AGENDA
REGULAR MEETING OF THE BOARD OF COMMISSIONERS
HUMBOLDT BAY HARBOR, RECREATION AND CONSERVATION DISTRICT

DATE: **March 24, 2016**

TIME: **Executive Closed Session – 6:00 PM**
Regular Session – 7:00 PM

PLACE: **Woodley Island Marina Meeting Room**

The Meeting Room is wheelchair accessible. Accommodations and access to Harbor District meetings for people with other handicaps must be requested of the Director of Administrative Services at 443-0801 at least 24 hours in advance of the meeting.

1. Call to Order at 6:00 p.m.

a. Move to Executive Closed Session pursuant to the provisions of the California Government Code Sections 54956.8 (Conference with Real Property Negotiators) and 54956.9(a) (Existing Litigation):

1) Conference with Real Property Negotiators
Agency Negotiator: Board President, Executive Director and District Counsel
Under Negotiation:
Lease with Mario's Marina, LLC at Shelter Cove

2) Existing Litigation
Sears v. Humboldt Bay Harbor, Recreation and Conservation District

2. Adjourn Executive Closed Session

3. Call to Order Regular Session at 7:00 P.M. and Roll Call

4. Pledge of Allegiance

5. Report on Executive Closed Session

6. Public Comment

Note: This portion of the Agenda allows the public to speak to the Board on the various issues not itemized on this Agenda. A member of the public may also request that a matter appearing on the Consent Calendar be pulled and discussed separately. Pursuant to the Brown Act, the Board may not take action on any item that does not appear on the Agenda. Each speaker is limited to speak for a period of three (3) minutes regarding each item on the Agenda. Each speaker is limited to speak for a period of three (3) minutes during the PUBLIC COMMENT portion of the Agenda regarding items of special interest to the public not appearing on the Agenda that are within the subject matter jurisdiction of the Board of Commissioners. The three (3) minute time limit may not be transferred to other speakers. The three (3) minute time limit for each speaker may be extended by the President of the Board of Commissioners or the Presiding Member of the Board of Commissioners at the regular meeting of the District. The three (3) minute time limit for each speaker may be enforced by the President of the Board of Commissioners or the Presiding Member of the Board of Commissioners at the regular meeting of the District.

7. Consent Calendar

a. Consideration of approval of minutes from the Board meeting of January 14, 2016.
b. Consideration of approval of Permit and Agreement to Operate a Charter Service with Phillip L. Glenn dba *Celtic Charter Service.*

8. Communications and Reports

a. Executive Director Report
b. Staff Reports
c. District Counsel, District Planner and District Treasurer Reports
d. Commissioner and Committee Reports
e. Other

9. Non Agenda

10. Unfinished Business

11. New Business

a. Consideration of approval of Lease Agreement with Mario's Marina, LLC in Shelter Cove.

b. Consideration of accepting for filing Application for Permit No. 16-04 to City of Arcata Rail-With-Trail Connectivity Project – Humboldt Bay Trail North.

c. Consideration of approval of purchase of VibeCore –D4 Portable Electric Vibracore System from Specialty Devices Inc. not to exceed 14,125.00.

d. Consideration of approval of Memorandum of Understanding with the City of Eureka to cost-share the purchase of the Vibe-Core-D4 Portable Electric Vibracore System.

12. Administrative and Emergency Permits

13. Adjournment

MINUTES (Subject to Approval)
REGULAR MEETING OF THE BOARD OF COMMISSIONERS
HUMBOLDT BAY HARBOR, RECREATION AND CONSERVATION DISTRICT

7a

January 14, 2016

PRESENT:

Commissioner Doss
Commissioner Dale
Commissioner Marks
Commissioner Wilson
Commissioner Higgins

President Marks called the Executive Closed Session to order at 6:05 p.m.

President Marks adjourned Executive Closed Session at 6:48 p.m.

President Marks called the regular meeting of the Board of Commissioners to order at 7:00 p.m.

President Marks led those present in the Pledge of Allegiance.

District Counsel reported on the Executive Closed Session as follows: Conference with Real Property Negotiators regarding the Lease with Mario's Marina at Shelter Cove – no action taken.

PUBLIC COMMENT

Kent Sawatzky told the Board of Commissioners transparency is necessary and gave them a handout, which was a Public Records Act request. He said he has major concerns about the District's transparency, but this request is not being done on a litigious basis. Public Records Act requires requested information is provided in a timely manner.

CONSENT CALENDAR

COMMISSIONER DALE MOVED FOR THE APPROVAL OF THE CONSENT CALENDAR. COMMISSIONER WILSON SECONDED.

Susan Rotwein said she is pleased to see the Travelift brakes are being maintained.

MOTION CARRIED WITHOUT DISSENT.

COMMUNICATIONS AND REPORTS

COMMISSIONER AND COMMITTEE REPORTS:

Commissioner Higgins:

- Reported he and Commissioner Wilson met with Yvonne Everett at HSU regarding some projects for the senior students, such as management of Woodley Island Wildlife Area by adding more native habitat, removal of non-native plants, etc.
- Met with a group of Koreans who are wanting to turn logs into chips and considering leasing some property at Redwood Terminal 2.
- Is on the Board of Directors for the Humboldt Bay Development Association, along with Rhea Williamson, Larry Oetker, Richard Marks and Aaron Newman.
- Steelhead are running and seals are gathering at the mouth of the Mad River.
- The levy between King Salmon and the dog pound is in a perilous condition, especially with high tides expected this weekend.

Commissioner Wilson:

- Met with Commissioner Higgins and HSU's Yvonne Everett. As well as management of the Woodley Island Wildlife Area, another project being considered is looking at bioengineering revetments around Humboldt Bay.

Commissioner Marks:

- Met with multiple agencies regarding the remaining waste at the pulp mill property.

Commissioner Dale:

- Had a great Christmas with his family; week of skiing at Mount Bachelor.
- Attended an aquaculture meeting at the Moss Landing Marine Lab.

Commissioner Higgins:

- Turned 50 a couple of weeks ago.
- Met with Supervisor Bohn, received many phone calls and had live conversations regarding illegal camping and gangway gates at Woodley Island. Commissioner Wilson said he would like to discuss the formation of a Woodley Island Tenant Committee with Commissioner Doss.

EXECUTIVE DIRECTOR'S REPORT

- Humboldt Bay Development Association Meeting – Election of Officers
  - Richard Marks- President
  - Patrick Higgins- Secretary
  - Larry Oetker- Treasurer
- Dredge Sediment Sampling Schedule- 2016 for dredging in 2017
  - City of Eureka Marina
  - "C" Dock
  - Woodley Island
  - Fields Landing
- Dredging Schedule and Disposal Locations:
  - King Salmon - 2016 at White Slough
  - Fields Landing - 2016-17? at White Slough
  - City of Eureka Marina and "C" Street - 2017 at RMT2 to ocean or bay
  - Woodley Island Marina - 2017 at Samoa dewatering lagoons to bay
  - City Docks and Redwood Terminals - 2018-19 at RMT2 or Samoa
- Dredge priority at problem areas first, all areas to depth by 2021;Total volume 290,000 cy - final sediment destination - TBD
- No bids received on Redwood Terminal 2 Substation Repair which were due December 21, 2015; Follow up bids just received - "circuit breakers cannot be repaired"; Installed used rebuilt circuit breakers plus all other work- $395K; With substation, new total of the New Market Tax Credits projects $3,175,317 - budgeted $3,218,742
- Meeting with Regional Water Quality Control Board Staff, DTSC, County Health and EPA regarding Redwood Terminal 2
  - EPA will take 90% of the remaining toxic waste; Remaining 10% is normal house waste, cleaners and paints.
  - Water Board Staff discussions on Dredging and Ocean outfall use.

STAFF REPORTS

Deputy Director

- Working with Wiyot Tribe regarding Assembly Bill 52: Native Americans, California Environmental Quality Act
- Presentation to Wiyot Tribe regarding Coast Seafoods Company Permit Renewal and Expansion Project
- King Salmon dredging permit applications filed
- Water trails implementation grant proposal being developed with City of Arcata

Director of Harbor Operations

- Shelter Cove visit to take inventory of the boats/cars parked on the land – some abandoned. Also working on a business plan to see if it viable for the District to take over the Shelter Cove lease.
- Water Sampling for Mariculture Pre-permitting Project
- Worked with PG&E on the permitting for Redwood Terminal 2 Electrical Upgrade
- Received soundings From Pacific Affiliates which verified shoaling and the need for a 32ft Draft Restriction—Army Corps of Engineers Survey to Come

Director of Facility Maintenance

- Redwood Marine Terminal Berth 1 improvements: Lighting and Secondary Pump
- Redwood Terminal 2 Inspections: Storm water Cleanup and Hazardous Material Inventory

- New Marina Dock Sections Completed, Waiting for Weather Window to Install
- Next Priority is Dredge Wiring

DISTRICT COUNSEL REPORT

- Reported he has been working with the consultants on the New Market Tax Credits documents.

DISTRICT PLANNER REPORT:

- Planning Commission has approved the CDP; appeals period completed with no appeals filed.
- Working on modifying the grant for the CUP/CDP. The County has added staff assigned to that project.
- Woodley Island – moving forward on the seafood market. The Coastal Commission has asked for a Coastal Dependent Industrial variance.
- PG&E's Fields Landing permit application has been filed. A lot line adjustment is needed to convey a parcel of land and requires a general conformity decision by the County.
- Samoa Peninsula Fire District will be reorganized into a community services district.

DISTRICT TREASURER REPORT:

- Continues to work with the auditors' towards the completion of the District's FY 2014-15 audit, which should be completed in 2-3 weeks.

OTHER: None

NON AGENDA: None

UNFINISHED BUSINESS: None

NEW BUSINESS

A. CONSIDERATION OF LETTER OF SUPPORT TO CONGRESSMAN JARED HUFFMAN ENCOURAGING HIM TO INTRODUCE PUBLIC LANDS LEGISLATION – ALISON STERLING NICHOLS.

Alison Sterling Nichols urged the Board to write a letter to Congressman Huffman encouraging him to introduce legislation which would provide protection for watersheds and biologically important places in our public lands, while restoring damaged areas that can expand economic benefits. Many of the damaged areas come from trespass marijuana grows.

COMMISSIONER HIGGINS MOVED FOR APPROVAL OF LETTER OF SUPPORT TO CONGRESSMAN JARED HUFFMAN ENCOURAGING HIM TO INTRODUCE PUBLIC LANDS LEGISLATION. COMMISSIONER DALE SECONDED.

Commissioner Doss said Humboldt Bay is very unique in that there is a lot of commerce and potential for future commerce and harbor activity to work in great balance, one of the District's main charges.

Kent Sawatzky said he strongly supports this type of legislation; protection of our assets and illumination of trespass marijuana grows.

Karen Brooks suggested adding wording to protect hunters. There must be grants for prevention and economic development strategies.

Ms. Sterling said there are grants available for law enforcement. When the infrastructure of the trespass grow is removed, re-establishing the grow usually does not happen because the overhead is too high.

Commissioner Higgins said the Eel River Restoration Projects is an active wilderness movement; areas are cleaned, eco-tourism is promoted.

Commissioner Doss said he would like to amend the motion to include edits about commercial activity and hunting.

COMMISSIONER HIGGINS AND COMMISSION DALE ACCEPTED COMMISSIONER DOSS' FRIENDLY AMENDMENT. MOTION CARRIED WITHOUT DISSENT.

B. CONSIDERATION OF ADOPTION OF RESOLUTION 2016-01, A RESOLUTION AUTHORIZING THE FINANCING OF CERTAIN CAPITAL IMPROVEMENTS AND APPROVING AND DIRECTING THE EXECUTION AND DELIVERY OF AN INSTALLMENT SALE AGREEMENT AND RELATED DOCUMENTS; APPOINTING THE WEIST LAW FIRM AS BOND COUNSEL IN CONNECTION THEREWITH; AND PROVIDING FOR OTHER MATTERS PROPERTY RELATING THERETO.

Cameron Weist attended the meeting by phone.

COMMISSIONER HIGGINS MOVED FOR THE ADOPTION OF RESOLUTION 2016-01, A RESOLUTION AUTHORIZING THE FINANCING OF CERTAIN CAPITAL IMPROVEMENTS AND APPROVING AND DIRECTING THE EXECUTION AND DELIVERY OF AN INSTALLMENT SALE AGREEMENT AND RELATED DOCUMENTS; APPOINTING THE WEIST LAW FIRM AS BOND COUNSEL IN CONNECTION THEREWITH; AND PROVIDING FOR OTHER MATTERS PROPERTY RELATING THERETO. COMMISSIONER DALE SECONDED.

Mr. Weist said the reason the Board is approving an Installment Sale Agreement vs. Loan Agreement is because on new money debt for new project financing there is no body of law that allows for special districts to incur loan agreements. Also this is a taxable transaction as there will be vendors and lessees requiring it to be a taxable transaction. Commissioner Higgins asked why, as a government entity would the District be taxed. Mr. Weist responded that because of the nature of the New Markets Tax Credit program, the assets will be utilized for private purposes.

Commissioner Wilson asked about the rate stabilization fund. Mr. Weist said it is for the protection of the District; there is a need to cover the senior debt service (the 2014 Refunding bonds) with the net revenue. Commissioner Wilson said there was some concern about the District leasing to the marijuana-related industry. Executive Director stated this is a Federal Treasury-related transaction and the District will be taking advantage of federal taxes; therefore Federally-prohibited industries are not allowed to benefit by this transaction.

ROLL CALL VOTE WAS TAKEN:
COMMISSIONER DOSS – AYE
COMMISSIONER DALE – AYE
COMMISSIONER MARKS – AYE
COMMISSIONER WILSON – AYE
COMMISSIONER HIGGINS – AYE

MOTION CARRIED WITHOUT DISSENT.

C. CONSIDERATION OF AGREEMENT FOR BOND COUNSEL SERVICES WITH THE WEIST LAW FIRM.

Executive Director reported that through a 2014 RFP process, the District hired Weist Law Firm for the 2014 refunding revenue bond - extension of services. Lender BBVA Compass Bank recommended Weist Law Firm for New Market Tax Credit Leverage loan - familiarity with terms and conditions of 2014 bond. Under the terms of the agreement, Mr. Weist will prepare and review all documents and render a legal opinion. His fee will be $37,500 plus out of pocket expenses - not to exceed $2,750. Executive Director stated Staff recommends hiring Weist Law Firm.

COMMISSIONER HIGGINS MOVED FOR THE APPROVAL OF THE AGREEMENT FOR BOND COUNSEL SERVICES WITH THE WEIST LAW FIRM. COMMISSIONER WILSON SECONDED. MOTION CARRIED WITHOUT DISSENT.

D. CONSIDERATION OF INSTALLMENT SALE AGREEMENT BETWEEN THE HUMBOLDT BAY HARBOR, RECREATION AND CONSERVATION DISTRICT AND COMPASS BANK FOR $1,154,000.00

Executive Director stated the Installment Sale Agreement is the District's leverage loan for the New Market Tax Credit Program. The Taxable Loan is for 15 years at 6.23% with an annual debt service of $160,000. Lenders cost - no points - lenders counsel not to exceed $12,500. The District must maintain revenue to debt service ratios of 1.25. No property collateral only revenues generated at RMT2. Final approval and documents will be presented to the Board at the January 28th Board meeting. If the NMTC program does not close, Loan is not required. Executive Director stated Staff recommends approval.

COMMISSIONER HIGGINS MOVED FOR THE APPROVAL OF INSTALLMENT SALE AGREEMENT BETWEEN THE HUMBOLDT BAY HARBOR, RECREATION AND CONSERVATION DISTRICT AND COMPASS BANK FOR $1,154,000.00. COMMISSIONER DALE SECONDED.

Kent Sawatzky asked if the collateral does not actually meet the obligation, is there a penalty. Renegotiate?

MOTION CARRIED WITHOUT DISSENT.

E. CONSIDERATION OF APPROVAL OF AGREEMENT WITH JZ CONTRACTING FOR THE REDWOOD TERMINAL 2 PERMANENT INSTALLATION OF NATURAL GAS AND WATER SUPPLY AND EXPANSION OF EXISTING RESTROOMS, NOT TO EXCEED $157,576.00.

Executive Director reported four bids were received, ranging from $157,576 - $302,500. The project consists of installing 2,500' underground two-inch water line and metered laterals into warehouse; 1,300' underground two-inch gas line and metered lateral into warehouse; water and gas connections for future tenants and ADA compliant men's and women's restrooms.

COMMISSIONER HIGGINS MOVED FOR THE APPROVAL OF AGREEMENT WITH JZ CONTRACTING FOR THE REDWOOD TERMINAL 2 PERMANENT INSTALLATION OF NATURAL GAS AND WATER SUPPLY AND EXPANSION OF EXISTING RESTROOMS, NOT TO EXCEED $157,576.00. COMMISSIONER WILSON SECONDED.

Kent Sawatzky asked if the contractor was local and if it is a prevailing wage project. Executive Director replied the contractor is local and it is a prevailing wage project.

MOTION CARRIED WITHOUT DISSENT.

F. CONSIDERATION OF ACCEPTING FOR FILING PERMIT APPLICATION NO. 16-01 FROM THE HUMBOLDT BAY HARBOR, RECREATION AND CONSERVATION DISTRICT FOR THE FISHERMAN'S CHANNEL DREDGING AND BENEFICIAL REUSE PILOT PROJECT.

Commissioner Wilson recused himself because included in the project description are some of his writings for a client.

COMMISSIONER DOSS MOVED FOR ACCEPTING FOR FILING PERMIT APPLICATION NO. 16-01 FROM THE HUMBOLDT BAY HARBOR, RECREATION AND CONSERVATION DISTRICT FOR THE FISHERMAN'S CHANNEL DREDGING AND BENEFICIAL REUSE PILOT PROJECT. COMMISSIONER HIGGINS SECONDED.

Deputy Director reported on the areas of dredging and the reuse of the dredge materials. There are four components to the project: 1) dredge the Fisherman's Channel; 2) Conveyance of dredge slurry through the pipeline to White Slough; 3) Sediment will be used for the White Slough restoration project; and) Mitigation/habitat restoration at the Fields Landing Boat Yard site. He said if the Board accepts this application for filing, the 30-day comment period will begin. The District is the CEQA lead agency and the project qualifies for a Mitigated Negative Declaration that will be circulated on Tuesday, Jan 18.

Commissioner Doss stated the dredging is valuable for the impact it will have on land values.

Deputy Director stated the fingers are privately owned and not all of the landowners are in agreement with the dredging. Executive Director said the beauty of the District owning its own dredge is that not all of the dredging has to be done at once.
Commissioner Doss asked if the fingers would leach into the main channel. Executive Director responded there will be some, but not all the way. The main channel will be dredged. Commissioner Doss commended Staff and the completeness of the information; a great project.

President Marks said it seems ridiculous to move that much dredge spoils through so much pipeline; it should be put on the beach.

Susan Rotwein asked if there will be a formal mitigation bank for the future. Deputy Director responded that a formal mitigation bank would take years and are set up for unknown projects; at this time the District is only looking for agreement from the agencies on mitigation for the Fisherman's Channel dredging.

Kent Sawatzky was surprised there is no one at this meeting from Humboldt Baykeeper, who typically have much to say about these project. He asked when the District removes the pilings around the bay do they have to put in coffer dams for containment. Deputy Director said placement of boom is sufficient.

Alison Talbot, PG&E, said the submittal of the permits this week is a significant milestone. One behalf of Director Loren Sharp, she acknowledged with appreciation the work of the District Staff and Board.

Karen Brooks said there should be a formal mitigation bank for future projects with all the restoration needed around the bay. Levees and dikes need to be restored. Sediment and dredge spoils are too fine to levees and dikes, but could be swapped with CalTrans or combine for use on levees and dikes.

MOTION CARRIED WITHOUT DISSENT.

Commissioner Wilson returned to the meeting.

G. CONSIDERATION OF NOMINATION OF A HARBOR DISTRICT COMMISSIONER TO BE A CANDIDATE FOR THE LAFCO DISTRICT MEMBER.

After some discussion, it was determined there was no interest from the Commissioners to be a LAFCo District member.

H. DISCUSSION OF ILLEGAL CAMPING WITHIN THE HARBOR DISTRICT'S JURISDICTION.

Commissioner Doss said illegal camping is a serious issue across the community. It conflicts with the District's responsibilities. He said the Board should take a stance and let other agencies the District is not in favor of this type of camping and is not going to assist in any way. His constituents' businesses on Broadway are affected. Tourists notice the transients and are alarmed. As a real estate agent, he said the District is a bad steward of the bay if this is allowed to continue. We are very proud of what comes out of Humboldt Bay. The District is not in a social welfare business, but can help other agencies. Commissioner Doss suggested a letter regarding the District's concern be written to the City of Eureka, even if the illegal camping is in their jurisdiction; the lines are blurry. Camping on City property next to the bay is a District concern. Human waste is leaching into the bay. Humboldt Bay is our gem that attracts new people to visit and move here. Let's look at the District's charge and what the Board is expected to do.

Commissioner Higgins said Commissioner Doss' has made good points; but the District's jurisdiction is the mud in the bay, not the land. This is a national problem. The City of Eureka has recognized illegal camping as a crisis. There is a great deal of inhumanity how it is being dealt with; but Commissioner Higgins pointed out it is not his jurisdiction.

Commissioner Dale stated this is not a new subject for the community. He said he is intimately involved through his day to day activities. There are several agencies addressing the problem, but there is no easy fix. Even the portable toilets are a temporary fix. Agrees with supporting the City and County, but not sure what the District can do.

Commissioner Marks said he has a blog and wrote on this issue in 2008. At that time there were hundreds of people living behind the Bayshore Mall. 80% of the people are home grown and have been living there five years or more. It is the same today. What do you do about it?

Commissioner Wilson said people need to be part of the solution, not just complain about the problem. Talk about the impacts to Humboldt Bay, not about the people.

Commissioner Higgins suggested inviting the City of Eureka and County of Humboldt to make a presentation on what they are doing about the illegal camping and how the District can help.

Commissioner Doss said he is surprised, disappointed and ashamed of the State. They don't have a solution, so are staying quiet. The District is the steward of the Bay. Commissioner Doss said he wanted it to be on record that it is not acceptable, not allowable, and not zoned.

Kent Sawatzky said if the homeless are pushed out of one place, they will come to Woodley Island. He urged the District to be proactive and partner with the City of Eureka and County of Humboldt; bring City of Arcata into the mix as well.

Karen Brooks reported Manila has a large homeless population. The Harbor District should be able to go to other state agencies and ask for resources. It is important to work with the children and give them a hand up, but they should have responsibility as well.

Dorothy Shonski said the news said the Harbor District was going to take care of the raw sewage that runs into the bay. Do not get involved on where the people are going. Be watchdogs and take a strong stance on the impacts.

Commissioner Wilson said within the confines of the Harbor District, it is the purview of the Board to address the impacts, not where the people go.

Commissioner Dale said he knows about the impact of raw sewage on water quality. There is human waste on these sites, but the vast majority does not meet the bay. Garbage is the concern for the bay.

I. CONSIDERATION TO PURCHASE AND MAINTAIN PORTA-POTTIES AT PALCO MARSH.

Commissioner Marks said the District had placed porta-potties at the trailhead in Samoa and that was a successful project. Then one was placed behind the Bayshore Mall and at Del Norte Street. The City of Eureka served an eviction notice to the illegal campers behind the Bayshore Mall and they retaliated by vandalizing the porta-potties. This time, he would like the District to partner with the City of Eureka, improve communication and secure the porta-potties, which will have to be purchased.

