveys for Burrowing Owls shall be conducted by a qualified biologist, if construction is proposed to occur within 100 ft. of burrowing owl nesting habitat during the breeding season for the species. BR/mm-34 Based on the proposed location of project-related disturbance, the one previously occupied burrow (2009) will not be impacted; however, if it is determined during the preconstruction survey that occupied burrows could be impacted, the applicant shall implement the following mitigation measures: Burrows, occupied by burrowing owls, shall not be disturbed during the nesting season (February 1 through August 31) unless a qualified biologist approved by CDFW verifies through noninvasive methods that either: a. Birds have not begun egg-laying and incubation; or, b. Juveniles from the occupied burrows are foraging independently and are capable of independent survival. When destruction of occupied burrows is unavoidable, existing unsuitable burrows shall be enhanced (enlarged or cleared of debris) or new burrows created (by installing artificial burrows) at a ratio of 2:1 on protected lands. If avoidance requirements cannot be met and owls must be moved away from the disturbance area, passive relocation techniques shall be used rather than trapping. Passive relocation is	

Table ES-1-1: Significant Environmental Impacts that can be Feasibly Mitigated or Avoided

(Decision-maker must issue "Findings" under CEQA Guidelines §15091(a) if the project is approved)

Description of Impact	Short/ Long-term	Mitigation Measure Summary	Residual Impact
		defined as encouraging owls to move from occupied burrows to alternate natural or artificial burrows that are beyond 160 ft. from the impact zone and that are within or contiguous to a minimum of 6.5 ac of foraging habitat for each pair of relocated owls. Relocation of owls shall only be implemented during the non-breeding season. On-site habitat shall be preserved in a conservation easement and managed to promote burrowing owl use of the site. a. Passive Relocation with One-way Doors -- Owls shall be excluded from burrows in the immediate impact zone and within a 160-ft buffer zone by installing one-way doors in burrow entrances. One-way doors (e.g., modified dryer vents) shall be left in place 48 hours to insure owls have left the burrow before excavation. Two natural or artificial burrows shall be provided for each burrow in the project area that will be rendered biologically unsuitable. The project area shall be monitored daily for one week to confirm owl use of burrows before excavating burrows in the immediate impact zone. Whenever possible, burrows shall be excavated using hand tools and refilled to prevent reoccupation. Sections of flexible plastic pipe shall be inserted into the tunnels during excavation to maintain an escape route for any animals inside the burrow. b. Passive Relocation without One-way Doors -- Two natural or artificial burrows shall be provided for each burrow in the project area that will be rendered biologically unsuitable. The project area shall be monitored daily until the owls have relocated to the new burrows. The formerly occupied burrows may then be excavated. Whenever possible, burrows shall be excavated using hand tools and refilled to prevent reoccupation. Sections of flexible plastic pipe shall be inserted into burrows during excavation to maintain an escape route for any animals inside the burrow.	
BR Impact 8: Construction of the proposed project has the potential to disrupt/disturb a		BR/mm-35 Prior to construction, a component including general marine mammal protection and conservation shall be	

Table ES-1-1: Significant Environmental Impacts that can be Feasibly Mitigated or Avoided

(Decision-maker must issue "Findings" under CEQA Guidelines §15091(a) if the project is approved)

Description of Impact	Short/ Long-term	Mitigation Measure Summary	Residual Impact
sensitive marine mammal species during pupping season.		integrated into an environmental training session for construction personnel working on the project, to be conducted by a qualified biologist. Topics covered shall include site specific environmental issues and sensitive natural resources, avoidance of disturbance, relevant environmental regulations, and BMPs identified for the project. All construction personnel shall be required to attend the environmental training session for sensitive biological resources and sign an attendance sheet indicating their agreement to comply with all applicable environmental regulations. BR/mm-36 Prior to construction, a qualified biologist shall conduct surveys to identify potential marine mammal haul-out sites in the vicinity of the BSA. Binoculars or a spotting scope shall be used for surveying potential haul-out locations, with implementation of exclusion zones as appropriate by a qualified biologist. If project activities will occur within designated exclusion zones, the qualified biologist shall survey potentially affected beach areas for presence of marine mammals. The surveys shall occur the day before work activities are scheduled to commence, with both a morning and afternoon count. If a marine mammal is found to be hauled out within a defined exclusion zone, project construction shall not occur within that exclusion zone until the marine mammal has departed. The condition of any marine mammal observed shall be noted. Marine Mammal Center personnel shall be contacted if the animal appears to be injured or in distress. BR/mm-37 During construction, monitoring by a qualified biologist shall occur every morning work is scheduled to occur for the proposed project within designated exclusion zones. The qualified biologist shall have the authority to halt work if it is determined that project activities are impacting marine mammals.	

Water Quality			
WQ Impact 1 Construction of the proposed project would alter the existing stormwater system, potentially expose native soils and fill to stormwater, and result in erosion and sedimentation.	Long-term	**WQ/mm-1** Prior to construction, final Drainage plans shall be prepared which incorporate recommendation from the Drainage Report and Technical memo. Changes to the proposed Drainage Plan shall include, but not be limited to constructing bioswales with side slopes no steeper than 3:1, constructing them in existing compacted gravel and/or native soil to the maximum extent feasible, maximizing onsite infiltration as feasible and required by the City's Coastal General Plan. **WQ/mm-2** Development of the Final Drainage plans shall be coordinated and consistent with the final Restoration Plan, the Cultural Resources Data Recovery Plan, and biological resource and cultural resource avoidance, minimization, and mitigation measures in this EIR.	Less than Significant