Commissioner Higgins said he needed further study, determine impacts on staff and consider working with New Directions.

Commissioner Dale suggested asking Harold Hilfiker to build a brick restroom.

Executive Director said the porta-potties can be purchased used and staff will do a better job of anchoring.

Commissioner Wilson asked staff to reach out to John Shelter and New Directions.

Commissioner Doss asked if the restrooms are ADA compliant.

Jack Birdwell, owner of B&B Toilets, said the Department of Health requires one unit for every 15 people. He requires a contract for a responsible party in case of damage. Quite a few units will be needed.

Kent Sawatzky suggested contacting Charlie Bean at Tri-County Living regarding ADA compliance.

Barbara Shumacker, Friends of the Marsh, said on Fridays they provide lunches to the homeless. The women hope the porta-potties return. Buying porta-potties for the marsh would be a win-win with the cleanliness of the bay and allow people to take care of themselves.

Sylvia Shaw, Friends of the Marsh, said she volunteers because of John Shelter; she wanted to see what it is like, who is there and why. On Wednesdays they would haul the trash out of the homeless areas; but now the dumpster has been removed and the trash is piling up. As a group, they could do a fundraiser and purchase porta-potties; but the Harbor District has a different advantage. Collaboration of many agencies would be helpful.

Kim Bergel, Eureka City Councilmember, said the Council has been working on an open space ordinance for over a month. The police have moved people from Del Norte Street south and more attention is being paid – service representatives, trash hauled, etc. Environmental concerns need to be addressed. The porta-potties will be the opportunity for harm reduction. The City cannot have a sanctioned camp, but porta-potties and dumpsters could create that environment. Ms. Bergel encouraged the Board to move forward purchasing porta-potties.

COMMISSIONER HIGGINS MOVED FOR THE APPROVAL TO PURCHASE AND MAINTAIN PORTA-POTTIES AT PALCO MARSH. COMMISSIONER DALE SECONDED.

Commissioner Doss said birds and wildlife are endangered by enabling this type of activity. How many egrets and other animals are not hanging out because people are living in their space?

COMMISSIONER WILSON OFFERED A FRIENDLY AMENDMENT TO DIRECT STAFF TO EXPLORE PLACING DUMPSTERS AS WELL. COMMISSIONERS HIGGINS AND DALE ACCEPTED THE FRIENDLY AMENDMENT. MOTION CARRIED WITH COMMISSIONER DOSS DISSENTING.

ADMINISTRATIVE AND EMERGENCY PERMITS: None

The Regular Meeting of the Board of Commissioners adjourned at 9:55 p.m.

APPROVED BY:

Greg Dale
Secretary

RECORDED BY:

Patricia Tyson
Director of Administrative Services

76

HUMBOLDT BAY HARBOR, RECREATION AND CONSERVATION DISTRICT

PERMIT AND AGREEMENT TO OPERATE A *CHARTER SERVICE*

Startare Drive
Woodley Island Marina
P.O. Box 1030
Eureka, CA 95501

PERMITTEE:
Phillip L Glenn
dba Celtic Charter Service
5105 Woodland Way
Eureka, CA 95503

This Permit and Agreement is executed in triplicate at Woodley Island Marina, Eureka, California, between HUMBOLDT BAY HARBOR, RECREATION AND CONSERVATION DISTRICT, hereinafter referred to as "District", and **PHILLIP L GLENN** dba ***CELTIC CHARTER SERVICE*** hereinafter referred to as "**Phillip L Glenn**."

WHEREAS, Phillip L Glenn will be the Lessee of Slip Number ___, Float __, at the Woodley Island Marina for vessel a vessel, pursuant to a Berthing Permit and Rental Agreement for the Woodley Island Marina; and

WHEREAS, on or about March 08, 2016, **Phillip L Glenn** made a written application to the District for a Permit from the District to operate the business ***Celtic Charter Service*** on a vessel to be moored at Slip Number ___, Float __ at the Woodley Island Marina; and

WHEREAS, Ordinance Number 9, Section 6.78, subparagraph (a) of the District prohibits any commercial endeavor or charter service for hire without a special permit from the District.

AFTER REVIEW AND CONSIDERATION thereof by the Board of Commissioners of the District of the application of **Phillip L Glenn**:

THE PARTIES, THEREFORE, AGREE AS FOLLOWS:

1. District shall permit **Phillip L Glenn**, to operate the business ***Celtic Charter Service*** for the purpose of charter service at the Woodley Island Marina. The charter services shall consist primarily of sport fishing. Diving or diving instruction from or on said vessel shall not be allowed and shall be prohibited at all times at any locations within or without the boundaries of Woodley Island Marina while **Phillip L Glenn** operates the business of charter services from the Woodley Island Marina.
2. The term of this Permit and Agreement shall be for three (3) years commencing May 01, 2016 and terminating on April 30, 2019. District or **Phillip L Glenn** may terminate this Permit and Agreement by giving sixty (60) days written notice of termination to the other party. District may terminate this Permit and Agreement with **Phillip L Glenn** with or without cause or reason by giving **Phillip L Glenn** sixty (60) days written notice of termination and **Phillip L Glenn** shall terminate their business, as defined in Paragraph 1, (60) days from the date of personal service of said written notice of termination or sixty (60) days from the date of deposit or the written notice of termination deposited, enclosed in a sealed envelope with postage thereon fully prepaid, in the United States mail, and addressed to **Phillip L Glenn**, at 5105 Woodland Way, Eureka, CA 95503. In the event **Phillip L Glenn** is in default of any of the provisions of the Berthing Permit and Rental Agreement for the Woodley Island Marina, and **Phillip L Glenn's** Berthing Permit is terminated pursuant to said Agreement, this Permit and Agreement to operate a Charter Service shall terminate forthwith on the date of termination of **Phillip L Glenn's** Berthing Permit and Rental Agreement for the Woodley Island Marina without the requirement of the hereinabove set forth sixty (60) day notice of termination provisions.
3. In addition to the monthly rental payable by **Phillip L Glenn** to the District pursuant to the Berthing Permit and Rental Agreement for the Woodley Island

Marina, **Phillip L Glenn** shall pay District the sum of two hundred fifty dollars and no cents ($250.00) per year, however all rates may be changed pursuant to paragraph 3 of the Berthing Permit and Rental Agreement for Woodley Island Marina which provides that the District may change or increase the rates by giving thirty (30) days notice.

4. On or prior to the date of the Agreement, to wit: May 01, 2016, **Phillip L Glenn** shall purchase and maintain throughout the term of the Permit and Agreement Commercial General Liability insurance covering **Phillip L Glenn** pursuant to the terms of this Permit and Agreement. Said insurance policy of "protection and indemnity insurance" insuring **Phillip L Glenn** from liability for bodily injury, death, or property damage as a result of their operation and shall name District as an additional insured and provide District, prior to May 01 each year, with a Certificate of Insurance stating the amount of the insurance and proof that the District is an additional named insured, and the agreement of said insurance company that District shall be notified forthwith of the event of non-payment of the premium or termination of said insurance policy. The amount of insurance shall be One Million Dollars and no cents ($1,000,000.00) per occurrence. In the event said liability insurance policy referred to in the Paragraph 4 is cancelled or terminated, **Phillip L Glenn** shall forthwith cease and stop their ***Celtic Charter Service*** business at District's premises at the Woodley Island Marina and shall not resume operations until said liability insurance policy is fully reinstated and in full force and effect.

5. **Phillip L Glenn** shall, prior to commencing operation of ***Celtic Charter Service***, obtain any and all necessary permits, if applicable, including but not limited to City of Eureka business license and California Department of Fish and Wildlife licenses.

6. **Phillip L Glenn** agrees that neither the Humboldt Bay Harbor, Recreation and Conservation District, nor its Board of Commissioners, nor any Officer of the District shall be liable to any extent for the injury or damages to any person or

property or for the death of any person arising out of or connected with **Phillip L Glenn,** and **Phillip L Glenn** shall indemnify and hold harmless District, its Commissioners, and Officers free and harmless from any liability for any such injury, death or damages. In addition, **Phillip L Glenn** agrees to hold harmless, indemnify, and hold District non-responsible for any of **Phillip L Glenn's** operations according to the provisions of paragraphs 11, 13, and 19 of the Berthing Permit and Rental Agreement for Woodley Island Marina, a copy of which is attached hereto as Exhibit "A" and incorporated by reference as though set forth in full.

7. **Phillip L Glenn** at all times shall comply and shall obtain compliance of Lessees' family, agents, employees, business visitors, and invitees of all laws, ordinances, rules and regulations, including Ordinance No.9, the Woodley Island Marina Rules and Regulations, and those of local, state, and federal government.
8. **Phillip L Glenn** at all times shall ensure that walkways and finger piers are not obstructed in any manner. No tires, ropes, canvas, or other material shall be nailed or attached to finger piers, docks, and piles without the written approval of the District. No person shall throw, discharge, or deposit from any vessel or from the shore or float or in any other manner, any waste, fish or shellfish parts into or upon the waters of the Woodley Island Marina or upon the banks, walls, sidewalks, or parking areas within the boundaries of the Woodley Island Marina. No person shall place or leave dead animals, fish, shellfish, bait, or other putrefying matter on or along seawalls, harbor structures, floats, piers, sidewalks, or parking areas within the boundaries of the Woodley Island Marina. Vessel must be kept free of trash and waste product so as not to attract seagulls, sea lions, harbor seals, and other animals. All trash and waste product shall be properly disposed of each day.
9. **Phillip L Glenn** may place a sign on the vessel the size of which must be approved by the District's Executive Director. **Phillip L Glenn** may place a

directional sign for incoming traffic onto Woodley Island Marina in an area approved by the Executive Director. Type and size of all signs are to be approved by the Executive Director of the District and, shall reasonably conform in size, shape, and colors of the signs heretofore existing on Woodley Island and the Woodley Island Marina.

10. This Permit and Agreement is not transferable or assignable by **Phillip L Glenn** without approval in writing by the District. Any transfer of assignment or attempted transfer or assignment of this Permit by **Phillip L Glenn** shall be null and void.
11. This Permit and Agreement is non-exclusive and District retains the right to enter into agreements with and grant permits to other persons or business for the same purposes as set forth in this Permit and Agreement.
12. The covenants and conditions herein contained shall apply to and bind the heirs, legal representatives, successors, and assigns of all of the parties hereto; and all of the parties hereto shall be jointly and severally liable hereunder.
13. Time is of the essence of this Permit and Agreement and of each and every covenant, term, and condition, and provision hereof.
14. **Phillip L Glenn** is hereby notified by the District that this Permit and Agreement to Operate ***Celtic Charter Service*** in conjunction with the Berthing Permit and Rental Agreement for a vessel at the Woodley Island Marina or property interests created herein, if any, may be subject to a possessory interest tax or property taxation if created pursuant to Sections 107 to 108 of the California Revenue and Taxation Code and that **Phillip L Glenn** and/or the party in whom the possessory interest is vested may be subject to the payment of property taxes levied upon such interests. **Phillip L Glenn** agrees and acknowledges that they have actual notice pursuant to Section 107.6 of the California Revenue and Taxation Code and that **Phillip L Glenn** may be required to pay a possessory interest tax as a result of this Permit and Agreement to operate a charter service in conjunction with a Berthing Permit and Rental Agreement for

the vessel for Woodley Island Marina. **Phillip L Glenn** hereby acknowledges that they have actual knowledge of the existence of a possessory interest tax and have read the provision of Section 107 to 108 of the California Revenue and Taxation Code. **Phillip L Glenn** agrees to and shall pay all possessory interest taxes levied by any governmental agency by reason of this Permit and Agreement and their Berthing Permit and Rental Agreement for their vessel, for Woodley Island Marina.

EXECUTED on, _____, 2016, by authority of the Board of Commissioners of the HUMBOLDT BAY HARBOR, RECREATION, AND CONSERVATION DISTRICT.

_____
PATRICK HIGGINS, President
Board of Commissioners
HUMBOLDT BAY HARBOR, RECREATION, AND CONSERVATION DISTRICT

Phillip L Glenn, dba *Celtic Charter Service*, as Permittee in this Permit and Agreement hereby accepts and agrees to all terms and conditions herein above set forth.

Dated: _____, 2016 **By**_____
PHILLIP L GLENN, Owner
Celtic Charter Service

11a

LEASE AGREEMENT

This LEASE AGREEMENT ("Lease") is entered into effective as of April 1, 2016 (the "Effective Date") between MARIO'S MARINA, LLC, a California limited liability company ("Lessor" or "Mario's"), and the Humboldt Bay Harbor, Recreation and Conservation District, a California public entity ("Lessee" or "District").

RECITALS:

A. This Lease pertains to the operation by Lessee of Mario's Marina located in Shelter Cove, Humboldt County, California. The area of Mario's Marina in which Lessee may operate marina related activities, services and businesses shall be more particularly described herein and is generally depicted on the drawing attached hereto as **Exhibit A.**

B. Lessor desires to lease the Premises (as defined below) to Lessee, and Lessee is willing to lease the Premises from Lessor and to operate the businesses currently operated therein by Lessor, pursuant to the provisions stated in this Lease.

C. Lessee has inspected the Premises and has investigated the viability of the Businesses (as defined below) and is fully informed of their physical and financial conditions; Lessee acknowledges and understands that Lessor makes no representation or warranty with respect to the suitability of the Premises for Lessee's intended use nor the future financial prospects of the Businesses.

NOW, THEREFORE, Lessor and Lessee mutually agree as follows:

1. **PREMISES.** Lessor leases to Lessee the real properties commonly known as Humboldt County Assessor Parcel Numbers 108-171-023 and 108-171-023R (collectively the "Premises") on which Lessor currently operates the following businesses (collectively, the "Businesses"), and Lessee leases from Lessor such Premises and agrees to operate the Businesses as more particularly provided herein:

(a) Tractor boat launch operation with commercial rights to charge users or sublease the right to operate the launch operation to a third party;

(b) Charter boat license agreements to charge facility use fees;

(c) Commercial boat license agreements to charge facility use fees;

(d) Boat storage area with commercial rights to charge users;

(e) Marina building commercial operation with right to sublease to tenants for uses not inconsistent with the operation and maintenance of a marina operation.

(f) Fish purchasing station with commercial rights to charge facility fee to users or sublease;

(g) Ground lease for operation and maintenance of fish cleaning station and washing station already owned by District (the "Fish Cleaning Station").

2. **INITIAL TERM.** Lessee shall have use and possession of the Premises pursuant to this Lease for an initial term (the "Initial Term") commencing April 1, 2016 (the "Commencement Date"), and ending on March 31, 2021.

3. **RENEWAL TERMS.** Lessee shall have the right to renew this Lease for up to three (3) additional five (5) year terms and two (2) additional ten (10) year terms (each, a "Renewal Term," and the Initial Term and the Renewal Terms collectively, the "Term"), such Renewal Terms to be exercised in any order, in Lessee's sole discretion, by giving Lessor written notice of the intent to renew no later than ninety (90) days prior to the Initial Term or the then-current Renewal Term.

4. **FISH CLEANING STATION LICENSE TERM.** Notwithstanding any other provision of this Lease, including but not limited to Lessee's decision not to renew or to terminate this Lease, the Lessee shall have an irrevocable license to operate and maintain the Fish Cleaning Station for twenty (20) years, commencing April 1, 2016 and ending March 31, 2036. Should the other provisions of this Lease not be renewed or be terminated by the Lessee, the Lessee shall pay $500 per year in advance on or before April 1 of each year 2016-2026 and $1,000 each year for years 2027-2036 as rent for the Fish Cleaning Station for each year during which the remainder of the Premises is not leased by Lessee.

5. **RIGHT TO TERMINATE.** Lessee may terminate this Lease at any time during the Initial Term and first Renewal Term with ninety (90) days' written notice to Lessor if Lessee, in Lessee's sole discretion, determines that the findings of a cultural site investigation precludes the site from being developed as Lessee intends, the Building (as defined below) cannot be reasonably and economically constructed, or in the event any other reason is reasonably likely to make the operation of the Premises and the Businesses not economically feasible for the Lessee. However, such a termination would not affect the Lessee's license to operate and maintain the Fish Cleaning Station as set forth in Section 4, above.

6. **RENT.**

(a) Lessee shall pay no rent during the Initial Term or the first year of the first Renewal Term, but in consideration of the right to possession and use of the Premises, shall: (1) within the first year of the Initial Term, contract for and pay for a cultural site investigation (the "Cultural Survey") of the Premises and the property on which the Premises are located (such property, consisting of the Premises and the Restaurant Property (as defined below), the "Property") as necessary to comply with governmental conditions for approval of the development of the Property; (2) within the first two years of the Initial Term, demolish existing remains of marina building and remove debris; (3) within the first two years of the Initial Term, clean up, grade and fence the boat parking/storage area; (4) within the first four years of the Initial Term, conduct site preparation and seek building permit(s) for the construction of the Building as contemplated in 12(b) hereof; (5) no later than the end of the first year of the first

Renewal Term, commence construction of the Building in accordance with the provisions of Section 12(b) hereof; (6) within the first year of the Initial Term, commence to improve the Fish Cleaning Station and take reasonable measures to improve the discharge system of the station and (7) no later than the end of the third year of the first Renewal Term, contract for and pay an engineer or surveyor to prepare, process with the Humboldt County Planning Department ("Planning"), and record after Planning approval, a parcel map (the "Parcel Map") in accordance with the California Subdivision Map Act to create two separate parcels by lot line adjustment or lot subdivision, one substantially constituting the area of the Premises and one substantially constituting the area of the Restaurant Property. Lessor shall reasonably cooperate with all of the foregoing Lessee obligations by approving (which approval shall not be unreasonably withheld, conditioned or delayed) and signing all applications and other documents reasonably necessary to accomplish Lessee's foregoing obligations. Lessee shall be entitled to retain all revenues, if any, generated by Lessee's operation of the Businesses and Premises.

(b) Notwithstanding the foregoing: (i) in the event the findings of the Cultural Survey would result in the actual out-of-pocket cost of Lessee's obligations set forth in items 4 and 5 of Section 6(a) above to exceed $50,000, Lessee shall be released from such obligations; provided, however, that in such event, Lessee shall then immediately be obligated to pay rent to Lessor; or (ii) in the event the findings of the Cultural Survey would result in delays in the satisfaction of Lessee's obligations set forth in items 4 and 5 of Section 6(a) above beyond the timeframes set forth with respect to each, Lessor and Lessee shall mutually determine, through good faith efforts, an extended timeline for completion of such obligations and a date on which Lessee's obligation to pay rent shall commence. In either event, the rent amount to be paid by Lessee shall be determined in the same manner as set forth in Section 6(c) below.

(c) For any five (5) year period of any Renewal Term, Lessee and Lessor shall attempt to negotiate a reasonable lease rent. If the parties are unable to reach an agreement on rent at least sixty (60) days prior to the commencement of any Renewal Term (or, if applicable, commencement of the second five (5) year period of any ten (10) year Renewal Term), the parties will submit the issue of rental value to an arbitrator mutually selected by the parties. If the parties are unable to agree on an arbitrator, the parties will request the judge of the Humboldt County Superior Court with primary responsibility for civil cases, or the presiding judge of that Court, to appoint an arbitrator from a list of arbitrators nominated the parties (however, that list shall not indicate which party nominated a particular individual). The arbitrator need not be an attorney or retired judge, but may be a real estate broker, appraiser, or other personal with specialized knowledge of commercial lease values. The rental value will be based upon the fair market rental value of the Premises, including the improvements made by the Lessee, as of the start of the applicable Renewal Term. The rent shall be a monthly rent for the applicable Renewal Term or portion thereof, as the case may be.

(d) The arbitrator's decision shall be binding upon Lessor. If Lessee, in Lessee's sole discretion, is of the opinion that the rent is too high, Lessee may decline to lease for the applicable Renewal Term.

7. **RIGHTS OF FIRST REFUSAL.**

(a) During the Term, provided this Lease has not been earlier terminated or expired, that Lessee is not at such time in default of the terms of this Lease and that the Parcel Map has been recorded, Lessee shall have a right of first refusal to purchase the Premises on the same terms and conditions as those offered by a third party and accepted by Lessor subject to this right of first refusal. Lessor shall notify Lessee in writing of any such third party offer and the terms thereof and Lessee may exercise its right of first refusal by providing Lessor with written notice of its exercise of such right. Terms of the purchase will be full payment in cash within one hundred twenty (120) days after Lessee delivers such exercise notice. However, if Lessee has declined to declined to exercise its right of first refusal to purchase the Premises and the Premises is sold by Lessor to a third party, the Lessee's right of first refusal as to the Premises is extinguished and cannot again be exercised.

(b) Lessor also owns a parcel of property in Shelter Cove used for a restaurant, bar, motel and mobile home rental area, shown on Exhibit A as the "Restaurant Property." If Lessor's current tenant operating the restaurant and bar terminates such tenant's lease, Lessee shall have the first right of refusal to lease said the Restaurant Property on the same terms and conditions as those accepted by a third party.

(c) During the Term, provided this Lease has not been earlier terminated or expired, that Lessee is not at such time in default of the terms of this Lease and that the Parcel Map has been recorded, Lessee shall have a right of first refusal to purchase the Restaurant Property on the same terms and conditions as those offered by a third party and accepted by Lessor subject to this right of first refusal. Lessor shall notify Lessee in writing of any such third party offer and the terms thereof and Lessee may exercise its right of first refusal by providing Lessor with written notice of its exercise of such right. Terms of the purchase will be full payment in cash within one hundred twenty (120) days after Lessee delivers such exercise notice. However, if Lessee has declined to declined to exercise its right of first refusal to purchase the Restaurant Property and the Restaurant Property is sold by Lessor to a third party, the Lessee's right of first refusal as to the Restaurant Property is extinguished and cannot again be exercised.

8. **PERSONAL PROPERTY TAXES.** Lessee shall pay before delinquency any taxes, assessments, license fees, and other charges that may be levied and assessed against Lessee's personal property installed or located in or on the Premises and become payable during the Term.

9. **REAL PROPERTY TAXES.** Lessor shall pay all real property taxes and any general and special assessments levied and assessed against the Property.

10. **USE; LIMITATION ON USE; SIGNAGE; ACCESS.** Lessee shall use, and permit use of, the Premises for the uses and operation of the reasonably related business purposes listed in Section 1 above, and for no other purpose without Lessor's prior written consent, which consent shall not be unreasonably withheld. Lessee shall not use or permit the Premises or any part thereof to be used for any purpose or use other than those authorized herein. Any signage to

be installed at the Premises by Lessee shall be subject to prior approval of Lessor, approval which shall not be unreasonably withheld, shall comply with all applicable local sign ordinances and shall be at the sole expense of Lessee. Lessor and Lessee each acknowledge that it is intended that (i) Lessor shall at all times have the right to access the Restaurant Property by passage across the Premises for all purposes reasonably necessary for Lessor's operation of the Restaurant Property and (ii) Lessee shall at all times have the right to access the Premises and the Fish Cleaning Station by passage across the Restaurant Property for all purposes reasonably necessary for Lessee's operation of the Premises and the Fish Cleaning Station.

11. REGULATORY REQUIREMENTS.

(a) Lessee shall use commercially reasonable efforts to enter into any and all agreements with the Shelter Cove Resort Improvement District #1 (the "RID") as may be required by RID for Lessee's operation of the Businesses in compliance with all applicable RID ordinances, regulations or other rules. Any such agreement shall provide for automatic termination of such agreement upon the expiration or earlier termination of this Lease or any Renewal Term.

(b) Lessee shall use commercially reasonable efforts to cooperate with the California State Water Resources Control Board ("WRCB") with a goal of mitigating any water pollution caused by the operation of the tractor launching business.

12. CONDITION AT COMMENCEMENT; MAINTENANCE, REPAIRS AND IMPROVEMENTS; OWNERSHIP OF IMPROVEMENTS.

(a) Lessee has had adequate time and access to the Premises to inspect their condition and accepts the Premises in its condition as of the Effective Date.

(b) Lessee shall construct a new marina building (the "Building") on the Premises. Lessee shall be solely responsible for the planning and completion of such construction in accordance with the following goals:

(i) the exterior of the Building shall be aesthetically pleasing and consistent with the adjacent or nearby structures and natural surroundings;

(ii) the Building shall be appropriate to Lessee's use of the Premises and operation of the Businesses and uses set forth in Section 1, above;.

(c) Lessee shall be solely responsible, at its cost, for construction of improvements and maintaining the Premises during the term of the Lease, including any Renewal Terms.

(d) Lessee shall pay all costs for construction done by Lessee or caused to be done by Lessee on the Premises as permitted by this Lease. Lessee shall keep the Premises free and clear of all mechanic's liens resulting from construction done by or for Lessee. Lessee shall have the right to contest the correctness or the validity of any such lien if, within five (5)

calendar days on demand by Lessor, Lessee procures and records a lien release bond issued by a corporation authorized to issue surety bonds in California in an amount equal to one and one-half (1 and 1/2) times the amount of the claim of lien. The bond shall meet the requirements of Civil Code Section 3143 and shall provide for the payment of any sum that the claimant may recover on the claim (together with any costs of suit and attorney's fees recovered by the claimant in the action). Upon expiration of the Term, Lessor shall own all improvements, including the Building and all fixtures located upon the Premises.

(e) Lessor shall deliver and assign to Lessee all permits and other authorizations or information previously obtained in connection with the demolition of the marina building and construction of the Building and shall approve, in its reasonable discretion, and sign all documents as may be reasonably necessary in its capacity as property owner for Lessee's construction of the improvements contemplated in this Agreement.

13. **UTILITIES AND SERVICES.**

(a) On or before the Commencement Date, to the extent separately metered, Lessee shall have made or shall make all arrangements for and pay all utilities and services furnished to the Premises and utilized in the operation of the Businesses, including, without limitation, gas, electricity, water, telephone service, sewage, heating, air conditioning and ventilating, janitorial , trash collection, any security or burglar alarm system and for all connection charges and deposits, and for all other materials and services which may be furnished to or used on or about the Premises during the Term. To the extent any such utilities are not separately metered, Lessee shall reimburse Lessor for such utilities in an amount reasonably attributable to Lessee's use of the Premises and operation of the Businesses; Lessee and Lessor shall cooperate to determine the amount of Lessee's share of any such utilities that are not separately metered.

(b) Lessee shall be solely responsible, at its cost, for implementation of any necessary upgrades or additions to electrical service to the Premises. Lessor shall retain for its use in its sole discretion all residential unit equivalents ("RUEs") required for the provision of sewer service for the Building and it shall be a condition to the effectiveness and commencement of this Lease that the RID assign to Lessor, at no cost to Lessor, all RUEs currently allocated to Mario's Marina and not otherwise already in use by Mario's Marina. Lessee shall use its commercially reasonable efforts, at its sole cost and expense, to secure all RUEs necessary or required for use in connection with the Building. If Lessee is unable to obtain the RUE's necessary for the Building from the RID despite use of commercially reasonable efforts, and Lessee's operations at the Premises adversely impacts Lessor's discharge capacity needed for its operation of the Restaurant Property, Lessee shall pay a share of the cost of sewer improvements necessary to secure discharge capacity sufficient to serve both Lessee's operation of the Premises and Lessor's operation of the Restaurant Property, such share being equal to Lessee's proportionate discharge capacity needs for its operation of the Premises.

14. **COMPLIANCE WITH LAWS; LESSOR'S ACCESS.**

(a) Lessee expressly understands and agrees that except to the extent Lessee may be exempt as a California public entity, Lessee is responsible for abiding by and complying with all federal, state, county and local laws, rules, regulations and ordinances, including, but not limited to, all "Hazardous Materials Laws"(as defined below), all other laws wages and hours worked, including, but not limited to, the Fair Labor Standards Act of 1938, 29 U.S.C. § 201, et seq.; social security; unemployment insurance; workers' compensation; executive orders; OSHA; Cal/OSHA; labor code laws; migrant workers; seasonal workers; safety; environmental protection; and any other requirements set forth in this Agreement.

(b) For the purposes of this Agreement, "Hazardous Material Laws" shall include any and all federal, state and local laws, regulations, ordinances, codes and policies relating to substances, chemicals, wastes, sewage or other materials that are regulated, controlled or prohibited; or relating to pollution or protection of the environment, of natural resources or of public health and safety, including, but not limited to, the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. § 9601, et seq.; the Resource Conservation and Recovery Act, 42 U.S.C. § 6901, et seq.;the Federal Water Pollution Control Act, 33 U.S.C. § 1251, et seq.; the Clean Air Act, 42 U.S.C. § 7401, et seq.; the California Hazardous Waste Control Act, Cal. Health & Saf. Code § 25300, et seq.; the California Safe Drinking Water and Toxic Enforcement Act, Cal. Health & Saf. Code § 25249.8, et seq.; and the California Porter-Cologne Water Quality Control Act, Cal. Water Code § 13000, et seq.

(c) Lessor and its agents and employees shall have the right to enter in and upon the Premises and the Building at any reasonable time and with reasonable notice to inspect Lessee's operations and confirm that Lessee is complying with this Agreement.

15. **INDEMNITY.** Lessee shall hold Lessor harmless from all loss, liability, damage, cost, and expense (including attorney's fees) arising out of any damage to any person or property occurring in, on or about the Premises, except that Lessor shall be liable to Lessee for damage resulting from any acts or omissions of Lessor or Lessor's authorized representatives, and Lessor shall hold Lessee harmless from all damages arising out of any such acts or omissions of Lessor or Lessor's authorized representatives.

16. **INSURANCE.**

(a) At all times during the term of this Lease, Lessee shall procure and maintain, at Lessee's own expense, all of the following coverage and in the amounts described below:

(i) Workers' Compensation Insurance conforming to the statutory requirements of the State of California;

(ii) Regardless of the minimum statutory requirements of the State of California, employer liability coverage under the above-referenced Workers' Compensation Insurance with minimum limits of no less than $1,000,000;

(iii) General liability (CGL) insurance shall be maintained with minimum limits of $5,000,000 each occurrence; $5,000,000 General Aggregate; and $5,000,000 Products/Completed Operations Aggregate. CGL insurance shall be written on ISO occurrence form CG 00 01 or equivalent and shall cover liability arising from premises, operations, independent contractors, products-completed operations, personal injury and advertising injury, and liability assumed under an insured contract (including the tort liability of another assumed in a business contract). Such CGL insurance shall name and include Lessor as an Additional Insured using ISO additional insured endorsement CG 20 10 04 13 and 20 37 04 13 or their aggregate equivalent;.

(b) Commercial automobile liability insurance shall be maintained with minimum limits of $1,000,000 per accident including coverage for any owned, non-owned, leased or hired vehicle written, or substantially similar coverage procured though a joint powers authority of California governmental entities that provides insurance services and protection for such entities.

(c) The coverage procured by Lessee as required herein shall not include a deductible in excess of $10,000 per loss without Lessor's written approval.

(d) All insurance coverage (the "Policies") shall be procured to the satisfaction and consent of Lessor, which shall not be unreasonably withheld. The Policies shall be endorsed to include (i) a waiver of subrogation and (ii) a provision that specifies the Policies are primary and that any insurance or self-insurance maintained by Lessor shall not contribute with it and (iii) that the waiver of subrogation shall not affect the Lessor's right, or any additional insured's right, to recover under such insurance policy. Lessor shall be entitled to inspect proof of required insurance at any time with reasonable notice to Lessee. If Lessee fails to maintain insurance coverage as required by this Lease, Lessor shall have the right, in addition to any other remedy available to it, to (i) immediately terminate this Agreement on written notice to Lessee or (ii) secure any or all of said Policies and Lessee shall immediately reimburse Lessor for the cost of such Policies upon request by Lessor.

(e) Lessee shall require its subcontractors and subtenants to maintain in full force and effect commercially reasonable insurance coverage substantially similar in form and substance to the insurance coverage required of Lessee in this Section 12, as appropriate to the nature of subcontractors' operations, each with minimum limits of no less than $1,000,000 each occurrence and/or general aggregate, as applicable, unless otherwise agreed to by Lessor in writing. Lessee shall be solely responsible for monitoring compliance by such subcontractors and subtenants with the aforementioned insurance requirements.

(f) Notwithstanding the foregoing, substantially similar coverages and endorsements may be provided through a joint powers authority of California governmental entities that provides insurance services and protection for such entities.

17. **LIMITATION ON VOLUNTARY ASSIGNMENT.** Lessee shall not assign Lessee's interest in this Lease or in the Premises without first obtaining Lessor's written consent,

which consent may be withheld in Lessor's sole discretion. The parties expressly acknowledge that the Lessee's operation of the Premises contemplates subleases with third party tenants or subcontracts, and any such sublease or subcontract does not require the consent of Lessor, provided that the term of any such sublease or subcontract shall expressly expire upon the expiration or earlier termination of this Lease Agreement.

18. **TENANT'S DEFAULT; REMEDIES.** It shall constitute an event of default for Lessee to fail to perform any provision of this Lease if the failure to perform is not cured within thirty (30) days after written notice has been given to Lessee. If the default cannot reasonably be cured within thirty (30) days, Lessee shall not be in default of this Lease if Lessee commences to cure the default within the thirty (30) day period and diligently and in good faith continues to cure the default; provided, however, that Lessee shall be in default if the default is capable of being cured within ninety (90) days and Lessee fails to cure such default within ninety (90) days from written notice to Lessee; provided further, however, that in the event Lessor determines in good faith in its reasonable discretion that such default constitutes a material default that is incapable of being cured, Lessor may terminate this Lease upon ninety (90) days' written notice to Lessee.

Notices given under this Section 18 shall specify the alleged default and the applicable Lease provisions and shall demand that Lessee perform the provisions of this Lease within the applicable period of time, or quit the Premises. No such notice shall be deemed a forfeiture or termination of this Lease unless Lessor so elects in the notice.

Subject to the cure periods set forth in this Section 18, upon material default by Lessee, Lessor may terminate Lessee's right to possession of the Premises at any time and may seek any and all other remedies available to Lessor at law or in equity.

19. **SEVERABILITY.** The unenforceability, invalidity, or illegality of any provision shall not render the other provisions unenforceable, invalid or illegal.

20. **ATTORNEY'S FEES.** Each party agrees to indemnify the other for such attorney's fees and costs incurred by the other party (the "Indemnified Party") as a result of the Indemnified Party's becoming a party to any litigation (including arbitration) concerning this Lease, the Premises or the Building or the improvements in which the Premises are located by reason of any act or omission of the other party (the "Indemnifying Party") or the Indemnifying Party's authorized representatives, and not by any act or omission of the Indemnified Palty or any act or omission of that Indemnified Party's authorized representatives. If either party commences an action (including arbitration) against the other party arising out of or in connection with this Lease, the prevailing party shall be entitled to recover from the losing party reasonable attorney's fees and costs of suit.

21. **NOTICES.** All notices, demands, requests, and consents required or desired to be given by Lessor or Lessee hereunder shall be in writing and either served personally or sent by United States mail or United Kingdom Postal Service, certified or registered, postage prepaid, addressed to Lessee at 601 Startare Drive, Eureka, California, 95501, and to Lessor at ****, or

such other address as shall be designated by either party in compliance with the provisions of this Section.

22. **MISCELLANEOUS.**

(a) Time of Essence. Time is of the essence of each provision of this Lease.

(b) Successors. This Lease shall be binding upon and shall inure to the benefit of the parties and their successors, except that nothing in this provision shall be deemed to permit any assignment, subletting, or use of the Premises other than as provided for herein.

(c) Applicable Law. This Lease shall be construed and interpreted in accordance with the laws of the State of California. Unless otherwise agreed in writing by the parties, exclusive jurisdiction and venue for any legal proceeding related to or arising from the Agreement shall be in the Superior Court of the State of California, County of Humboldt.

23. **INTEGRATED LEASE; MODIFICATION.** This Lease contains all the agreements of the parties and cannot be amended or modified except by a writing executed by the party to be charged with any such amendment or modification.

IN WITNESS WHEREOF the parties hereto have executed this Amendment the day and year first written above.

MARIO'S MARINA, LLC	HUMBOLDT BAY HARBOR, RECREATION AND CONSERVATION DISTRICT
By: _____	By: _____
Its: _____	Its: _____

116

City of ARCATA

736 F Street Arcata, California 95521

City Council 822-5953 | City Manager 822-5953 | Public Works 822-5957 | Police 822-2428
Community Development 822-5955 | Environmental Services 822-8184 | A&MRTS 822-3775
Finance 822-5951 | Recreation Division 822-7091 | FAX 822-8018

March 3, 2016

Humboldt Bay Harbor,
Recreation, and Conservation
District
PO Box 1030
Eureka, California 95502

Re: Application for Permit
Arcata Rail-With-Trail Connectivity Project – Humboldt Bay Trail North

Dear HBHRCD:

Please find enclosed the application for an HBHRCD Development Permit for the City of Arcata Rail-With-Trail Connectivity Project, Humboldt Bay Trail North segment. Additional required information regarding the project has been provided in the attachments (listed below).

Fee Schedule
The HBHRCD application fee is enclosed. I understand that in addition to the $100 fee, staff time to process the permit will be billed.

CEQA
The City of Arcata is the Lead Agency under the California Environmental Quality Act (CEQA). The Mitigated Negative Declaration (SCH#2013032008) was certified on May 8, 2013. To account for changes to the mitigation and monitoring plan, an Addendum will be prepared and certified prior to permit issuance.

Thank you in advance for your review and consideration of the HBHRCD Development Permit Application and project information. Please contact Emily Benvie of my staff (707) 825-2102) with any questions regarding this submittal.

Sincerely,

Julie Neander
Deputy Director
Environmental
Services

RECEIVED
MAR - 7 2016
H.B.H.R. & C.D.

Enclosures: HBHRCD Development Permit Applicaiton

Attachment 1: Project Description
Attachment 2: Location Map
Attachment 3: Environmental Commitment Record
Attachment 4: Initial Study/Mitigated Negative Declaration

HUMBOLDT BAY HARBOR, RECREATION AND CONSERVATION DISTRICT

P.O. BOX 1030
Eureka, California 95502
(707) 443-0801
(707) 443-0800 fax

Date Filed_____

General Information	For Commission Use
1.) Name & Address of Developer, Project Sponsor and Legal Owner Applicant: City of Arcata, Attn: Julie Neander Owners: Various – See Project Description, Attachment XX	A. Application No._____ Application Type: Franchise ☐ Permit ☐ Lease ☐
2.) Address of Project and Assessor's block, lot and Parcel Number Various – See Attachment 2, Project Description	B. Date Received by Harbor District C. Date Accepted for filing by BOC
3.) Name, Address and Telephone No. of Person to be contacted concerning this Project Emily Benvie (707) 825-2102 736 F Street, Arcata, CA 95521	D. Date of Public Notice E. Date of Acceptance EIR or Negative Declaration F. Date of Public Notice G. Date of Public Hearings
4.) Attach list of names and addresses of all adjoining property owners	H. Date of Approval Disapproval _____ Conditional _____ Approval _____
5.) List and Describe any other related Permits & Other Public Approvals required for this Project, including those required by City, Regional, State & Federal Agencies. ACOE – Section 404 & 10 Permit RWQCB – 401 Certification CDFW – 1600 Agreement CCC – Coastal Development Permit City of Arcata – Grading	I. Expiration Date
6.) Existing Zoning District: NR, PF, Railroad	Comments
7.) Proposed Use of Site (Title of Project for which this form is filed) Humboldt Bay Trail North – Multiuse Trail	

Describe in detail the proposed project:

Please See Attached

Answer all questions completely on a separate sheet of paper. If the question does not apply to your project, so indicate by marking N.A. If you have questions, please contact the Harbor District Office.

Project Description

8. Site Size **N/A**
9. Square Footage
10. Number of floors of construction **N/A**
11. Amount of off-street parking provided
12. Attach plans
13. Proposed scheduling -
14. Associated projects
15. Anticipated incremental development
16. If residential, include the number of units, schedule of unit sizes, range of sale prices or rents, and type of household size expected. **N/A**
17. If commercial, indicate the type, whether neighborhood, city or regionally oriented, square footage of sales area, and loading facilities **N/A**
18. If industrial, indicate type, estimated employment per shift, and loading facilities. **N/A**
19. If institutional, indicate the major function, estimated employment per shift, estimated occupancy, loading facilities, and community benefits to be derived from the project. **N/A**
20. If the project involves a variance, conditional use or recognizing application, state this and indicate clearly why the application is required.

Are the following items applicable to the project or its effects? Answer yes or no. Discuss all items answered yes. **No.**

21. Change in existing features of any bays, tidelands, beaches, lakes or hills, or substantial alteration of ground contours.

22. Change in scenic views or vistas from existing residential areas or public lands or roads.

23. Change in pattern, scale or character of general area of project.

24. Significant amounts of solid waste or litter. **N/A**

25. Change in dust, ash, smoke, fumes or odors in vicinity. **N/A**

26. Change in ocean, bay, lake, stream or ground water quality or quantity, or alteration of existing drainage patterns.

27. Substantial change in existing noise or vibration levels in the vicinity.

    A. During Construction
    B. During Project Utilization

28. Site on filled land or on slope of 10% or more.**N/A**

29. Use of disposal or potentially hazardous materials, such as toxic substances, flammable or explosives. **N/A**

30. Substantial change in demand for municipal services (police, fire, water, sewage, etc.) **N/A**

31. Substantially increase fossil fuel consumption (electricity, oil, natural gas, etc.). **N/A**

32. Relationship to larger project or series of projects

ENVIRONMENTAL SETTING:

33. Describe the project site as it exists before the project including information on topography, soil stability, plants and animals, and any cultural, historical, or scenic aspects. Describe any existing structures on the site and the use of the structures. Attach photographs of the site. Snapshots or polaroid photos will be accepted.

34. Describe the surrounding properties, including information on plants and animals and any cultural, historical, or scenic aspects. Indicate the type of land use (residential, commercial, etc.) intensity of land use (one-family, apartment houses, shops, department stores, etc.) and the scale of development (height, frontage, set-back, rear yard, etc.) Attach photographs of the vicinity. Snapshots or polaroid photos will be accepted.

----------Questions 35; 36 and 39 MUST BE ANSWERED!----------

35. How will the proposed use or activity promote the public health, safety, comfort, and convenience?

36. How is the requested grant, permit, franchise, lease, right, or privilege required by the public convenience and necessity?

37. Financial statement:
    A. Estimated cost of the project.
    B. How will the project be financed.

38. Describe fully directions necessary to arrive at project site.

39. Will the Applicant agree that as a condition of the permit being issued to Applicant, to indemnify and hold harmless the Humboldt Bay, Harbor Recreation and Conservation District from any and all claims, demands, or liabilities for attorneys' fees obtained from or against demands for attorney's fees, costs of suit, and costs of administrative records made against District by any and all third parties as a result of third party environmental actions against District arising out of the subject matter of this application and permit, including, but not limited to, attorney's fees, costs of suit, and costs of administrative records obtained by or awarded to third parties pursuant to the California Code of Civil Procedure Section 1021.5 or any other applicable local, state, or federal laws, whether such attorneys' fees, costs of suit, and costs

of administrative records are direct or indirect, or incurred in the compromise, attempted compromise, trial, appeal, or arbitration of claims for attorneys' fees and costs of administrative records in connection with the subject matter of this application and permit?

NOTE

The District hereby advises the Applicant that, under California Public Resources Code Section 21089, the District when a lead agency under the Environmental Quality Act of 1970, as amended, pertaining to an Environmental Impact Report (EIR) or a Negative Declaration may charge and collect from the Applicant a reasonable fee in order to recover the estimated costs incurred by the District in preparing an Environmental Impact Report (EIR) or Negative Declaration for the project and the procedures necessary to comply with the provisions of the public resources code on the Applicants project. In the event your project contains an analysis of issues pertaining to the Environmental Quality Act of 1970, as amended, for which District staff is not competent to independently review, or District requires the same in preparation of an Environmental Impact Report (EIR) or Negative Declaration for the project, the District may retain a reviewing consultant to evaluate the content of the Administrative-Draft EIR and Final EIR or Negative Declaration with respect to these issues. The cost of such reviewing consultant services shall be borne by the Applicant.

CERTIFICATION: I hereby certify that he statements furnished above and in the attached exhibits present the data and information required for this initial evaluation to the best of my ability, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

Dated:_____ _____

For_____

Attachment 1

Project Description

Project Description

Location

The project area is in the *Arcata South, California* 7.5-minute U.S. Geological Survey (USGS) topographic quadrangle. The project is located in Arcata, Humboldt County, California. It begins just south of SR 255 (Samoa Boulevard)and runs through Arcata Marsh and Wildlife Sanctuary (AMWS); south along the NCRA ROW, paralleling SR 101; terminating just to the north of Brainard's Slough, north of Eureka (Attachment 2, Site Plan).

The project area includes developed and undeveloped lands in the City of Arcata, and Humboldt County, and along Humboldt Bay spanning Jolly Giant Creek, Butcher's Slough, Gannon Slough, Jacoby Creek, and Old Jacoby Creek. The Humboldt Bay ecosystem accommodates a variety of waterfowl, wading birds and shorebirds, several species of fish and other aquatic organisms, passerines, and raptors. It is apparent from its elevation relative to tidewater and its geomorphic features that the area historically consisted of estuarine habitat, likely composed of salt marsh and slough channels along with other brackish habitats.

The project Assessor Parcel Numbers include:

501-091-006; 021-191-002; 021-191-003; 503-251-002; 503-251-008; 503-232-013; 503-251-003; 503-241-001; 503-241-005; 503-251-012; 503-241-011; 503-241-016; 503-241-012; 503-241-010; 503-251-009; 503-241-014; 503-241-013; 503-211-004; 501-043-001; 501-043-002; 501-043-004; 501-043-005; 501-061-001; 501-061-002

Property ownership is as follows:

- North Coast Railroad Authority (License Agreement finalization pending)
- US Fish and Wildlife Service (License Agreement finalization pending)
- Winzler & Slack Properties
- City of Arcata

Waterbody The project involves permanent impacts (placement of fill) in both palustrine and estuarine wetlands. It includes construction of bridges over Gannon Slough, Butcher Slough, Jacoby Creek, and Old Jacoby Creek. Piles will be driven using a vibratory pile driver. The ultimate receiving water body is Humboldt Bay.

A Natural Environment Study (NES) (Caltrans, 2015), Mitigated Negative Declaration (MND) (SCH # 2013032008), Wetlands Delineation (Winzler and Kelly, 2010), and Wetland Habitat Mitigation and Monitoring Plan (WHMMP) (Winzler and Kelly 2011, updated 2014) were prepared for the project that evaluated impacts and mitigation measures for the project terminus located south of Brainard's Slough. The project has since been modified so that the terminus will now be located just north of Brainard's Slough. Updated wetland impacts and mitigation are discussed below under "Wetlands Impacts and Mitigation." Furthermore, the project will not use the WHMMP, but will rely on Humboldt Bay Area Mitigation (HBAM). The precise mitigation and monitoring plan has not yet been finalized. However, a Memorandum of Understanding (MOU) will be executed and will detail specific mitigation ratios, area, success criteria, and monitoring

to be included in the final mitigation and monitoring plan. An Addendum to the Mitigation Negative Declaration will be prepared to evaluate the changes to the project scope and mitigation.

Proposed Project Area

The trail will be approximately 3 miles in length, which will result in a cumulative 3.25 acres of surfacing. The total project area is approximately 10 acres, which includes all approved staging areas, mitigation locations, and the approximately 14-foot-wide footprint of the proposed trail (i.e., paved section and unpaved shoulders) plus a 5-foot temporary construction buffer area surrounding the proposed trail. Staging areas are located east of I Street, along the north side of G Street, and at the south terminus of the project. The project is located on the coastal plain near to Humboldt Bay. The elevation of the trail and bridges is less than 15 feet above mean sea level (msl), and all nearby waterways are subject to tidal influence.

Construction of the Trail and Bridges

The proposed action will extend a recently completed trail segment that currently follows the NCRA railroad ROW generally southwest through Arcata from near the skate park and Sunset Avenue, at the northern end of town, to just north of SR 255. The proposed trail extension will continue from south of SR 255, adjacent to the existing rail corridor and trails south through AMWS to Butcher Slough, near the Arcata wastewater treatment plant (WWTP), where it will connect with the railroad ROW again. The proposed trail will then follow the railroad ROW south along the eastern shore of Humboldt Bay, with Humboldt Bay National Wildlife Refuge (HBNWR) directly to the west and SR 101 immediately to the east. The proposed trail extension will end just north of Brainard's Slough. The trail will have a two inch thick hot mix asphalt surface and be a 10-feet wide, on average, with 2-feet of shoulder along each side. The total area of asphalt placed will be approximately 135,000 square feet with an estimated volume of 23,000 cubic feet for the entire trail. If rail service returns, all trail segments adjacent to the railroad tracks will include a 4-foot high wood rail fence installed between the trail and the railroad grade. All new bridges (except for Gannon Slough) will be 10-feet wide, with 4 –foot high pedestrian guard rails. Cutting and filling will be necessary in many areas to obtain an appropriate grade for the trail. This will require an estimated 3,510 cubic yards cut and 10,440 cubic yards fill. Some areas defined as wetlands will be impacted by filling, namely the drainage basin bridge area on the north end of AMWS and the drainage ditches along SR 101. The proposed Humboldt Bay Trail–North is considered in three sections for the purposes of the project description.

Section 1 – Samoa Boulevard to the Arcata Marsh North Entrance

This section of trail will follow the railroad ROW south along the west side of the tracks to the north end of AMWS. Land use in this segment is dominated by urban and industrial uses, consisting mainly of hard compacted soils and non-native vegetation. Trail construction will consist mostly of grading and compacting the soils in the railroad ROW, adding road base aggregate to a width of about 14-feet, and applying an asphalt concrete surface to create a 10-foot wide paved trail with 2-foot shoulders along each side. Access for construction of this section will use

existing access routes along South I Street and from the north via Samoa Boulevard. Equipment and materials staging will occur in the northernmost parking lot along South I Street.

Section 2 – Arcata Marsh North Entrance to Butcher Slough Crossing

Here the trail will leave the railroad ROW and surrounding urban area and cross a drainage channel consisting of dense emergent wetland vegetation, with no evidence of channel scour. This channel conveys drainage from surrounding urban and industrial land surfaces to the AMWS and is not tidally influenced. A bridge will be constructed over the drainage channel to an existing trail, on an earthen dike, on the east side of the brackish marsh. This new bridge will consist of four bridge decks extending in a 93-ft span. The bridge will be will be placed on concrete footings constructed at the edge of a wetland in the AMWS. Construction of the bridge and footings will require the filling of approximately 200 square feet of wetland area. These impacts are to be mitigated as part of a comprehensive Wetland Mitigation Plan to be developed in accordance with the HBAM concept and the MOU. The trail will continue south, crossing I Street, following an existing trail along the west side of Arcata Marsh pond. From here, the trail will head southeast along an existing trail/service road to Butcher Slough. Trail construction will consist of grading, scarifying, and compacting the existing berm trail soils and adding road base aggregate to a width of 14-feet and applying an asphalt concrete surface to create a 10-foot wide paved trail, with 2-foot shoulders, along each side, and sloped to match the existing site drainage. Construction access to this section of the trail will be from the existing trail entrance at the Arcata WWTP. Staging areas will be located on the north side of the bridge that is east of the brackish marsh, on the south side of I Street, across from the center of AMWS in a vacant lot, and in the parking lot at the south end of the WWTP. During construction of the bridge located east of the brackish marsh, it will be necessary for work to occur within the existing wetlands and avoidance and minimization measures will adhered to. This includes the placement of construction fabrics and protective pads to prevent rutting, compression of the soil, or destroying existing vegetation.

Section 3 – Butcher Slough to the Bracut Intersection

The trail will then cross Butcher Slough by constructing a new bridge. A new bridge is necessary because 1) retrofitting the existing bridge requires evaluation of the existing load-bearing sewer pipe; 2) the sewer pipe may require future replacement which would necessitate replacement of the entire bridge systems; 3) retrofitting the existing bridge will prohibit access during construction; and 4) the existing abutments would need to be widened, therefore making retrofitting the existing bridge impractical. After crossing Butcher Slough, the trail will reconnect to the railroad ROW just north of the Arcata WWTP. From here, the trail will follow the railroad ROW south along SR 101, with HBNWR to the west and SR 101 to the east. Within this section, the trail will require the construction of new bridges over three waterways. The trail will terminate south of the Bayside cutoff just north of Brainard Slough. This section of trail will largely be constructed on fill originally used to build the railroad grade prism. This section of the proposed trail is adjacent to tidal-dependent wetland (i.e. salt marsh) that exists on the margins of

Humboldt Bay and adjacent waterways with tidal influences, such as Gannon Slough and Jacoby Creek. Trail construction will consist of excavating, grading, scarifying, and compacting the existing railroad fill prism to match the completed trail surface to the surrounding grades and embankments, adding road base aggregate to a width of 14-feet, and applying an asphalt concrete surface to create a 10-foot wide paved trail, with 2-foot shoulders, along each side. Trail sections along the SR 101 corridor will encroach on existing drainage ditches considered to be palustrine or estuarine emergent wetlands (See "Wetlands Impacts and Mitigation," below, for further discussion). Analyses of the potential impacts to the SR 101 ditch system found that the small amount of fill placed will not have significant impacts on the total hydrologic conveyance capacity (Winzler and Kelly 2011).

Construction access to this section of the trail will be via existing city surface streets and pull outs along SR 101. Staging of construction equipment and materials will be located along the trail alignment in several areas. Staging areas will be located on vacant land and pullouts on the west side of South G Street, in existing parking areas located at the Arcata WWTP, in grassy areas between the edge of pavement along SR 101 and the railway grade at the north and south ends of the new trail bridges.

Construction of the Humboldt Bay Trail–North will require five waterway crossings located in stream drainages and tidal sloughs (Drainage ditch, Butcher Slough, Gannon Slough, Old Jacoby Creek, Jacoby Creek), including installation of support piles in or near the stream and slough channels below an elevation of 8-feet above mean sea level. Pertinent elements and considerations of the bridge designs for the purposes of this project description are described in the following paragraphs proceeding from north to south along the trail alignment.

Butcher Slough

As previously stated, A new bridge is necessary because 1) retrofitting the existing bridge requires evaluation of the existing load-bearing sewer pipe; 2) the sewer pipe may require future replacement which would necessitate replacement of the entire bridge systems; 3) retrofitting the existing bridge will prohibit access during construction; and 4) the existing abutments would need to be widened, therefore making retrofitting the existing bridge impractical. Butcher Slough is brackish and receives freshwater input from Jolly Giant Creek about 100 feet northeast and upstream of the new bridge location. In the action area, Butcher Slough is approximately 60 feet wide and less than 10 feet deep, with a vertical tidal range of 1-3 feet. Some excavation near the water's edge to install risers or new concrete cast-in-place footings is required. The proposed bridge will be constructed of a pre-manufactured, 80-foot long by 10-foot wide bridge with pedestrian guardrails and timber decking. No new piles will be required at this location (Table 1).

Gannon Slough

This is the longest of the five proposed pedestrian bridges, with a span of at least 180 feet. It will be located between the current railroad bridge to the west and the southbound lanes of the SR 101 bridge. Gannon Slough is free flowing and tidally influenced at the proposed site. In the action area, Gannon Slough is approximately 170 feet wide and less than 10 feet deep. During minus tides the wetted width of the channel is reduced to less than 10 feet in most portions of the action area. This location is adjacent to HBNWR, which is immediately to the west. There are two tide gates influencing Gannon Slough that are located about 550 and 1,200 feet, respectively, upstream and northeast of the proposed bridge crossing. Eighteen (18) 18-20-inch diameter, round cast-in-place steel shell piles (CISS) to be driven using a vibrating pile driver in or near the slough channel will be needed to construct this bridge (Table 1), ten (10) of which, will be required to be within the active slough channel. The pile placements will consist of four (4) sets of two (2) for the approach decks, and two (2) sets of five for the main span. Three (3) sets of two (2) will be required on the north end of the bridge and one set of two for the approach decks on the south end. The main span piles will be installed in the slough channel below an elevation of 8 feet msl during a minus tide in order to avoid installation in water. No trestles will be necessary during the auguring process of the CISS piles and the drill rig will not encroach on the mud bottom. All pile sets on the approaches will be spaced 25-feet apart, with 180-feet between the pile sets supporting the main span. The proposed bridge will be a pre-manufactured, 180-foot long by 10-feet wide, steel bridge, with a concrete or wood surface and pedestrian guardrails. A vista overlook onto Humboldt Bay and interpretive area will be connected to the trail north of the bridge and will also be constructed at this location using existing ground and will not require pile installation.

Jacoby Creek

A new non-motorized bicycle/pedestrian bridge will be built as part of the proposed action at this location, which will span approximately 80 feet. Jacoby Creek is free flowing and tidally influenced. This creek is approximately 25 feet wide and less than 10 feet deep in the action area. Just east of the proposed bridge location, upstream from the SR 101 northbound lane, the stream corridor includes a dense riparian zone of over 100 feet wide in some locations upstream of the action area. To the west, Jacoby Creek flows freely into the HBNWR. The proposed bridge will be constructed of a pre-manufactured, 80-foot long by 10-foot wide, fiberglass bridge structure, with timber decking and pedestrian guardrails. This bridge will require four (4) 18-20-inch diameter CISS piles to be driven using a vibratory pile driver near the creek channel (Table 1).

Old Jacoby Creek

This location will require a new bridge with a span of approximately 80 feet. Old Jacoby Creek runs under the highway and flow is controlled by a tide gate. The creek flows through two 48-inch metal culverts, less than 20 feet downstream of the proposed bridge crossing and under the railroad grade directly into the HBNWR. The downstream end of these culverts is currently eroding heavily and in need of repair. The proposed bridge will be constructed of a pre-

manufactured, 80-foot long by 10-foot wide, fiberglass bridge structure, with timber decking and pedestrian guardrails. This bridge will require four (4) 18-20-inch diameter CISS piles to be driven using a vibratory pile driver near the creek channel (Table 1), none will be below 8-feet msl.

Table 1. Pile-Driving Parameters for the Arcata Humboldt Bay Trail - North Project

Location	Driver type	Pile type	Pile size		Maximum number of Piles	Piles installed per day	Substrate
			Diameter	Length			
Butcher Slough	NA	NA	NA	NA	NA	NA	Sand-Soft Clay-Stiff Clay
Gannon Slough	Vibratory	Round cast-in-place steel shell	18-20-inch	55-60 feet	18	The south end (7 piles) will take 2 to 3 days. The north end (11 piles) will take 3 to 4 days.	Soft Clay-Sand
Jacoby Creek	Vibratory	Round cast-in-place steel shell	18-20-inch	55-60 feet	4	A minimum of 2 per day for a total of 2 days. A maximum of 4 per day, for 1 day only.	Soft Clay-Sand
Old Jacoby Creek	Vibratory	Round cast-in-place steel shell	18-20-inch	55-60 feet	4	A minimum of 2 per day for a total of 2 days. A maximum of 4 per day, for 1 day only.	Sandy Soft Clay-Sand

Construction Criteria and Methods

No falsework will be required to construct the pedestrian trail bridges. Cranes and/or excavators will be used for lifting and placing pre-manufactured bridge decks onto footings and piles, including pile placement and excavating for cast-in-place concrete footings. Equipment used during construction will be stored on site at designated staging areas. These sites have been designated by the City and will not require any clearing or grubbing for use and are described in the Proposed Project Area. These areas will not occur within any watercourse banks or channels and will be located at least 150 feet from waterways or in an isolated hard-surfaced zone, such as a parking lot. All vehicles will be steam cleaned before any operation below ordinary high

water mark. The proposed staging areas are located adjacent to the proposed trail and will not require construction of any additional temporary access routes.

The proposed trail construction is anticipated to start in March 2017. All new bridges will be fully constructed in one season and in-channel work will be scheduled to occur during minus low tides occurring between July 1st and September 31st of 2017. Limited in-channel work to ebb cycles during minus tides will allow avoiding work in the water. It is estimated that it will take a month to construct each bridge, with the exception of the longest bridge at Gannon Slough. This bridge is expected to take two months. Therefore in order to complete construction of all bridges within the seasonal work window, some bridges will be constructed concurrently. The following describes construction criteria, methods, and the sequence of construction activities associated with installation of all trail bridges. Elements of construction common to all of the bridges is described first, followed by a description, in more detail, of elements that are unique to each bridge.

Construction Elements Common to All Trail Bridges

- Prior to the beginning of construction, install and apply environmental protection, erosion, and sediment control measures.
- Erosion and sediment control includes straw wattle sediment barriers, silt fences, and biofilters, following the Construction General Permit guidelines that will be documented in the project-specific Storm Water Pollution Prevention Plan (SWPPP).
- The installation of piles will occur daily during minus, ebb tides, therefore, dewatering will not be required at bridge installation locations. Auguring out of the CISS piles will not require the use of trestles or encroachment on the mud bottoms.

Butcher Slough:

- Excavate material to install bridge footings and/or abutments. Excavation area will be approximately 5-feet long by a minimum of 10–feet wide and 5–feet deep. Native soil is to be segregated and stockpiled for re-use and stored at the staging areas. This excavation will occur above the high tide level.
- If "bay muds" are present, a layer of nonwoven geotextile fabric will be placed prior to placing fill.
- Construct concrete abutments and footings per specifications (Appendix F, Sheet S-5.0).
- Backfill abutments.
- Place 80- x 10–foot single span, pre-manufactured, bridge, with timber decking and guard rails.
- Construct trail approaches to new bridge.
- Placement of erosion blankets/turf reinforcement mats, where needed.
- Two-percent slopes from trailway crown will provide runoff drainage.

Gannon Slough:

- Excavate material to install bridge footings and abutments. Excavation area will be approximately 5-feet long by a minimum of 10-feet wide and 8-feet deep. Native soil is to be segregated and stockpiled for re-use and stored at the staging areas. This excavation will occur above the high tide level.
- If "bay muds" are present, a layer of nonwoven geotextile fabric will be placed prior to placing fill.
- Construct concrete abutments and footings per specifications (Appendix F, Sheet S-4.0, Sheet S-8.2 (Gannon Slough Overlook)).
- Backfill abutments.
- Prepare sites for vibratory pile installation, this may include access for workers on bay mud using planks.
- Drive with vibratory methods eighteen (18), 18-20 inch diameter steel shells, auger out sediment from inside of pile, place rebar cage in shell, and fill with CIP concrete.
- Place (6) precast, concrete approach slabs with CIP concrete topping.
- Place six (6) precast, concrete bridge wing walls.
- Install 180– x 10–foot, pre-manufactured, steel bridge deck with pedestrian guardrails.
- Construct trail approaches to new bridge.
- Placement of erosion blankets/turf reinforcement mats, where needed.
- Two-percent slopes from trailway crown will provide runoff drainage. Existing drainage ditches adjacent to proposed bridges will remain in place with minor modifications.

Jacoby Creek:

- Excavate material to install bridge footings and abutments. Excavation area will be approximately 6-feet long by a minimum of 10-feet wide and 4-feet deep. Native soil is to be segregated and stockpiled for re-use and stored at the staging areas. This excavation will occur above the high tide level.
- If "bay muds" are present, a layer of nonwoven geotextile fabric will be placed prior to placing fill.
- Construct concrete spread footings per specifications (Appendix F, Sheet S-3.0).
- Backfill abutments.
- Prepare sites for vibratory pile installation, this may include access for workers on bay mud using planks.
- Drive with vibratory methods four (4), 18-20 inch diameter steel shells, auger out sediment from inside of pile, place rebar cage in shell, and fill with CIP concrete.
- Place two (2) precast, concrete approach slabs with CIP concrete topping.
- Place two (2) precast, concrete bridge wings.
- Place 80- x 10-foot single span, pre-manufactured, fiberglass bridge with railings and timber decking.
- Construct trail approaches to new bridge.
- Placement of erosion blankets/turf reinforcement mats where needed.

- Two-percent slopes from trailway crown will provide runoff drainage. Existing drainage ditches adjacent to proposed bridges will remain in place with minor modifications.

Old Jacoby Creek:

- Excavate material to install bridge footings and abutments. Excavation area will be approximately 6-feet long by a minimum of 10-feet wide and 4-feet deep. Native soil is to be segregated and stockpiled for re-use and stored at the staging areas. This excavation will occur above the high tide level.
- If "bay muds" are present, a layer of nonwoven geotextile fabric will be placed prior to placing fill.
- Construct concrete spread footings per specifications (Appendix F, Sheet S-3.0).
- Backfill abutments.
- Prepare sites for vibratory pile installation, this may include access for workers on bay mud using planks.
- Drive with vibratory methods four (4), 18-20 inch diameter steel shells, auger out sediment from inside of pile, place rebar cage in shell, and fill with CIP concrete.
- Place two (2) precast, concrete approach slabs with CIP concrete topping.
- Place two (2) precast, concrete bridge wings.
- Place 80- x 10-foot single span, pre-manufactured, fiberglass bridge with railings and timber decking.
- Construct trail approaches to new bridge.
- Placement of erosion blankets/turf reinforcement mats where needed.
- Two-percent slopes from trailway crown will provide runoff drainage. Existing drainage ditches adjacent to proposed bridges will remain in place with minor modifications.

Wetland Impacts and Mitigation

The field delineation was conducted by Winzler and Kelly in 2010. A total of 8.00 acres of waters of the United States was mapped in the Project area. A total of 9.13 acres of waters of the State was mapped in the Project Area. All waters of the United States are included in waters of the State. Waters of the United States and waters of the State occurred as estuarine, palustrine, riparian and tidal waters. (Note: this includes wetlands within the original project terminus, south of Brainard's Slough).

Permanent Impacts: Implementation of the proposed project will result in permanent impacts on up to 1.78 acres of the United States. This is comprised of 0.48 acres of impacts to estuarine wetlands and 1.30 acres impacts to palustrine wetlands. In addition, approximately .093 acres of wetlands will be impacted by bridge shading; approximately 85% of bridge shading impacts are to mudflat. Finally, approximately .079 acres of riparian (Waters of the State) will be impacted.

Temporary Impacts: : Implementation of the proposed project will result in temporary impacts on up to 1.025 acres to both Waters of the State and Waters of the US. Approximately 0.068 acres of temporary impacts will be to Waters of the State, and approximately 0.957 acres of temporary impacts will be to Waters of the US.

Compensatory Mitigation: Temporary impacts will be mitigated for at a 1:1 ratio in the disturbed areas after completion of construction activities. Permanent impacts will be mitigated at a 4:1 ratio (1:1 Creation, 3:1 Enhancement), or other ratio as agreed by the City and the Corps, North Coast RWQCB, CCC, and the CDFW. The 4:1 ratio is proposed to compensate for temporal losses, because mitigation will occur in 2018/2019, while the project will occur from 2017/2018.

Mitigation for permanent impacts will be implemented by Caltrans, in accordance with the Humboldt Bay Area Mitigation (HBAM) concept design. Because the precise mitigation and monitoring plan has not yet been finalized, a Memorandum of Understanding (MOU) will be executed between the City of Arcata (applicant) and Caltrans (property owner). This MOU will specify, at minimum, mitigation ratios (e.g. palustrine and estuarine), area, success criteria, and five-year monitoring standards to the satisfaction of permitting agencies. The MOU will be a legally binding instrument pursuant to CEQA Guidelines Section 15126.4(a)(2), and will meet all mitigation requirements; it will be formalized prior to construction. The final mitigation and monitoring plan will be prepared in accordance with HBAM and the MOU.

Initially, the Mitigated Negative Declaration considered a previous Wetland and Habitat Mitigation and Monitoring Plan (WHMMP). However, the project has since evolved to rely on HBAM for mitigation. HBAM, will create higher quality estuarine and palustrine habitat. As part of a larger mitigation project, it will restore ecosystem functions over large areas as opposed to small and isolated wetland sites. It will mitigate for permanent impacts, including temporal loss, at a minimum ratio of 4:1. This will be achieved through a 1:1 creation ratio and a 3:1 enhancement ratio. Enhancement will be achieved by converting existing low-functioning palustrine emergent agricultural wetland into forested/scrub wetland. The forested/scrub wetland type was characteristic of the historical ecology of the Humboldt Bay area prior to agricultural conversion. Restoring this habitat type will provide a more ecologically diverse and productive habitat than currently exists. An addendum to the certified Mitigated Negative Declaration will be prepared prior to permit issuance in order to evaluate the changes in mitigation.

Following the approval and mitigation permit issuance by the pertinent regulatory agencies, the final mitigation and monitoring plan will be completed.

Temporary impacts to wetlands shall be avoided through implementation of avoidance and minimization measures. All construction staging activities will be located in upland areas, away from wetland features, to the extent practicable. Temporary barriers to intrusion (e.g., exclusionary fencing) shall be placed at the edge of the verified wetland boundaries to ensure that construction equipment and access do not encroach on jurisdictional waters

Bridge Shading and Riparian Impacts: Mitigation is not proposed for bridge shading or riparian (Waters of the State) impacts. Riparian habitat, which is included under California Coastal Act one-parameter wetland definition, occurs in the project area largely as narrow strips of hydrophytic riparian vegetation along ditches (SR 101 and railroad ROW drainage ditch) and at stream and slough crossings or as scattered bunches of willows largely contained in areas. This riparian habitat is dominated by Himalayan blackberry, as well as some willow species and red alder. Although this habitat is considered to be a wetland based on the Coastal Act definition,

there will not be significant impacts to riparian habitat because minimal contiguous riparian habitat exists. The most substantive riparian habitat that could be considered a riparian corridor is located south of SR 255, which has been recently augmented by City tree planting projects; impacts to this portion of riparian habitat will be minimal. Approximately 0.08 acres of riparian habitat will be permanently impacted as a result of the project. Bridge shading impacts are predominantly to mudflat habitat. Because the mudflat habitat will not be significantly altered by shading, no mitigation is proposed.

AVOIDANCE AND MINIMIZATION

The proposed project will minimize the effect on riparian vegetation and wetlands by implementing the Conservation Measures outlined in the Environmental Commitment Record (Attachment 4). In addition, a SWPPP will be prepared by a QSD prior to construction. Avoidance and minimization measures for impacts to riparian vegetation and wetlands are summarized as follows:

- The width of the construction disturbance will be minimized through careful pre-construction planning.
- To avoid unnecessary effects, exclusionary fencing shall be installed along the boundaries of all riparian areas to be avoided to ensure that impacts to riparian vegetation outside of the construction area are minimized.
- All pedestrian and vehicular traffic into the avoided areas delineated by the fencing shall be prohibited during construction.
- To the maximum extent practicable, activities that increase the erosion potential in the project area shall be restricted to the relatively dry summer and early fall period to minimize the potential for rainfall events to transport sediment to surface water features. If these activities must take place during the late fall, winter, or spring, then temporary erosion and sediment control structures shall be in place and operational at the end of each construction day and maintained until permanent erosion control structures are in place.
- Areas where wetland and upland vegetation need to be removed shall be identified in advance of ground disturbance and limited to only those areas that have been approved.
- Within 10 days of completion of construction in those areas where subsequent ground disturbance will not occur for 10 calendar days or more, weed-free mulch shall be applied to disturbed areas to reduce the potential for short-term erosion. Prior to a rain event or when there is a greater than 50 percent possibility of rain within the next 24 hours, as forecasted by the National Weather Service, weed-free mulch shall be applied to all exposed areas upon completion of the day's activities. Soils shall not be left exposed during the rainy season.
- Suitable BMPs, such as silt fences, straw wattles, or catch basins, shall be placed below all construction activities at the edge of surface water features to intercept sediment before it reaches the waterway. These structures shall be installed prior to any clearing or grading activities.
- If spoil sites are used, they shall be located such that they do not drain directly into a surface water feature, if possible. If a spoil site drains into a surface water feature,

catch basins shall be constructed to intercept sediment before it reaches the feature. Spoil sites shall be graded and vegetated to reduce the potential for erosion.

- Sediment control measures shall be in place prior to the onset of the rainy season and will be monitored and maintained in good working condition until disturbed areas have been revegetated.
- A site-specific spill prevention plan shall be implemented for potentially hazardous materials. The plan shall include the proper handling and storage of all potentially hazardous materials, as well as the proper procedures for cleaning up and reporting any spills. If necessary, containment berms shall be constructed to prevent spilled materials from reaching surface water features.
- Equipment and hazardous materials shall be stored 50 ft away from surface water features.
- Vehicles and equipment used during construction shall receive proper and timely maintenance to reduce the potential for mechanical breakdowns leading to a spill of materials. Maintenance and fueling shall be conducted in an area at least 50 ft away from waterways or within an adequate fueling containment area.

HBHRCD Permit-Specific Questions

9. Square Footage

The trail will span approximately 3 miles with 3.2 acres of impervious surfacing.

11. Amount of off-street parking

In order to minimize project impacts and promote active transportation, no new parking facilities are proposed. AMWS currently has four parking lots, and there is ample off-street parking located along portions of the trail to accommodate visitors from outside of the immediate area.

13. Proposed Scheduling

Construction is scheduled for Spring 2017-Fall 2018

14. Associated Projects

Rail with Trail Phase 1 (completed November 2015); Eureka Waterfront Trail (Not yet implemented); Humboldt Bay Trail South (not yet implemented)

15. Anticipated Incremental Development

See #14, above.

21. Change in Existing Features

The existing railroad right of way will be developed with a non-motorized multi-use trail. This will require 4 bridge crossings. Approximately 10,440 cubic yards of fill is required. There will be no significant changes to existing features, as no major structures or land alterations are proposed.

22. Change in Scenic Vistas

The trail minimizes alteration to natural landforms to the maximum extent practicable considering design constraints and sea level rise planning. Vegetation removal is minimized to the greatest extent practicable. No new fencing is proposed beyond what is necessary to comply with safety requirements, which is limited to bridges and their approaches, in addition to the viewing platform. The heights of all proposed fences are minimized to maintain a clear

viewshed. The tallest bridge will have a maximum height of 15 feet. Because minimal structures are proposed over a three mile span, the project will not significantly alter the existing setting.

23. Change in Pattern, Scale, or Character of General Area of Project

Currently, there is not significant human use of the land. Upon implementation of the project, the area within the trail footprint will be used for recreation and non-motorized transportation.

26. Change in Ocean ... Alteration of Existing Drainage Patterns

No changes to the ocean, bay, sloughs, or ground water quality or quantity, or alterations of existing drainage patterns are proposed. The project includes maintaining existing drainage patterns and conveying stormwater to prevent any increase in runoff due to impervious surfaces. Bridges will not alter the existing hydrology of the slough channels. Implementation of standard BMPs will ensure that water quality is not degraded.

27. Substantial change in existing noise or vibration levels in the vicinity.

A. During Construction: during construction, there will be construction-generated noise. A vibratory pile driver will be used for pile installation to minimize noise impacts.

B. During Project Utilization: Upon construction completion, the project will not change the existing noise or vibration levels in the vicinity.

32. Relationship to larger project or series of projects

The project is a critical link in a trail system that will provide a non-motorized trail linking northern Arcata to southern Eureka. The other trails are the Hikshari Trail; Eureka Waterfront Trail; Humboldt Bay Trail South; Humboldt Bay Trail North; and Rail with Trail Phase I.

33. Describe the project site as it exists before the project including information on topography, soil stability, plants and animals, and any cultural, historical, or scenic aspects. Describe any existing structures on the site and the use of the structures. Attach photographs of the site. Snapshots or polaroid photos will be accepted.

The action area is located in the coastal plain of tributaries to Arcata Bay, in the northeast section of Humboldt Bay. The trail will cross vacant land, NCRA ROW, City of Arcata street ROWs, Arcata Marsh trails, wildlife habitat, and wetlands. Bridges will span Jolly Giant Creek, Butcher's Slough, Gannon Slough, Jacoby Creek, and Old Jacoby Creek. Most of the trail corridor consists of human-altered soils as a result of cut-and-fill for road development, railroad development, berm/dike installation and manipulation, agricultural uses, urban development, wastewater treatment infrastructure, highway roadbed, and railroad fill. Much of the vegetation has similarly been altered from long-term land uses, and consists of many non-native and disturbance oriented species. Site hydrology has also been historically altered from estuarine habitat to that of urban uses (Winzler & Kelley 2010).

The proposed project lies within the North Coast region and the Coast Ranges geomorphic province. The bedrock geology of Humboldt County as a whole divides generally into the Klamath Mountain province in the northeast and the Coast Ranges province in the central and southwest parts of the county. The North Coast is the location of numerous fault lines and is near the intersection of three tectonic plates, the Pacific, Gorda, and North American. Soils in the vicinity are generally coarse to fine alluvium deposits typical of northwest California coastal plains. Near the Bracut area the soil is of the Hookton Formation, consisting of mainly sandstone

with clay and gravel. In much of the action area, non-native soils used as fill for the railroad grade and highway construction are present (Winzler & Kelley 2010).

The waterways in the action area are part of the larger Humboldt Bay ecosystem that accommodates a variety of waterfowl, wading birds and shorebirds, several species of fish and other aquatic organisms, passerines, and raptors. It is apparent from its elevation relative to tidewater and its geomorphic features that the area historically consisted of estuarine habitat, likely composed of salt marsh and slough channels along with other more brackish water habitats. Although much of the historic estuary has been converted to other land uses, some estuarine habitat still exists. The habitat that remains has been severely degraded by the installation of tide gates and other land management practices. These modifications also have had a pronounced effect on flood routing and sedimentation. Land use in the watershed includes a mix of residential, agricultural, and municipal infrastructure.

Both cultural and historic resources review have been conducted to determine potential impacts of the project on these resources. An Archaeological Survey Report was prepared by James Roscoe (2014), which did not identify any cultural resources within the Area of Potential Effects. Historical Resources Evaluation Report and Historic Property Report were also prepared in 2014, and the Office of Historic Preservation State Historic Preservation Officer concurred on October 29, 2015 that no properties within the Area of Potential Effects are eligible for the National Register of Historic Places.

The project is not located within a designated Coastal Scenic, Coastal View, or Design Review area. The trail minimizes alteration to natural landforms to the maximum extent practicable considering design constraints and sea level rise planning. Vegetation removal is minimized to the greatest extent practicable. No new fencing is proposed beyond what is necessary to comply with safety requirements, which is limited to bridges and their approaches, in addition to the viewing platform. The heights of all proposed fences are minimized to maintain a clear viewshed. The tallest bridge will have a maximum height of 15 feet. Because minimal structures are proposed over a three mile span, the project will not significantly alter the existing setting.

34.Describe the surrounding properties, including information on plants and animals and any cultural, historical, or scenic aspects. Indicate the type of land use (residential, commercial, etc.) intensity of land use (one-family, apartment houses, shops, department stores, etc.) and the scale of development (height, frontage, set-back, rear yard, etc.) Attach photographs of the vicinity. Snapshots or polaroid photos will be accepted.

The surrounding property includes the Arcata Marsh and Wildlife Sanctuary, Arcata Wastewater Treatment Plant, Highway 101, and HBNWR. Land uses include open space, and recreation, wastewater treatment, City of Arcata corporation yard, and vehicle travel. There are no residences vicinity.

35. How will the proposed use or activity promote the public health, safety, comfort, and convenience?

The proposed trail will provide public access to HBNWR and Humboldt Bay and increased public recreation, nature study, and multi-modal transportation opportunities. It will increase public safety by providing bicycle commuters with an alternative to using the Highway 101 shoulder. The trail # will serve as a critical link providing multi-use non-motorized transportation connecting Arcata to Eureka.

Financial statement:

A. Estimated cost of the project.
$5.1 Million

B. How will the project be financed:
a. City of Arcata Capital Improvement Program
b. Caltrans SHOPP Minor Funds
c. Caltrans Active Transportation Program

38. Describe fully directions necessary to arrive at project site.

See "Project Location," above.

39. The applicant agrees to indemnify and hold harmless HBHRCD, as indicated in #39 of permit.

References

Caltrans, 2015. City of Arcata—Humboldt Bay Trail-North—Natural Environment Study.

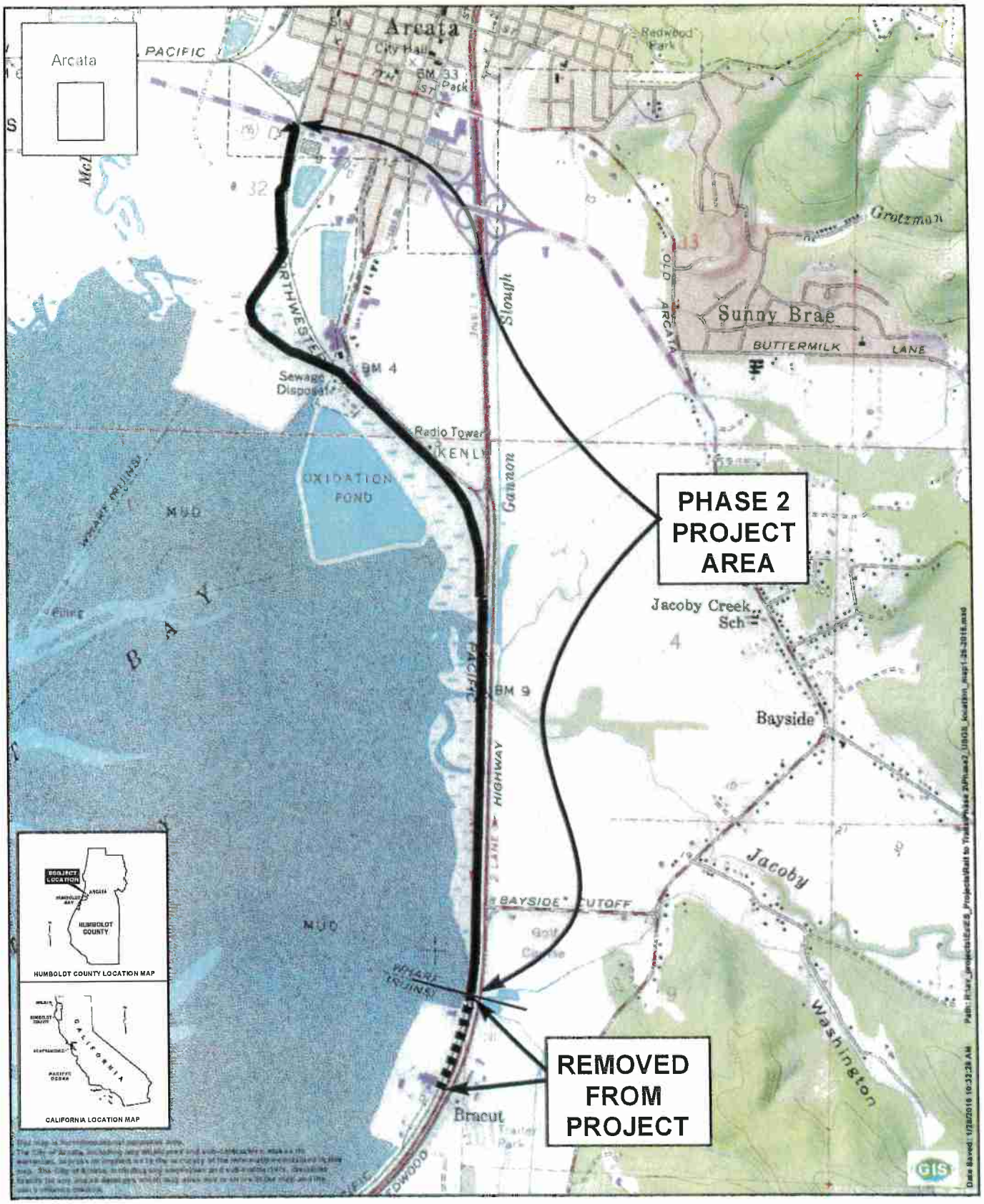
Roscoe, J. 2014. An Archaeological Survey Report for The Rail With Trail Connectivity Project.

Winzler and Kelly. 2010. Wetlands Delineation and Habitat Mapping Rail-With-Trail Connectivity Project---City of Arcata, Humboldt County, California.

Winzler and Kelly. 2011a. Wetland And Habitat Mitigation and Monitoring Plan For City Of Arcata Rail-With-Trail Connectivity Project---Updated by City of Arcata, October 2014.

Attachment 2

Location Map



City of Arcata
Environmental Services

City of Arcata
Humboldt Bay Trail-North
Location Map

U.S.G.S. 7.5 Minute Topographic Map:
Arcata South Quadrangle
Section 32 of T.6.N., R.1.E. &
Section 4 & 9 of T.5.N., R.1.E of H.B. & M.

1:24,000

0 500 1,000
Feet

Attachment 3

Environmental Commitment Record

Rail With Trail Project

Environmental Commitment Record

Project Name	City of Arcata Rail with Trail Connectivity Project	Federal Project No.		Notes:
Contact	Julie Neander, (707) 825-2151	ATPL 5021 (020)		

Project Description: *The City of Arcata is planning to construct, operate and maintain an approximately 4.5-mile long Class I, ADA accessible, non-motorized, multiuse paved trail, according to the American Association of State Highway Transportation Officials, a Class I trail is a paved or unpaved non-motorized facility physically separated from motorized vehicular traffic by an open space or barrier. The northern 3.25 miles of the project are located in the City of Arcata and the southern 1.25 miles are located in the County of Humboldt, south of the City. The proposed trail alignments would run from northern Arcata at Larson Park through the City and the Arcata Marsh and Wildlife Sanctuary, along the eastern edge of Humboldt Bay, southward to the Highway 101 and Bracut intersection.*

NOTE: This following table is intended as a summary guide to environmental commitments and is meant to be a living document. Much of the information presented was gathered during the CEQA process prior to the issuance of regulatory permits. It does not replace or supersede any environmental commitments made in technical studies or correspondence prior to CEQA clearance. If there are any discrepancies between this table and technical studies/permits, then the technical studies/permits will take precedence. Typically, environmental commitments related to regulatory permits will be added to this document once permits are authorized.

PERMITS REQUIRED	Agency	Permit Number	Date of Permit	Project Component
Section 7 ESA	NMFS	Programmatic LOC	9/22/2015	
Section 7 ESA	USFWS	Programmatic LOC		
Section 404 Nationwide Permit 14	USACE	*Pending*		
Section 401 Water Quality Certification	RWQCB	*Pending*		
Section 1602 Streambed Alteration Agreement	CDFW	*Pending*		
Coastal Development Permit - State	CCC	*Pending*		

Task and Brief Description	Document	Timing/Phase	Actions to Comply with Task	Task Completion: Initial	Task Completion: Date
Aesthetics Mitigation #1 - Revegetate areas exposed to project-related earthwork					
Revegetate exposed areas and replant native tree species.	CEQA document;		• Soils and slopes exposed due to project-related earthwork shall be re-vegetated with native ground cover, understory species, and trees. • Trees shall be replaced with native species on a 1:1 basis along the trail where possible and along Janes Creek riparian areas lacking riparian cover to offset loss of vegetation associated with trail development.		
Biological Mitigation #1 - Minimize impacts to water bodies and sensitive fish species					
Impacts to water bodies and sensitive fish species from ground disturbing construction activities within the channels and/or below the HTLs of Butcher's Slough, Gannon Slough, Old Jacoby Creek and Brainard's Slough shall be curtailed as much as possible with minimization and avoidance measures and conservation measures.	CEQA document; BA; NMFS LOC; NES		Minimization avoidance measures: • Isolate pile installations, bridge footing installations and other ground disturbing activities within the channel or below the HTL from flowing water; • Implement BMPs to avoid sedimentation and polluted runoff draining into creeks; • Use of vibratory pile driving as opposed to the use of impact hammers in or near water; • To minimize the potential for transmission of sound waves through the water, vibratory pile driving will be scheduled between the latter 2-hours of outgoing tides and beginning 2-hours of incoming tides so that no piles will be placed in the water; • Limit operation to periods when precipitation is not expected and non-spawning seasons for the sensitive fish species within those water bodies (July 1 - September 30).		
Biological Mitigation #2 - Minimize impacts to special status plant species					
Efforts shall be made to avoid Humboldt Bay Owl's clover, Point Reyes bird's beak and Sand spurrey during trail construction.	CEQA document; NES		• Construction schedules will be planned for times when these plants are dormant or have dropped their seed. -- Should construction occur when those plants are present, the area will be surveyed and any individual plants of these types will be flagged. -- Impacted plants of these types will be replaced on a 1:1 basis at sites adjacent to the trail corridor or in the proposed mitigation areas determined suitable by a qualified botanist.		
Biological Mitigation #3 - Minimize impacts to special status and migratory bird species					
The City of Arcata shall take precautions to avoid impacts to sensitive avian species within the project area.	CEQA document; NES		• Grading and other construction activities shall be scheduled to avoid the nesting season (March - August) to the extent possible. • Pre-construction surveys shall be conducted by a qualified biologist for: Willow Flycatcher, Black-capped Chickadee, Warbling Vireo, Yellow-breasted Chat, and Yellow Warblers within the Shay Park area, and for sensitive migratory waterfowl and shorebird species in the sloughs to be crossed by the proposed trail. --These surveys shall be conducted no more than 7 days prior to initiation of construction activities. --Biologist shall inspect all potential nesting habitat for migratory bird nests where project activities could result in disturbance, including areas of direct impact plus an area extending at least 100 ft. from the perimeter of the project area. • If the survey finds these species to be nesting within the vicinity of the proposed trail: --Construction shall be delayed until the end of the nesting season of these species; or --A 150-foot wide buffer shall be established around occupied nests where no construction activities may occur until the young have fledged. --A qualified biologist shall monitor any active nests for disturbance and evidence of fledging during construction, and until the young have fledged, and submit status reports to CDFW throughout the nesting season.		

Biological Mitigation #4 - Minimize impacts to and replace lost riparian habitat.					
The City of Arcata shall take measures to reduce potential impacts to riparian habitat and will replace impacted wetlands based on the City of Arcata Wetland Mitigation and Monitoring Plan (designed to meet applicable regulatory agency requirements).	CEQA document; HA; NMFS LOC; NES		• Pre-construction planning to minimize width of construction disturbance zone; • Worker access to hay mind will be on boards; • Installation of exclusionary fencing along boundaries of riparian areas; • Replanting of disturbed riparian areas using grasses and forbs found in the action area; • Revegetation monitoring shall be implemented in accordance with the Wetlands and Habitat Mitigation and Monitoring Plan (Winzler and Kelly 2011, updated 2014); Replace the acreage of jurisdictional wetlands to be permanently impacted by the proposed trail with the creation of comparable on-site wetlands on a 1:1 basis; • Include an estuarine wetland enhancement component of 2:1 for impacted acres of wetlands; • Revegetate in a way that reflects the native plant species within the wetland types to be mitigated; • Water on the most suitable for a minimum of 5 years		
Biological Mitigation #5 - Pre-construction Surveys					
Pre-construction surveys shall be conducted by a qualified biologist for sensitive plant and animal species on and within the vicinity of the proposed on-site wetland mitigation sites.	CEQA document;		If the surveys find sensitive species, the City shall: • Adhere to the biologist's recommendations to avoid significant impacts to these species; • Conduct any consultations with, and obtain any permits that may be required from, applicable regulatory agencies.		
Biological Mitigation #6 - Prevention of spread of invasive species					
The City shall take measures to avoid the spread of invasive species. These shall include guidance provided by the State of California Aquatic Invasive Species Management Plan (CDFG 2008).	HA; NMFS LOC; NES		• Equipment used for off-road construction activities will be weed-free prior to entering action area; • Any mulches or fill used will be weed-free; • Any vegetative material used for revegetation will consist of sterile seed and/or locally adapted native plant materials to the extent practical; • Any equipment (including boots/waders) and construction equipment shall be properly disinfected or cleaned according guidance provided by the State of CA Aquatic Invasive Species Management Plan, prior to in-water work.		
Biological Mitigation #7 - Erosion and sedimentation control.					
Erosion and sedimentation control measures shall be implemented during construction of project area. These measures shall conform to provisions in the City's Stormwater Erosion Control Ordinance and Sections 20-2 and 20-3 of the Caltrans Standard Specifications.	NES		• Construction will be conducted from July 1st - September 30th to minimize potential for rainfall events; • For upland construction activities that must take place during the late-fall, winter, or spring (e.g. to avoid avian nesting periods), temporary erosion and sediment control structures shall be in place and operational at the end of each construction day until permanent erosion control structures are in place; • Exclusionary fencing will be installed around environmentally sensitive and other areas that do not need to be disturbed; • Weed-free mulch shall be applied to disturbed area within 10 days of ground disturbing activities; • Suitable BMPs, such as silt fences, straw wattles or catch basins, shall be placed below construction activities at waters' edge to intercept sediment; • Sediment build-up at the base of BMPs will be removed before BMP removal • Spoil sites shall be located so as not to drain directly into surface water feature, or, if it does drain directly, a catch basic shall be constructed to intercept sediment; • Spoil sites shall be graded and revegetated to reduce erosion potential. • Sediment control measures shall be in place prior to the onset of the rainy season, and shall be monitored and maintained in good working condition until revegetation		
Biological Mitigation #8 - Air Quality/Dust Control					
The Contractor shall implement a dust control program to limit fugitive dust emissions.	NES		Dust control program shall include: • Watering inactive construction sites and exposed stockpile sites at least twice daily (including non-work days) or until soils are stable; • In accordance with CA Vehicle Code, vehicles hauling soil/other loose materials from construction site shall be covered or should maintain at least 6 in. of freeboard; • Any topsoil removed during operations shall be stored on-site in piles 4 feet or less in height and be clearly marked. Topsoil piles that will not be immediately returned to use shall be revegetated with a non-persistent erosion control mixture; • Soil piles for backfill shall be flagged separately from native topsoil stockpiles and surrounded by sediment barriers (silt fencing, straw wattles, etc.) or covered; unless they are to be immediately used; • Equipment or manual watering shall be conducted on all stockpiles, dirt/gravel roads, and exposed or disturbed soil surface areas until soils are stable to reduce airborne dust.		

Biological Mitigation #9 - Management of Human Disturbance					
The City of Arcata shall manage visitor use and recreation in and around the project area to avoid disturbance of wildlife foraging and roosting along Arcata Marsh, WWTP, HBNWR, Humboldt Bay and associated wildlife habitats.	NES		Management shall include: • Establishment of view and access sites that allow the public to see and access these areas for recreation and wildlife viewing; • Posting signs to thereby discourage access in other sites; The number and physical distribution of these access sites shall be designated in a manner that encourages appreciation for the flora and fauna of the area while reducing disturbance and other activities that are detrimental to vegetation and wildlife.		
Cultural Mitigation # 1 - Monitoring for archaeological and paleontological artifacts					
Earth-moving and excavation activities will be monitored for presence of archaeological or paleontological artifacts. This mitigation shall also be implemented at the wetlands sites.	CEQA document;		If activities uncover suspected cultural resources, • Activities shall be stopped immediately; • Any suspected cultural resources sites will be inspected by a qualified archaeologist, and any reporting/curation/ preservation recommendations made by the archaeologist will be implemented.		
Cultural Mitigation # 2 - Monitoring for presence of human remains					
Earth-moving and excavation activities will be monitored for presence of human remains. This mitigation shall also be implemented at the wetlands sites.	CEQA document;		If human remains are uncovered, • Construction activities in the immediate vicinity of the remains shall be halted; • All appropriate parties (City of Arcata Planning Department, Humboldt County Coroner, Native American Heritage Commission and the relevant Native American representative(s) shall be notified. • The remains shall be treated in accordance with all applicable federal, state, local and tribal requirements.		
Cultural Mitigation #3 - NCIC records search and reconnaissance					
A NCIC records search and reconnaissance (e.g. surface) level archaeological/paleontological field survey of the mitigation wetlands sites prior to development of the wetlands will be conducted by a qualified archaeologist.	CEQA document;		If the records search indicates the existence of archaeological or paleontological resources, or if such resources are found during the field survey and determined to be "significant" or "unique" as defined by CEQA, required mitigation shall be identified by the consultant and implemented by the City prior to construction (including potentially subsurface investigations).		
Geological Mitigation #1 - Supplemental geotechnical report for High School property					
Prior to project activities that would impact the slope on the High School property, the City of Arcata shall have a Supplemental Geotechnical Report prepared for this area.	CEQA document;		Implement any slope stability and bank stabilization recommendations made in the report.		
Hazards Mitigation #1 - Pre-construction soil borings to characterize soil and groundwater					
Pre-construction soil borings shall be conducted to characterize the soil and groundwater. Laboratory analytical results of samples collected from these borings shall be utilized to ascertain whether health and safety concerns are present and to determine necessary soil and/or groundwater disposal options.	CEQA document;		Conduct pre-construction soil borings at the following locations: Adjacent to the NCRA ROW where the alignment follows the RR track; and • Adjacent to Reliable Equipment Co. on the corner of 11th and L Streets. Determine necessary soil/groundwater disposal options based on results of sample analysis.		
Hazards Mitigation #2 - Monitoring for soil contaminations and Phase II Environmental Site Assessment, if needed					
Project construction contractors shall be vigilant for any evidence of soil contamination or hazardous materials and report to the City of Arcata. If contamination is found, the City shall have the site remediated to the satisfaction of the applicable federal, state and county regulatory agencies.	CEQA document;		Contractor shall report to the City of Arcata: • Any evidence of potential soil contamination • Unearthing of storage drums • Other potential sources of hazardous materials/wastes. If determined by the City to be warranted, • A Phase II Environmental Site Assessment shall be conducted, including: -- a hazardous materials field survey, -- borings, -- and soil testing to determine if hazardous materials contamination is present, and if so, the spatial extent of the contamination.		
Hazards Mitigation #3 - Testing for contamination prior to dewatering					
If de-watering is required during construction within 300 feet of any of the recorded hazardous materials/waste sites with the potential to be impacted by the project, the City shall have the water proposed for removal tested for contamination prior to dewatering activities. Any dewatering activities will be conducted in compliance with the Caltrans Field Guide for Construction Site Dewatering and Section 13-14.03G of the Caltrans Standard Specifications (2010).	CEQA document;		• If the water is found to contain regulated contaminants, the City shall have the water remediated to the satisfaction of the applicable federal, state and county regulatory agencies prior to removal. • Water removed from cofferd work areas shall be pumped to a temporary sediment retention basin outside of the channel, through a mechanized water filtration system, or into Baker tanks of similar storage system and trucked offsite to an authorized disposal site.		

Hazards Mitigation #4 - Phase I Environmental Site Assessment.					
The City of Arcata shall have a Phase I Environmental Site Assessment conducted by a qualified engineer or hazardous materials consultant of the mitigation wetlands sites prior to development of the wetlands.	CEQA document;		• A Phase I Environmental Site Assessment shall be conducted; • If the Phase I indicates that un-remediated hazardous materials sites are listed by government records as occurring on the mitigation wetlands sites, or if the field survey finds hazardous materials contains/tanks or evidence of hazardous materials contamination, required mitigation shall be identified by the consultant and implemented by the City prior to construction.		
Hazards Mitigation #5 - Prevention of accidental spills.					
The City of Arcata shall include measures to reduce potential impacts to vegetation and aquatic habitat resources in the action area associated with accidental spills of pollutants. All work will be conducted in accordance with Caltrans Storm Water Quality Handbook for Construction Site Best Management Practices Manual.	BA; NMFS LOC; NES		Measures shall include: • A site specific spill prevention plan shall be implemented for potentially hazardous materials (hazmat) - - plan shall include proper handling/storage of hazmats and procedures for cleaning/reporting any spills; If necessary, containment berms shall be constructed to prevent spilled materials from reaching surface water features; • Equipment and hazmat shall be stored 100 ft away from surface water features; • Proper and timely maintenance of vehicles and equipment used - - maintenance and fueling shall be conducted at least 100 ft away from waterways or within a fueling containment area; • Plastic materials shall be placed under asphaltic concrete paving equipment while not in use to catch and/or contain drips and leaks; • Minimization of sand and gravel from any new asphalt getting into storm drains, streets, and creeks by sweeping - - old or spilled asphalt will be recycled or disposed as approved by the Resident Engineer; • Petroleum of petroleum covered aggregate (from chip seal application or sweeping operations), AC grindings, pieces or chunks used in embankments or shoulder backing will be prevented from entering any storm drain or water course - - silt fencing shall be used until installation is complete; • Use of non-toxic substances to coat asphalt transport trucks and asphalt spreading equipment; • Drainage inlet structures and manholes shall be covered with filter fabric during application of seal, coat, tack coat, slurry seal, and/or fog seal - - these substances shall not be applied if rainfall is predicted during the application or curing period; • Use of non-toxic vegetable oil for operating hydraulic equipment, rather than use of conventional hydraulic fluids. • If dewatering is not required for other purposes, removal of seepage water in the cofferd areas may be ceased after new abutment concrete is poured and is curing (for at least 72 hours) within the form structures, provided that pH of water inside cofferdam enclosures does not exceed a difference of 0.5 pH units from that of ambient water quality in main slough channel. If the difference is greater than 0.5 units, water levels within the cofferd areas will be kept below the level of the concrete abutment forms and pumped to temporary		

Attachment 4

Mitigated Negative Declaration

Initial Study &
Draft Mitigated Negative Declaration

For the

Arcata Rail with Trail Connectivity Project

Prepared for the:

City of Arcata

By:

PLANWEST PARTNERS, INC.

July 2, 2010

Updated February 2013 by
City of Arcata

Table of Contents

PAGE

Project Summary....1
Environmental Factors Potentially Affected....8
Determination....8
Evaluation of Environmental Impacts....9
- Aesthetics....10
- Agriculture and Forestry Resources....13
- Air Quality....14
- Biological Resources....16
- Cultural Resources....28
- Geology and Soils....30
- Greenhouse Gas Emissions....34
- Hazards and Hazardous Materials....36
- Hydrology and Water Quality....41
- Land Use and Planning....48
- Mineral Resources....51
- Noise....52
- Population and Housing....55
- Public Services....56
- Recreation....57
- Transportation and Traffic....58
- Utilities and Service Systems....66
- Mandatory Findings of Significance....67

References....70

List of Figures

Figure 1 Location Map....3
Figure 2 Earthquake Hazards....32
Figure 3 Listed Hazardous Waste Sites....39
Figure 4 Flood Zones and Water Courses....44
Figure 5 City of Arcata General Plan Land Use Designations....49
Figure 6 City of Arcata Zoning....50
Figure 7 Noise Contours....54
Figure 8 Circulation....60

List of Tables

Table 1 Existing & Impacted Habitat, Wetlands & Waters of U.S. - Proposed Project...18
Table 2 Bridge Impacts to Waters of the U.S. under the Proposed Project....22
Table 3 Listed Hazardous Materials/Waste Sites with Potential to be Impacted by Proposed Project....37

Appendices

The following appendices and reports are available under separate cover at the City of Arcata Environmental Services Department, 736 F Street, Arcata, California 95521. Or on the City website http://www.cityofarcata.org/departments/public-works/parks/rail-with-trail

Appendix A	Project Information: City of Arcata Rail with Trail Connectivity Project (with detailed alignment maps)
Appendix B	Arcata Rail with Trail Implementation and Operations Plan (including Corridor Management Plan, Trail Maintenance Plan, and Trail Safety Plan)
Appendix C	Natural Features Inventory (including Natural Diversity Database Search)
Appendix D	Wetland Delineation
Appendix E	Cultural Resources Report (available to archaeologists and other authorized personnel only in accordance with federal and state confidentiality requirements)
Appendix F	Phase I Environmental Site Assessment
Appendix G	Arcata Rail with Trails Hydrologic Analysis Technical Memorandum
Appendix H	Geotechnical Report
Appendix I	Arcata Rail with Trail Design Plan Set
Appendix J	Wetland Habitat Mitigation and Monitoring Plan

Prior Report

Arcata Rail with Trail Connectivity Project Environmental Matrix and Impact Analysis Discussion

INITIAL STUDY and CHECKLIST

PROJECT: **City of Arcata Rail with Trail Connectivity Project**

LEAD AGENCY: City of Arcata Environmental Services Department
736 F Street
Arcata, CA 95521

LEAD AGENCY CONTACT PERSON:
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Environmental Services Department
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THIS *INITIAL STUDY and CHECKLIST* PREPARED BY:
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Arcata, CA 95521
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Updated February 2013 - City of Arcata
736 F Street
Arcata, CA 95521
707-822-8184

PROJECT LOCATION: City of Arcata and Humboldt County, CA (Figure 1)

PROPERTY OWNERS: City of Arcata, North Coast Railroad Authority (NCRA), U.S. Fish & Wildlife Service (FWS) (Humboldt Bay Wildlife Refuge) and private ownership.

GENERAL PLAN DESIGNATION: Multiple City designations - primarily undesignated right-of-way (ROW), Natural Resource (NR) and Public Facility (PF); this is mostly NCRA ROW or City street ROW, also through City parks designated PF, private property designated Industrial Limited (IL) and Residential Low Density (RL), and the Arcata Marsh and Wildlife Sanctuary designated NR. Also through lands with County designations including NR and Industrial General (MG); see Appendix A, Table 1 for further information.

ZONING DESIGNATION: Multiple City zones - primarily undesignated ROW, Natural Resource (NR) and Public Facility (PF); mostly NCRA ROW or City street ROW; also through City parks zoned PF, private property zoned Industrial Limited (IL) and Residential Low Density (RL), and the Arcata Marsh and Wildlife Sanctuary zoned NR. Also through lands with County NR and MG designations; see Appendix A, Table 2 for further information.

PARCEL NUMBERS: Various; mostly NCRA ROW or City Street ROW, some parcels owned by City of Arcata, U.S. Fish and Wildlife Service (Humboldt Bay Wildlife Refuge), and private ownership. See Appendix A, Table 2 for further information.

PROJECT SUMMARY

The proposed Arcata Rail with Trail Connectivity Project (proposed project or proposed trail) involves construction, operation and maintenance of an approximately 4.5 mile long Class I, ADA accessible, non-motorized, multiuse, paved trail. According to the American Association of State Highway Transportation Officials (AASHTO), a Class I Trail is a paved or unpaved non-motorized facility physically separated from motorized vehicular traffic by an open space or barrier. The northern 3.25 miles of the project are located in the City of Arcata (City) and the southern 1.25 miles are located in the County of Humboldt south of the City. The project is west of Highway 101 (Figure 1).

The proposed project would include three potential trail alignments, which would run from northern Arcata at Larson Park (near Sunset Avenue and the Arcata Skate Park), through the City and the Arcata Marsh and Wildlife Sanctuary (Arcata Marsh), and along the eastern edge of Humboldt Bay southward to the Highway 101 and Bracut intersection. The trail, under any of the alignments, would be along or within the NCRA ROW, a portion of the Highway 101 corridor, City-owned ROW, and would also cross private property.

This Initial Study evaluates each of the three trail alignment options, including a Selected Alignment, an Interim Alignment, and a Secondary Alignment for one, relatively short, trail segment. Each of these is summarized below. See Appendix A for a detailed project description including background, existing site conditions, list of permits and agency approvals, trail design standards, and detailed trail alignment maps. For the purpose of the discussions in this Initial Study, the "trail corridor" refers to the trail, trail shoulder, trail prism, and areas to experience direct physical impacts during trail construction (e.g. temporary construction staging areas).

TRAIL ALIGNMENT OPTIONS

Selected Alignment (Alignment A)

This alignment was designed to be compliant with NCRA's Rail with Trail Guidelines and would preserve the tracks for potential future rail service. For ease of reference, the project is divided into eight distinct segments (Segment 0 through 7) arranged from north to south and described below (see detailed trail alignment maps, Appendix A of this Initial Study, for reference).

Segment 0- *Larson Park to Sunset Avenue*

The proposed northern trail terminus would begin in the City of Arcata's Larson Park. The alignment would exit the southeast corner of the park, enter the railroad (RR) ROW, and travel along the north side of the railroad tracks where it would cross Sunset Ave.

Segment 1- *Sunset to Alliance Road*

The trail would leave the RR ROW parallel to and on the north side of the railroad tracks, adjoin the City's proposed Foster Avenue extension project, and travel west along the Foster Street extension to the north side of the entrance to Shay Park.

Segment 2- *Alliance Road*

Near the end of the existing Foster Avenue, the alignment would head south into Shay Park. Within this treed area, the alignment would follow a raised earthen berm between Jolly Giant Creek and Alliance Road to the railroad crossing at Alliance Road and 17th Street.

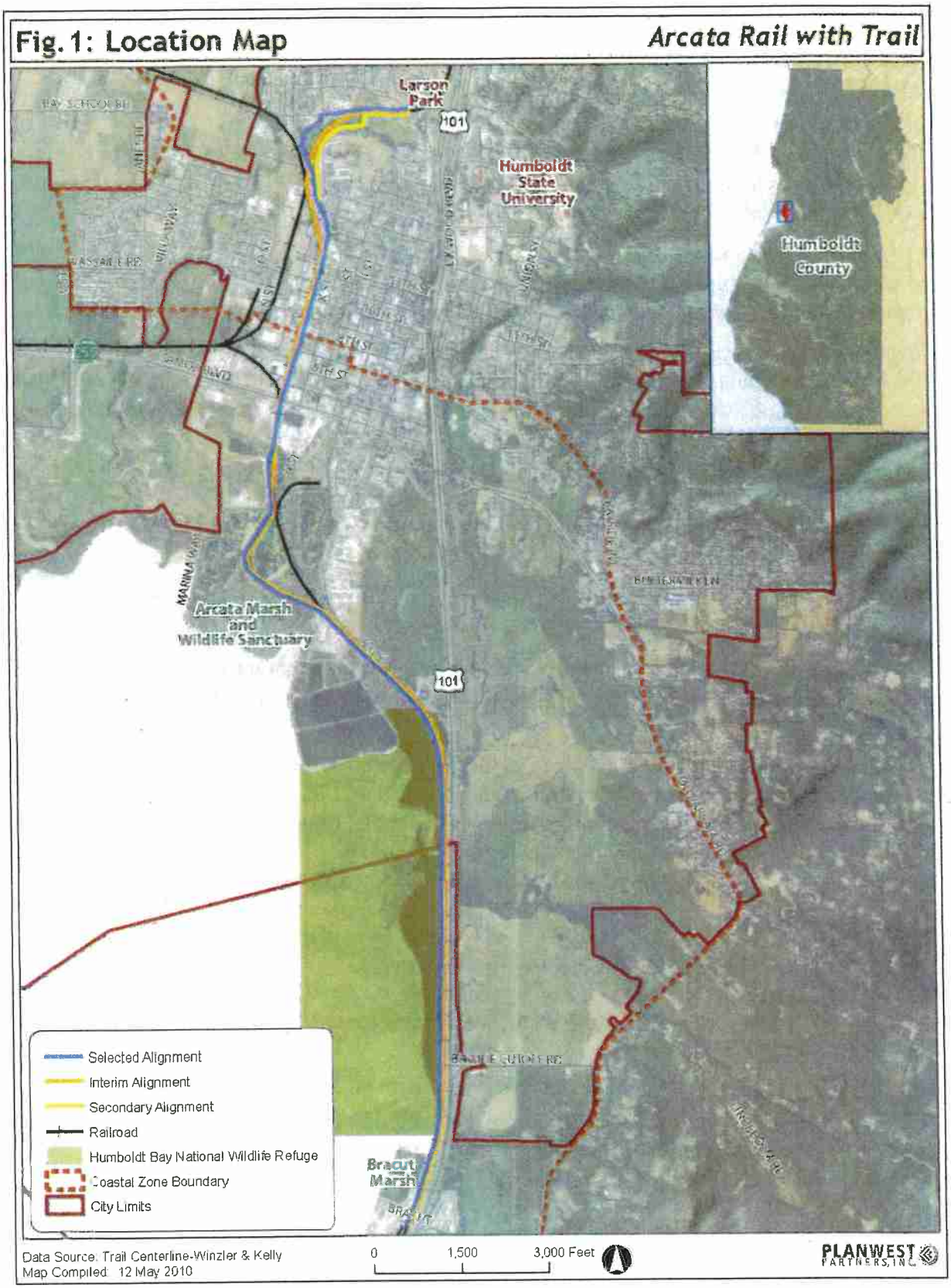


Fig. 1: Location Map
Arcata Rail with Trail
Larson Park
101
Humboldt State University
Humboldt County
Arcata Marsh and Wildlife Sanctuary
Selected Alignment
Interim Alignment
Secondary Alignment
Railroad
Humboldt Bay National Wildlife Refuge
Coastal Zone Boundary
City Limits
Data Source: Trail Centerline-Winzler & Kelly
Map Compiled: 12 May 2010
0
1,500
3,000 Feet
PLANWEST PARTNERS, INC.

Segment 3

Segment 3.1 - Below the High School

The alignment would parallel the east side of Alliance Road, cross the railroad tracks, leaving the RR ROW, and continue along the east side of Alliance Road, across 15th Street.

Segment 3.2 - L Street Connection

From the existing paved trail which intersects Alliance Road from an abandoned portion of L Street, the alignment would cross to the south side of Alliance Road, re-enter the RR ROW, and travel along L Street east of the railroad tracks to 12th Street.

Segment 3.3 – Urban Interface Trail

The trail would share an alignment with L Street to form a proposed Urban Trail Interface. Design would focus on shared use of the existing road with a separate trail on the west side of the RR ROW.

Segments 3.4 & 3.5- L Street (West Side) & Samoa Boulevard Crossing

At 7th Street, the trail would continue along the west side of the RR ROW to Samoa Boulevard. Within the Samoa Boulevard crossing, the alignment would cross to the west side of a branch of the railroad tracks.

Segment 4

From Samoa Boulevard, the alignment would continue within the RR ROW southward along the west side of the railroad tracks.

Segment 5

Segment 5.1 - Arcata Marsh North Entrance

Upon reaching the City of Arcata Marsh and Wildlife Sanctuary, the alignment would leave the RR ROW and cross an emergent wetland on a proposed bridge with pilings to an existing earthen dike.

Segments 5.2, 5.3 & 5.4 - Arcata Marsh

The trail would continue along the dike, parallel to the railroad tracks and separated by the emergent wetland until reaching South I Street. The trail would cross South I Street, deviate to the west of railroad tracks, and follow an existing crushed gravel path parallel to South I Street. The trail would turn southeast, leave South I Street and continue through the Arcata Marsh and Wildlife Sanctuary until reaching the bridge at Butcher's Slough north of the City's Wastewater Treatment Plant (WWTP).

Segment 6

Segments 6.1 & 6.2 – Butcher's Slough Crossing

The trail would cross Butcher's Slough on a proposed bridge. At the WWTP, the alignment would become parallel with the railroad tracks and South G Street, to the west of the RR ROW, and continue along an existing crushed gravel path.

Segment 6.3 - South G Street

Once past the WWTP Corp Yard entrance the alignment would re-enter the RR ROW and continue to travel southeast towards Highway 101.

Segment 7

Segment 7.1

The railroad tracks and the project alignment turn south and parallel Highway 101. The trail would continue within the RR ROW and cross the tracks immediately north of Gannon Slough. Also

immediately north of the Gannon Slough Bridge, there would be an interpretive sign and viewing platform for the Humboldt Bay Wildlife Refuge which would be owned and operated by the FWS.

Segment 7.2 & 7.3 – Gannon Slough Crossing
The alignment would cross over Gannon Slough on a proposed new trail bridge between Highway 101 and the railroad bridge and remain within RR ROW east of the railroad tracks and west of Highway 101.

Segment 7.4 – Jacoby Creek Crossing
Immediately north of Jacoby Creek, if available the alignment would cross the drainage ditch between the tracks and Highway 101 to access the bike lane on the proposed Caltrans Jacoby Creek replacement bridge. Immediately south of the bridge, the alignment would cross back to the eastern portion of the RR ROW.

Segment 7.5 & 7.6 – Old Jacoby Creek Crossing
The alignment would continue within the RR ROW from Jacoby Creek to Old Jacoby Creek and cross Old Jacoby Creek on a proposed bridge to be placed atop structural pilings.

Segment 7.7 & 7.8- Highway 101
The alignment continues southward in the RR ROW between Highway 101 and the tracks.

Segment 7.9- Bracut
The alignment would continue southward in the RR ROW between Highway 101 and the tracks. The far northern portion of this segment would require partial fill of an existing drainage ditch. The alignment would terminate between the tracks and Highway 101 at the Bracut entrance.

Interim Alignment (Alignment B)
This alignment would generally follow the Selected Alignment as described above, except that in certain locations with limited usable space the trail would be constructed directly on the railroad prism (Figure 1). The Interim Alignment would deviate from the Selected Alignment and occupy the railroad prism for all trail segments except: (1) along L Street (Segments 3.3 and 3.4) and (2) through the Arcata Marsh (Segments 5, 6.1 and 6.2). This alignment would deviate from the NCRA's Rail with Trail Guidelines (with respect to setbacks from the tracks, etc.) and would be implemented with Railroad Authority permission to temporarily build on the tracks, allowing the City to defer construction costs and create options for project construction phasing. This alignment would occupy the existing railroad track prism in certain locations and avoid the need at these locations to build additional prism, reducing the amount of fill required for trail development reducing associated costs, and potentially reducing impacts to wetlands, biological habitat, etc. Eventual relocation of the trail off the tracks would follow the Selected Alignment but would require updated CEQA resource review.

Secondary Alignment (Alignment C)
This alignment would be adjacent to Arcata High School and only extend from Sunset Avenue to 15th Street (Segments 1, 2 & 3.1), and then join up with one of the other alignments for the balance of its southward route to Bracut (Figure 1). This alignment would primarily occupy an existing service road on the high school property and therefore potentially avoid impacts to Jolly Giant Creek. The Secondary Alignment would require Northern Humboldt Union High School District Board review and approval before it could be implemented.

PROJECT OBJECTIVES

- Be planned for bicyclists, walkers and hikers, runners, skaters, wildlife viewers, nature educators, and other non-motorized outdoor users.
- Be a key connection in the California Coastal Trail and Humboldt Bay Trail, promoting coastal access regionally and state-wide.
- Highlight the natural, cultural, and historic resources of Humboldt Bay.
- Promote environmentally sensitive access to the Bay for wildlife viewing and a variety of recreational and educational activities.
- Serve local residents and visitors as a community amenity and nature tourism destination, promoting economic vitality.
- Promote healthy lifestyles, active volunteerism, and community stewardship.
- Be planned, promoted, developed, and managed by a collaborative multi agency partnership.
- Be planned and developed with full consideration of existing and future highway and rail uses.
- Be planned and developed, consistent with Coastal Act policies and related local, state, and federal regulations, promoting protection of wetland, wildlife, and other natural resources.
- Be established with full consideration of the needs of private and public land owners/managers.
- Be located and designed to provide safe, enjoyable non-motorized commuter and recreational coastal access for walkers, runners, bicyclists, skaters, and other outdoor recreational users.
- Not compromise or preclude existing recreational uses including hunting and other existing, allowable recreational uses.
- Connect key destinations that will highlight the unique natural, cultural, and historic resources of Humboldt Bay.
- Integrate spur trails and other recreation facilities to connect to regional recreational, educational, and community resources and to enhance access consistent with trail goals.
- Have designated access points, including trailheads and community/neighborhood linkages, that provide safe and direct pedestrian and bicyclist access.
- Offer a variety of wildlife viewing sites and places to stop to enjoy the Bay.
- Integrate interpretation of natural, cultural, and historic resources in trail planning and design.
- Serve as an alternative route for the Pacific Coast Bike Route.

PROJECT ELEMENTS

Under all three potential trail alignments, there would be a trailhead located at both the north and south end of the proposed trail. The trailhead on the northern end would be located at Larson Park, a City owned park. The trailhead would consist of a connection to the proposed trail from existing walkways at Larson Park that would likely have informational signs posted such as a map and information regarding the trail. The southern trailhead would be located immediately north of the Bracut intersection on the west side of Highway 101 and would likely consist of a small paved area that could serve as a turn-around and have an information sign similar to that for the northern trailhead.

The trail cross-section under all alignments would range from 12 feet to approximately 30 feet in width and consist of three elements including the paved tread surface, the trail's shoulders, and (in some cases) a fill prism designed to bring the trail surface to a required grade or elevation. The trail would include yellow centerline striping and additional warning signage and striping approaching intersections with existing roads and railroad crossings. In addition, signage would be added along the trail warning users

of curves, bends, and other hazardous situations. Fencing and/or physical barriers would be installed in some locations in which the trail occurs within the NCRA ROW, where the edge of the trail is less than 5 feet from the edge of the travel way of a road, where less than 30-feet from the edge of the travel way of Highway 101 (i.e. in the Caltrans "Clear Recovery Zone"), and/or along bridge and boardwalk edges.

Immediately north of the Gannon Slough Bridge, there would be an interpretive sign and viewing platform for the Humboldt Bay Wildlife Refuge which would be owned and operated by the FWS. The FWS may include water access abilities at this location since it would be a short walk from the G Street intersection and would allow an alternate water access location for hunters.

PUBLIC AGENCIES WITH JURISDICTIONAL AUTHORITY

The City of Arcata is the CEQA lead agency for the proposed project. Other agencies with jurisdictional authority (e.g. responsible and trustee agencies) are listed below.

Federal

- U.S. Army Corps of Engineers (COE)
- U.S. Fish & Wildlife Service (FWS)
- National Marine Fisheries Service (NMFS)

State

- Regional Water Quality Control Board (RWQCB)
- California Coastal Commission
- California Department of Fish & Wildlife (DFW)
- North Coast Railroad Authority (NCRA)
- California Public Utilities Commission (CPUC)
- California Department of Transportation (Caltrans)
- State Lands Commission

Local

- Humboldt County Public Works Department
- Humboldt Bay Harbor, Recreation & Conservation District
- Northern Humboldt Union High School District (for the Secondary Alignment only)
- City of Arcata

TRAIL MANAGEMENT

Several reports are being prepared to assist the City with management strategies including a Corridor Management Plan, Trail Maintenance Plan, and Trail Safety Plan; these documents will be combined into one *Trail Implementation and Operations Plan* (Appendix B). The Corridor Management Plan addresses management issues throughout proposed trail corridor relating to use and design of the facility. The Trail Maintenance Plan takes into consideration unique aspects of the trail and local setting including that the trail would be considered a joint or "shared use" facility, defined as a paved trail open to the general public for recreation and non-motorized transportation purposes in a corridor that serves other transportation functions. In addition, trails require their own maintenance, emergency access, and security vehicles; the Maintenance Plan outlines the major maintenance-related responsibilities of the trail management agency. A Trail Safety Plan has been prepared to satisfy the 2009 NCRA Policy and Procedures Manual requirements for a public agency proposing a rail-with-trail facility. As specified in the NCRA Policy and Procedures Manual, the Safety Plan includes design, maintenance and operations measures.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:
The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

X Aesthetics	☐ Greenhouse Gas Emissions	☐ Population/Housing
☐ Agricultural & Forestry Resources	X Hazards & Hazardous Materials	☐ Public Services
☐ Air Quality	☐ Hydrology/Water Quality	☐ Recreation
X Biological Resources	☐ Land Use/Planning	☐ Transportation/Traffic
X Cultural Resources	☐ Mineral Resources	☐ Utilities/Service Systems
☐ Geology/Soils	☐ Noise	☐ Mandatory Findings of Significance

DETERMINATION: (To be completed by the Lead Agency)
On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect: (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect: (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Mark André — Signature

3-1-13 — Date

Mark S. André, Director

City of Arcata Environmental Services Department

EVALUATION OF ENVIRONMENTAL IMPACTS:

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each questions. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2) All answers must take account of the whole action involved, including offsite as well as onsite, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced).

5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

   a) Earlier Analysis Used. Identify and state where they are available for review.

   b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

   c) Mitigation Measures. For effects that are "Less Than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be citied in the discussion.

8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9) The analysis of each issue should identify:

   a) the significance criteria or threshold used to evaluate each question; and
   b) the mitigation measure identified, if any, to reduce the impact to less than significant.

NOTE: For the purposes of this analysis, potential impacts are denoted in the checklist as follows:
A = Selected Alignment B = Interim Alignment C = Secondary Alignment

Issues and Supporting Information	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
AESTHETICS: Would the project:				
a) Have a substantial adverse effect on a scenic vista?			A, B, C	
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?		A, B, C		
c) Substantially degrade the existing visual character or quality of the site and its surroundings?		A, B, C		
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			A, B, C	

Discussion - Selected Alignment (A)

a-c) Visual resources within the proposed trail corridor include both natural and man-made features. Scenic resources surrounding the trail corridor include natural areas adjacent to creeks and riparian vegetation, urban areas along City streets, the Arcata Marsh, and Humboldt Bay and tidelands. The following Arcata General Plan: 2020 Design Element policies are applicable to the proposed project:

- D-3a Designation of coastal scenic highways.
- D-3e Arcata Bay - Open waters, shoreline, and tidal marshes.
- D-3j Streamside riparian areas.
- D-7d Site design criteria.
- D-7f Maintenance of required landscaping.

Arcata GP: 2020 policy D-3a designates coastal scenic highways including Samoa Blvd. (from Crescent Drive to Manila), Highway 101 (from southerly City boundary north to the Mad River), and South I Street (from Samoa Blvd. south). Views of the Arcata Marsh and Humboldt Bay and tidelands are protected by Policy D-3e Arcata Bay - Open waters, shoreline, and tidal marshes, which states:

> "Proposed land uses and developments shall not significantly alter the natural appearance or landforms of the waters, shoreline, and tidal marshes of Arcata Bay... Development within the area bounded by Samoa Blvd., Butcher's Slough and Gannon Slough shall include local native plant landscaping, screenings and other measures to ensure compatibility with the educational, recreational, wildlife and other uses of the Humboldt Bay National Wildlife Refuge and the Arcata Marsh and Wildlife Sanctuary. "

Trail development would occur on existing Marsh trails and, for the most part, along the east side of the existing railroad tracks, and at the same elevations, along the Bay and therefore would not substantially alter the shoreline or obstruct Bay views. Fencing and/or physical barriers may be installed under the following five conditions and installation is assumed for this analysis:

(1) in locations in which the trail is within the RR ROW, in which case the fence would be placed between the trail and the RR tracks,

(2) where the edge of the trail is less than 5 feet from the edge of the travel way of a road, in which case the fence would be placed between the trail and the road,

(3) where the edge of the trail is less than 30 feet from the edge of the travel way of Highway 101 (i.e. within the Caltrans "Clear Recovery Zone"), in which case the fence would be placed between the trail and Highway 101,

(4) along the edges of bridges and boardwalks, and/or

(5) areas in which a vertical clearance equal to or greater than 30 inches separates the surface of the trail and adjacent ground surface.

In areas falling under condition #1, the barrier would consist of a four-foot high wooden split-rail fence, or similar, with posts ten feet on center or black vinyl coated chain link fencing. In areas falling under condition #2, the barrier would consist of a physical barrier separation such as K-rail, fencing, guardrail, or shrubs. In areas falling under condition #3, the barrier would consist of a physical barrier separation such as K-rail, fencing, shrubs, or guardrail, where there is danger of motorist encroachment. In areas falling under condition #4 or #5, the barrier would consist of wooden or metal bridge railings. The above fence designs would not substantially alter the shoreline or obstruct Bay views, therefore impacts would be ***less than significant.***

The existing L Street corridor includes a relatively narrow paved street which gets limited use primarily from driveway access to adjacent residences and businesses. The railroad tracks run down the middle of the street corridor and there are overhead power lines along the western side of the street. The proposed Urban Interface Trail along L Street would include features to enhance the existing visual character of this area such as landscaping including native trees, shrubs, onsite drainage retention areas, and trail lighting. These features would create a much more inviting and comfortable environment that is visually appealing and encourages non-motorized transportation. Therefore impacts would be ***less than significant.***

Construction of the trail prism would result in the removal of trees, shrubs and riparian vegetation along some trail segments, especially in Shay Park, the Arcata Marsh, and along South G Street. The removal of trees and vegetation could substantially damage scenic resources and/or substantially degrade existing visual character in these areas. This impact would be ***less than significant after mitigation*** with implementation of Mitigation Measure Aesthetics -1.

d) The proposed trail passes through both City streets and natural areas. There is existing street lighting near the trail corridor along Sunset Avenue, Alliance Road, L Street, and Samoa Boulevard. Safety lighting (up to 70 new lights) would be installed along the trail and at all trail/ road crossings. The proposed project would modify lighting at the intersection of 17th Street and Alliance Road and add additional decorative street lighting along L Street where minimal street

lights currently exist (see Trail Operations Plan, Appendix B). New lighting would not be installed in areas where the trail passes through the Arcata Marsh. The trail segment that routes along the northern and western boundaries of Shay Park will incorporate lighting. To minimize potential impacts, the City has General Plan and Land Use Code policies to control light impacts on- and off-site. The proposed trail lighting would be designed and planned to conform to all applicable City performance standards for light and glare including shielding and directing all lighting downward and away from wetland and habitat areas such as Shay Park. With compliance with these performance standards, outdoor light and glare under the proposed project would be similar to what is currently generated along City streets and would thus be ***less than significant.***

To maintain existing natural areas along the trail corridor and prevent potential impacts, lighting would not be installed along the natural areas of the trail in the Arcata Marsh and along the Bay. Therefore, light and glare impacts in these areas would also be ***less than significant.***

Mitigation – Selected Alignment (A)

Aesthetics -1) *Soils and slopes exposed due to project-related earthwork shall be re-vegetated with native ground cover, understory species, and trees. Trees shall be replaced with native species on a 1:1 basis along the trail where possible and along Janes Creek riparian areas lacking riparian cover to offset loss of vegetation associated with development of the trail.*

Discussion - Interim Alignment (B)

Same as the Selected Alignment for all aesthetic issues with implementation of Mitigation Measure Aesthetices-1 above. Note that the Interim Alignment would result in the removal of fewer trees/shrubs and a smaller area of vegetation because portions of the trail would be constructed on the existing railroad track prism rather than requiring construction of additional or new prism. However this would not change the significance determinations.

Mitigation – Interim Alignment (B)

Implement Mitigation Measure Aesthetics-1.

Discussion - Secondary Alignment (C)

Same as the Selected Alignment for all aesthetic issues with implementation of Mitigation -1 above. Note that the Secondary Alignment could result in the removal of trees/shrubs and riparian vegetation on the hillside below Arcata High School to allow for construction of a retaining wall or additional structural support required for the trail. However this would not change the significance determinations.

Mitigation – Secondary Alignment (C)

Implement Mitigation Measure Aesthetics-1.

Issues and Supporting Information	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
AGRICULTURE AND FOREST RESOURCES: Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				A, B, C
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				A, B, C
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g), timberland (as defined by PRC section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				A, B, C
d) Result in the loss of forest land or conversion of forest land to non-forest use?				A, B, C
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forestland to non-forest use?			A, B, C	

Discussion - Selected Alignment (A)

a-d) The proposed trail corridor runs along the same general path as the North West Pacific rail line within NCRA and City ROWs. The project corridor is primarily undesignated ROW, but also travels through City parks designated PF, private property designated IL, and the Arcata Marsh and Wildlife Sanctuary which is designated NR. The parcels that make up the trail corridor are not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (collectively "Farmland"), do not contain existing farming uses, are not zoned for agricultural or timberland uses, are not under Williamson Act contracts, and are not "Forests," nor is the land directly adjacent to the corridor. Hence the proposed trail would not convert Farmland to non-agricultural use or result in the loss of forest land or conversion of forest land to non forest use. ***No impact*** would occur.

e) The project corridor is mostly within NCRA and City ROWs and is not adjacent to agricultural or forest lands. The proposed project would construct 4.5 miles of paved multiuse trail through the City of Arcata, the Arcata Marsh and Wildlife Sanctuary, and along Humboldt Bay. The proposed trail alignment between Samoa Boulevard and South I Street would be near land within the coastal zone historically designated and utilized for agricultural purposes (McDaniel Slough Enhancement Project area). However, this area is now designated NR and the City has worked with multiple agencies to restore and enhance wetland function to reclaimed former tidal salt/brackish marsh in this area. The proposed trail would be similar to, and in some cases overlay, existing levee trail uses currently on the site and would not result in the conversion of Farmland to non-agriculture use. Therefore, a ***less than significant impact*** would occur.

The proposed trail alignment is not directly adjacent to designated agriculture land or timberland. Thus, the proposed project would not involve changes in the existing environment which, due to its location or nature, could result in conversion of existing adjacent Farmland to non-agricultural use or conversion of forestland to non-forest use. A ***less than significant impact*** would occur.

Discussion - Interim Alignment (B)

Same as the Selected Alignment for all agriculture and forest issues.

Discussion - Secondary Alignment (C)

Same as the Selected Alignment for all agriculture and forest issues.

Issues and Supporting Information	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
AIR QUALITY: Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct Implementation of the applicable air quality plan?			A, B, C	
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?			A, B, C	
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			A, B, C	
d) Expose sensitive receptors to substantial pollutant concentrations?				A, B, C
e) Create objectionable odors affecting a substantial number of people?				A, B, C

Discussion - Selected Alignment (A)

a, b) The project site is located within the North Coast Air Basin (NCAB) and the jurisdiction of the North Coastal Unified Air Quality Management District (NCUAQMD). The North Coast Air Basin currently meets all federal air quality standards; however, it has been designated as non-attainment (exceeds maximum limits) for California Ambient Air Quality Standards for particulate matter less than ten microns in size (PM_{10}). To address this, the NCUAQMD adopted a Particulate Matter Attainment Plan in 1995. This plan presents available information about the nature and causes of PM_{10} standard exceedance, and identifies cost-effective control measures to reduce PM_{10} emissions, to levels necessary to meet California Ambient Air Quality Standards.

The following Arcata General Plan: 2020 Design Element policies are applicable to the proposed project:

- AQ-2a Implement land use measures to reduce vehicle trips, miles traveled, and air pollutant emissions.

- AQ-2b Implement transportation measures to reduce vehicle trips, miles traveled, and air pollutant emissions.
- AQ-2f Enforce air quality control measures and monitoring at construction sites.

The proposed project would generate construction emissions associated with mechanical clearing, grading, base laying, surface application and re-vegetation activities. While the NCAB is in non-attainment for PM_{10}, the temporary nature of construction activities combined with implementation of standard NCUAQMD dust and CO_2 emission reduction measures during construction (e.g., watering of construction site, covering haul trucks, street sweeping haul routes, landscaping/covering freshly graded areas immediately after grading, etc.) would avoid significant impacts. The proposed project would also provide a multi-use, ADA accessible trail through central Arcata south towards Eureka, thus potentially reducing vehicle miles traveled (VMT) and resulting in a beneficial air quality impact. The proposed project would not obstruct implementation of the NCUAQMD Particulate Matter Attainment Plan, violate air quality standards, or contribute substantially to an existing or projected air quality violation. Additionally, the project is consistent with Arcata's General Plan Air Quality Element. Therefore, a ***less than significant impact*** would occur.

c) Some of the project's construction activities would likely temporarily increase PM_{10} levels (e.g., exposing and moving soil can increase airborne particulate matter). The City of Arcata's standard permit conditions regulate construction practices to avoid and minimize adverse effects on air quality. The proposed project will carry out the City's standards and best management practices during the construction phase, and thereby minimize the project's short-term PM_{10} impacts to a ***less than significant*** level.

In the long term, the proposed project would not add any significant level of PM_{10} emissions that would cause a cumulatively considerable net increase. As stated previously, the project would potentially reduce motorized vehicle trips or miles traveled. The project is designed to encourage less motorized trips. If the project does succeed in reducing current or future motorized vehicle travel, it will help reduce emissions of PM_{10}, ozone precursors, carbon monoxide, and other toxics in the air basin.

d) The majority of the proposed project is not located adjacent to a sensitive receptor (e.g. hospitals, daycare centers, schools, etc.). However, a portion of the proposed trail would be approximately 0.20 miles from Arcata Elementary School and 0.07 miles from Arcata High School. Still, the proposed project would not result in substantial air pollutant concentrations, and thus would not significantly impact these sensitive receptors. Therefore, ***no impact*** would occur.

e) The construction phase would include trail paving, which could include applying hot asphalt. The odor from hot asphalt may be objectionable to some. However, the odor impact would be both short-term and localized segment by segment, and therefore would neither be persistent nor affect a substantial number of people. ***No impact*** would occur.

Discussion - Interim Alignment (B)

Same as the Selected Alignment for all air quality issues. Note the Interim Alignment would result in slightly less construction emissions than the Selected Alignment because portions of the

trail would be constructed on the existing railroad track prism rather than requiring construction of additional or new prism. This alignment would also be approximately 200 feet closer to Arcata High School than the Selected Alignment. However, this would not change the significance determinations.

Discussion - Secondary Alignment (C)

Same as the Selected Alignment for all air quality issues. Although this alignment would be constructed on Arcata High School property adjacent to existing High School shop buildings (wood shop, Pacific Coast High School and Six Rivers High School) and parking areas, this would not change significance determinations.

Issues and Supporting Information	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
BIOLOGICAL RESOURCES: Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?		A, B, C		
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?		A, B, C		
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?		A, B, C		
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?			A, B, C	
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			A, B, C	
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?			A, B, C	

Analysis Methodology

The background information and responses below are based on a Natural Features Inventory and Wetlands Delineation prepared for the project (Appendices C and D). The Natural Features Inventory includes: (1) a review of databases listing special-status plant and animal species that have been previously recorded in the region in which the proposed trail corridor is located (e.g., Natural Diversity

Database, Inventory of Rare and Endangered Vascular Plans, etc.); (2) an assessment of the likelihood that the project corridor and its environs contains habitat that may support any of the recorded species; and (3) a reconnaissance-level biological field survey of the trail corridor. The Wetland Delineation includes delineation of jurisdictional wetlands within and adjacent to the trail corridor following Federal and State delineation criteria and procedures. The wetland boundary was evaluated using the Army Corps of Engineers (three-parameter), City of Arcata (two-parameter), and/or Coastal Commission (one-parameter) methodologies, as applicable based on location. The Natural Features Inventory and Wetlands Delineation are included in their entirety as Appendices C and D of this Initial Study.

Existing Conditions

The proposed trail corridor (e.g., trail, trail shoulder, and trail prism) includes developed and undeveloped land located between Larson Park and Bracut. It would run through the City of Arcata, the Arcata Marsh and Wildlife Sanctuary, and along Humboldt Bay. It would cross vacant land, NCRA ROW, City of Arcata street ROW, Arcata Marsh trails, wildlife habitat, and wetlands, and would span Jolly Giant Creek, Butcher's Slough, Gannon Slough, Jacoby Creek, Old Jacoby Creek, Brainard's Slough, an unnamed drainage ditch parallel to Highway 101, and Arcata Bay. Most of the trail corridor consists of human-altered soils from cut and fill for road development, railroad development, berm/dike instillation and manipulation, agricultural uses, urban development, wastewater treatment infrastructure, highway roadbed, and railroad fill. Much of the vegetation has similarly been altered from long-term land uses, and consists of many non-native and disturbance oriented species. Site hydrology has also been historically altered from conversion of land to urban uses (W&K 2010a). The following wetland types were mapped within the trail corridor:

Palustrine Emergent: Freshwater wetlands within vegetated freshwater ditches, springs, and seeps in the City, seasonal high groundwater, compacted areas near Shay Park and other former industrial/ commercial properties within urban limits of the City. Also, some ditches that act as stormwater conveyance, which have extensive wetland vegetation, hydric soils, and hold persistent or seasonal water. This includes the ditch located along Highway 101 between the railroad prism and the highway edge of pavement (W&K 2010a).

Palustrine Emergent Ditch: These areas consist of City stormwater conveyance ditches that in some cases are established with palustrine emergent vegetation and meet the City definition of two-parameter wetlands. These are human-made ditches, absent permanent or seasonal wetland hydrology, that were observed to have ephemeral water directly related to storm events (W&K 2010a).

Estuarine Intertidal Emergent (Saltmarsh): These areas are present at the margins of Humboldt Bay, Butcher's Slough, Gannon Slough, and Jacoby Creek, and are subject to tidal inundation with some fresh water influence when located within tidal parts of creek mouths/estuaries (W&K 2010a).

Estuarine Emergent Ditch: These areas are isolated from direct tidal influence and are connected to the palustrine emergent ditch that runs along the west side of Highway 101 between the railroad prism and the highway edge of pavement. Some portions of this ditch receive subsurface saltwater infiltration, have remnant saline conditions, or receive occasional saltwater during high tide storm events (W&K 2010a).

For purposes of simplicity, this analysis groups the two palustrine emergent wetland categories above into a single "palustrine wetlands" category, and the two estuarine emergent wetland categories above into "estuarine wetlands." See Appendix D of this Initial Study for analysis of wetland impacts by each of the four wetland categories.

Detailed wetland delineation maps are included in Appendix D. Table 1 identifies the acreage of the existing habitat, wetlands and Waters of the U.S./State located within the study area (trail corridor plus land on either side of the corridor), and the acreages of these resources that would be temporarily and permanently filled and/or otherwise impacted under the proposed project. As indicated in Table 1, the study area currently contains 0.03 acres of shorebird roosting/rocky shoreline habitat, 2.06 acres of riparian habitat, 0.71 acres of Humboldt Bay owl's clover (*Castilleja ambigua ssp. humboldtiensis*) [CNPS List 1B.2], 0.16 acres of Lyngbye's sedge (*Caryx lyngbyei)* [CNPS List 2.2], 4.15 acres of palustrine wetlands, 3.22 acres of estuarine wetlands, and 1.04 acres of Waters of the U.S./State. In addition, although survey results were not available at the time of preparation of this Initial Study, it is assumed that the trail corridor may also contain Point Reyes bird's beak *(Cordylanthus maritimus ssp. palustris)* [CNPS List 1B.2] and sand spurrey (*Spergularia Canadensis var. occidentalis*) [CNPS List 2.1].

Table 1
Existing and Impacted Habitat, Wetlands, and Waters of the U.S.
Under the Proposed Project

	Habitat (acres)						Wetlands (acres)		
	Shorebird Roosting/Rocky Shoreline	Riparian (1 Parameter)	Humboldt Bay owl's clover (*Castilleja ambigua ssp. humboldtiensis*)	Lyngbye's sedge (*Caryx Lyngbyei*)	Point Reyes bird's beak (*Cordylanthus maritimus ssp. palustris*)[1]	Sand spurrey (*Spergularia Canadensis var. occidentalis*)[1]	Palustrine[2]	Estuarine[3]	Waters of the U.S/ State (acres)[4]
Existing	0.03	2.06	0.71	0.16	0.85	0	4.15	3.22	1.04
Temporarily Impacted	0.00	0.12	<0.01 (186 ft^2)	0	<0.01 (279 ft^2)	0	0.67	0.24	0.03
Permanently Impacted	0.00	0.14	<0.01 (284 ft^2)	0	0.01 (616 ft^2)	0	1.35	0.41	0.01

[1] *Data has not been collected at this time, presence is assumed until a survey for the species has been conducted.*
[2] *Includes palustrine emergent and palustrine emergent ditch wetlands.*
[3] *Includes estuarine intertidal emergent (saltmarsh) and estuarine emergent ditch wetlands.*
[4] *Ordinary high water mark and tidal waters of the U.S. (below high tide line)*
Source: Wetlands Delineation, Appendix F, Table 1, May 2010.

The Humboldt Bay area provides habitat for a large diversity of aquatic and terrestrial animal species. The biotic environmental setting within the proposed trail corridor includes wetlands, sloughs, freshwater marsh, coastal salt marsh, creeks, ditches, mudflats, and natural communities, including aquatic, riparian, upland habitat, shorebird roosting habitat and sensitive species. Existing urban development, the railroad tracks, and Highway 101 each limit the diversity and abundance of habitat for

use by wildlife species. The Natural Features Inventory and Wetland Delineation describe each habitat type in detail (Appendices C and D).

Sensitive Species

The riparian habitat through Shay Park has a high potential for migratory bird use in addition to providing potential habitat for nesting birds, including the Black-capped Chickadee, a California Species of Special Concern. Creeks and sloughs in the project area could potentially serve as migration corridors for fish, such as salmon, that move between salt and freshwater to complete their life history. Sloughs could also potentially provide resting and feeding habitat for migratory waterfowl and shorebirds. The brackish waters of the sloughs, drainage ditches, and the lower reaches of the streams provide potential habitat for special status species as listed below.

Fishes

Tidewater Goby (*Eucyclogobius newberryi*): The tidewater goby is listed as endangered by the Federal Government (59 FR 5494; March 7, 1994). The tidewater goby is generally found in fresh or low salinity (brackish) water of shallow (less than one meter) lagoons, coastal wetlands, and lower stream reaches where the water is fairly still but not stagnant. The potential habitat for goby within the project area is limited to the lower portions of Jacoby Creek, within Butcher's Slough, and potentially backwaters associated with estuarine emergent wetlands and ditches that at some point have or had connectivity to inputs from the Bay and maintain water throughout the year (W&K, 2009a).

Coho Salmon (*Oncorhynchus kisutch*): The Southern Oregon/Northern California coho salmon (Southern Oregon/Northern California ESU) was federally listed as a threatened species by NMFS (62 FR 33038; dated June 18, 1997) and is also listed as threatened by the State of California. The coho salmon was listed as threatened in the Southern Oregon/Northern California Coast Evolutionary Significant Unit (ESU), defined as all coho salmon naturally produced in streams between Cape Blanco in southern Oregon and Punta Gorda in northern California, Humboldt County. Coho salmon spawn in coastal streams in fall or winter, and remain in fresh water for about a year.

Chinook Salmon (*Oncorhynchus tshawytscha*): The California Coastal chinook salmon (Southern Oregon/California Coastal ESU) is listed by the Federal Government as a threatened species (64 FR 50393; September 16, 1999). The coastal chinook salmon was listed as threatened in the Southern Oregon/Northern California Coast Evolutionary Significant Unit (ESU). California coastal chinook salmon are a distinct population of chinook salmon that reside from Redwood Creek in Humboldt County, south through the Russian River in Sonoma County.

Longfin smelt (*Spirinchus thalyichthys*): The longfin smelt (*Spirinchus thalyichthys)* was listed as threatened by the California Fish and Game Commission, effective as of March 5, 2009. The decision was finalized on June 25, 2009. All life stages of longfin smelt are known to occur in Humboldt Bay and tributary streams; however, with some seasonal variability in presence. Adult longfin smelt could be present in the Bay at any season, and juvenile outmigration occurs in the spring. Longfin smelt apparently occur in Humboldt Bay at very low density, however some uncertainty remains about distribution because no specific studies to detect their presence

have been conducted in most Humboldt County streams. At present they are considered uncommon in Humboldt Bay (W&K 2009a).

Steelhead (*Oncorhynchus mykiss*): The Northern California steelhead (Northern California ESU) is listed by the Federal Government as a threatened species within the "Northern California ESU" (FR 65:36074; August 7, 2000). This coastal steelhead ESU occupies river basins from Redwood Creek in Humboldt County, California to the Gualala River, inclusive (i.e. in Smith, Klamath, Trinity, Mad, and Eel Rivers and Redwood Creek). Generally, in this ESU, steelhead return to fresh water to spawn from August through June, spawn from December through April, with peak spawning in January in the larger basins, and late February and March in the smaller coastal basins.

A few additional potentially sensitive but non-listed fish species may be present in the general vicinity, as follows:

Coastal Cutthroat Trout (*Oncorhynchous clarki clarki*): The Southern Oregon/California Coast ESU of coastal cutthroat trout was determined to be a Federal Candidate species by NMFS. In Vol.63, No. 55, p. 13832; March 23, 1998 of the Federal Register. This ESU of Coastal Cutthroat Trout includes populations of cutthroat trout from south of Cape Blanco to the southern extent of the subspecies' range near the Mattole River in California.

Green Sturgeon (*Acipenser medirostris*): The green sturgeon Northern Distinct Population Segment (DPS), north of and including the Eel River, is a Federal Species of Concern. The Southern DPS is listed as threatened (71 FR 17757, April 7, 2006). It is found in estuaries, lower reaches of large rivers, and salt or brackish waters off river mouths. Juveniles under 300 mm are not tolerant of salinity, and would not be expected to occur in Humboldt Bay.

Pacific eulachon (*Thalyichthys pacificus*, PT): This small, anadromous smelt has been proposed for federal threatened status (74 FR 10857, March 13, 2009). The species occurs from Alaska south to Humboldt Bay, where it has been found in the Bay and small tributary streams, and in the Mad River. At any given time most of their adult population would be expected to inhabit deeper waters beyond Humboldt Bay, and any fish present would most likely be active in the mid-water column.

Pacific Lamprey (*Lampetra tridentata*, SC): The Pacific lamprey, is a jawless fish that hatches in freshwater and spends its early life in the bottom sediments of rivers. Adults usually stay in the ocean near the shore, and then return to freshwater to spawn.

Plants

All areas of estuarine intertidal emergent wetlands are considered potential habitat for Humboldt Bay owl's clover (*Castilleja ambigua ssp. humboldtiensis*), and Point Reyes bird's beak (*Cordylanthus maritimus ssp. palustris*) [both CNPS List 1B.2]. The brackish ditches on the east side of the tracks are considered low-quality potential habitat and the saltwater marsh associated with Butcher's Slough and vegetated salt flats on the west side of the tracks along the margin of the bay are considered moderate to high value habitat for these species. Of lesser potential to occur within the project site is sand spurrey (*Spergularia Canadensis var. occidentalis*) which

prefers prime saltmarsh habitat and is less likely to occur along the railroad bed [CNPS List 2.1]. Sand spurrey has not been reported along the east shore of Humboldt Bay. CNPS listed plant species Lyngbye's sedge (*Caryx lyngbyei)* [CNPS List 2.2] is also associated with estuarine intertidal emergent (saltmarsh) wetland.

No sensitive animal species were observed within the proposed trail corridor during the field survey. The terrestrial habitats surrounding the trail corridor have limited potential to support special status animal species because of the proximity to Highway 101 and the ongoing noise, high level vehicular presence, and ongoing road maintenance activities. None of the special status terrestrial animal species from the region have been documented within the corridor and these species are not likely to occur because of the lack of suitable habitats (W&K 2009a).

Existing Regulatory Setting

The City of Arcata's General Plan 2020 Resource and Conservation Element policies that apply to biological resources include, but are not limited to:

RC-1a Maintain biological and ecological integrity.
RC-1b Non-native plant and animal species.
RC-1c Habitat value protection.
RC-1d Sensitive habitat definition.
RC-3a Requirement for wetland delineation and study.
RC-3b Filling of wetlands.
RC-3c Designation of Wetland Protection Areas (WPA).
RC-3d Allowable Uses and activities in Wetland Protection Areas.
RC-3f Review and approval of projects affecting Wetland Protection Areas.
RC-3j Minimum mitigation requirements for wetland impacts.
RC-3k Wetland functional capacity maintenance requirement.

The Resource Conservation & Management Element designates environmentally sensitive habitat areas (ESHAs) including Jacoby Creek, Jolly Giant Creek, Gannon Slough, Butcher's Slough, and the Arcata Marsh and Wildlife Sanctuary (Policy RC-1d). In addition to the policies above, the City's Land Use Code would apply to the proposed project (Municipal Code, Title 9, Article 5) including applicable policies on Wetland Conservation and Management (9.59.060) which protect existing wetlands areas and maintains a standard of 'no net loss' in area, function, and value.

Pursuant to Clean Water Act Section 404, a Section 404 Permit is required for any fill or dredging within jurisdictional wetlands or waters of the U.S. The COE has jurisdiction over wetlands which meet each or any of the three-wetland criteria (hydrology, soils, and vegetation) defined in the COE Wetlands Delineation Manual (Environmental Laboratory, 1987). The COE does not regulate wetland buffers, development adjacent to wetlands, or environmentally sensitive habitat areas (ESHAs). Additionally, such federally-permitted projects are subject to a 401-water quality certification from the RWQCB to minimize impacts to "Waters of the State." The Fish and Wildlife Service has jurisdiction over species listed as threatened or endangered under Section 9 of the Federal Endangered Species Act. CDFW and National Marine Fisheries Service (NMFS) have jurisdiction over species listed as threatened or endangered under California Fish and Game Code Section 2080.

In addition to the above state and federal requirements, biological resources within the coastal zone are subject to the California Coastal Act of 1976. The major components of the Coastal Act that pertain to the proposed project are the protection of wetlands and ESHAs. The California Coastal Commission regulates impacts to wetlands and ESHAs within the Coastal Zone.

Discussion - Selected Alignment (A)

a) Special status fish species such as tidewater goby, southern Oregon/northern California Coho salmon, California coastal Chinook salmon and coastal cutthroat trout are known to use the tributaries in Arcata and Humboldt Bay. Therefore, the sloughs, streams, and ditches located immediately adjacent to the alignment are potentially utilized by these fish species. The brackish to saltwater areas of Butcher's Slough, Gannon Slough and tidally influenced lower portion of Jacoby Creek are considered potential habitat for several special status fish species, as listed above. Direct impacts to this habitat (i.e. "Waters of the U.S.") would occur due to pile installation and bridge footings below the Ordinary High Water Mark (OHWM) for non-tidal waters and below the High Tide Line (HTL) for tidally influenced waters. Indirect (shading) impacts could occur due to bridge structures placed over Waters of the U.S. The extent of these impacts is summarized in Table 2 below. As indicated, project bridge impacts would directly impact a total of 256 square feet (0.01 acres), and indirectly impact (e.g. shade) a total of 8,249 square feet (0.19 acres), of Waters of the U.S.

Table 2
Bridge Impacts to Waters of U.S. Under the Proposed Project

Water Crossing Name	Bridge Data			Impacts to Waters of U.S.	
	Total # of Piles	Total Piles Below HTL/ OHWM	Total # of Bridge Footings[1]	Bridge Footings Ground Disturbance Below HTL/OHWM (ft^2)	Bridge Shading Below HTL/OHWM (ft^2)
Jolly Giant Creek	0	0	2	0	80
Arcata Marsh Berm Bridge	0	0	5	0	0
Butcher's Slough	4	0	2	60	979
Gannon Slough	16	13	7	134	4,432
Jacoby Creek	0	0	0	0	0
Old Jacoby Creek	6	2	4	13	938
Brainard's Slough	6	5	4	49	1,820
			TOTAL	**256 ft^2 (0.01 acres)**	**8,249 ft^2 (0.19 acres)**

HTL = High Tide Line. OHWM = Ordinary High Water Mark.
[1] Bridge footings include pile caps and retaining footings
Source: Appendix A Table 4, May 2010

As indicated in Table 2, the proposed crossings of Jacoby Creek, Jolly Giant Creek and the Arcata Marsh Berm would not directly impact Waters of the U.S. in that bridge piles, footings, or other ground disturbing activities are not proposed within the HTL or OHWM of these waterways. However, as indicated in Table 2, the proposed crossings of Butcher's Slough, Gannon Slough, Old Jacoby Creek and Brainard's Slough would directly impact Waters of the U.S. in that bridges, pile footings, or other ground disturbing activities are proposed within the

channel and/or below the HTL of these waterways: the proposed Butcher's Slough crossing would require bridge footings below the HTL; the proposed Gannon Slough Crossing would require piles within the channel along with temporary dewatering using cofferdams during construction; the Old Jacoby Creek and Brainard's Slough crossings would require piles and footings below the HTL. Because sensitive fish species have the potential to occur in these waterways, the project could impact these fish species – this would be ***less than significant impact after mitigation*** with implementation of Mitigation Measure Biological-1

All areas mapped as estuarine intertidal emergent wetlands are considered potential habitat for Humboldt Bay owl's clover, Point Reyes bird's beak, Lyngbye's sedge, and sand spurrey. A survey for Humboldt Bay owl's clover and Lyngbye's sedge was conducted; as indicated in Table 1, approximately 0.71 acres and 0.16 acres of the plants were found respectively. Less than 0.01 acres of Humboldt Bay owl's clover would be temporarily impacted during trail construction, and no acreage of the plant would be permanently impacted. There would be no temporary or permanent impacts to Lyngby's sedge. In addition, while survey results for Point Reyes bird's beak and Sand spurrey where not ready in time for inclusion in this Initial Study (although survey results are expected around the beginning of August, 2010), presence of these species within the trail corridor is assumed to provide a conservative analysis. Thus, the proposed project could impact these sensitive plant species – this would be ***less than significant impact after mitigation*** with implementation of Mitigation Measure Biological-2.

The riparian habitat through Shay Park provides potential habitat for California bird Species of Special Concern, including the Willow Flycatcher, Yellow-breasted Chat, Yellow Warbler, Warbling Vireo, and Black-capped Chickadee. Sloughs to be crossed by the proposed trail could also potentially provide resting and feeding habitat for migratory waterfowl and shorebirds. Project construction activities could generate temporary noise, dust, vibration, and light that could have adverse impacts to these and other sensitive avian species, especially during the breeding season. Although no special status avian species were observed during the field survey, and potential construction impacts would be temporary, an additional survey prior to construction activities near Shay Park and along the sloughs to be crossed by the proposed trail would reduce the potential impact even further. Therefore, the project would have a ***less than significant impact after mitigation*** on special status avian species with implementation of Mitigation Measure Biological-3.

b, c) Much of the proposed trail development through the City is adjacent to existing streets and through disturbed areas and therefore would not impact riparian habitat or other sensitive natural communities. However, trail development along the northern and western boundary of Shay Park, South of Samoa Boulevard, through the Arcata Marsh, and along Humboldt Bay would result in impacts to riparian habitat and to both palustrine and estuarine wetlands.

Riparian Habitat

Construction of the trail prism would result in the removal of trees, shrubs and riparian vegetation along some trail segments, especially in Shay Park, the Arcata Marsh, and along South G Street. Of the 2.06 acres of existing riparian areas within the proposed trail corridor, approximately 0.14 acres would be permanently impacted (i.e. vegetation / tree removal) and

0.12 acres would be temporarily impacted (Table 1). Impacts would be ***less than significant after mitigation*** with implementation of Mitigation Measure Aesthetics-1.

Shorebird Roosting / Rocky Shoreline

The presence of several shorebird roosting locations along the railroad alignment between Arcata and Bracut has been documented in prior studies (W&K 2009a). The actual railroad alignment is likely used for roosting mostly during high tides when more preferred locations are unavailable along the Bay margin. During the field survey, the biologist did not observe use of the roosting locations on the railroad alignment other than piles that are away from the railroad bed and within the intertidal zone. As shown in Table 1 above, approximately 0.03 acres of shorebird roosting habitat exists within the study area, however the proposed project would not result in permanent or temporary impacts to these areas. Since shorebird use of the railroad alignment within the project footprint does not appear to be frequent based on several high-tide site visits by the project biologist, it is unlikely that human movement effects associated with use of the new trail would significantly alter current shorebird use of the project site. Therefore, a ***less than significant impact*** would occur.

Waters of the U.S.

Several areas within the proposed project corridor are defined as "Waters of the U.S./State," including Jolly Giant Creek (at Shay Park), Butcher's Slough, Gannon Slough, Jacoby Creek, Old Jacoby Creek, and Brainard's Slough. There are 1.04 acres of Waters within the proposed trail corridor (Table 1). Permanent impacts of 0.01 acres would result from installation of bridge footings and other crossing structures below the HTL, while 0.03 acres of temporary impacts would occur (Table 2). As long as construction activities within these Waters occur in accordance with the required 404, 1603 and other permits from NOAA Fisheries, FWS, COE and DFW, the impact would be ***less than significant***.

Wetlands

The proposed project would result in impacts to palustrine emergent wetlands, estuarine intertidal emergent (saltmarsh) wetlands, and estuarine emergent (ditch) wetlands. The study area currently contains 4.15 acres of palustrine wetlands and 3.22 acres of estuarine wetlands. Temporary and permanent impacts to palustrine wetlands would total 0.67 acres and 1.35 acres respectively, while temporary and permanent impacts to estuarine wetlands (including waters of the state) would total 0.27 and 0.42 acres respectively (Table 1).

In the area south of Samoa Boulevard, a boardwalk/bridge is proposed across existing wetlands to join the proposed trail from the railroad bed to the existing Arcata Marsh berm. Equipment staging is also proposed in this wetland area, although the size of the temporary impact area would be minimized by storing supplies and equipment in upland areas. The proposed boardwalk/bridge would be designed to minimize footing requirements and associated impacts to the wetlands, and minimization measures are proposed associated with the proposed equipment staging, including the placement of protective pads (metal/wood/rubber sheets) on top of the wetlands where equipment access/staging would be required to present the equipment tracks/wheels from rutting and compressing the soil and uprooting or destroying existing wetland vegetation. Still, the wetland would be temporarily impacted during trail construction and

permanently impacted by the proposed boardwalk/bridge footings and shading from the bridge/boardwalk itself.

Based on the above, the proposed trail would impact a limited amount of palustrine emergent wetland, estuarine intertidal emergent, and estuarine emergent wetlands. To mitigate the wetland impacts the City has developed a mitigation and monitoring plan that creates 1.75 acres of on-site wetlands (see Mitigation Biological-4) adjacent to or in close proximity to the proposed trail corridor. The wetland mitigation sites include areas at or adjacent to the Arcata Marsh and Wildlife Sanctuary which add to and/or enhance existing wetlands rather than creating small isolated wetlands in other areas along the proposed trail corridor. The Plan proposes two mitigation options. One option replaces palustrine wetlands on a 1:1 ratio and estuarine wetlands on a 1:1 ratio or a second option that replaces an overall 1:1 wetlands replacement that creates a greater proportion of high value estuarine wetlands to replace impacted low value palustrine wetlands that were historically estuarine wetlands. The estuarine wetlands are designed to provide habitat for *Humboldt Bay Owl's clover, Point Reyes bird's beak and Sand spurrey* to offset impacts from trail construction. Therefore a ***less than significant impact after mitigation*** would occur with implementation of Mitigation Measure Biological-4.

d) The creeks and sloughs in the vicinity of the proposed project serve as migration corridors for listed fish species that move between salt and freshwater habitat to spawn. Small areas adjacent to the proposed trail corridor also serve as habitat for listed migratory waterfowl and shorebird species. Project construction activities could potentially discourage the use of small areas of Jolly Giant Creek, Butcher's Slough, Gannon Slough, Jacoby Creek, Old Jacoby Creek, and Brainard's Slough by these listed migratory fish species, and could potentially discourage use of small areas of habitat along Humboldt Bay and within Arcata Marsh by these migratory waterfowl and shorebird species. However, because project construction activities would be temporary, and because there is substantial additional habitat in the area for these species, project construction activities would not interfere substantially with the movement of native resident or migratory fish or wildlife species, and a ***less than significant impact*** would occur.

The project would include the construction of approximately 0.01 acres of bridge footings below the HTL/OHWM of Jolly Giant Creek, Butcher's Slough, Gannon Slough, Old Jacoby Creek, and Brainard's Slough. While these creeks and sloughs serve as migration corridors for listed fish species, the size and extent of the footings would be minimal and would not represent a barrier to fish passage. Therefore, project structures would not interfere substantially with the movement of native resident or migratory fish or wildlife species, and a ***less than significant impact*** would occur.

e) Arcata General Plan: 2020 Resource Conservation and Management Element policies define sensitive habitat areas (e.g. streams, creeks and wetlands) and limit activities adjacent to these areas, referred to as environmental buffer areas (EBA) (Policies RC-1, 2 and 3). Generally EBAs range from 50-100 feet. Construction and maintenance of foot trails for public access and outdoor recreation activities such as bird watching, hiking and similar activities are allowable uses within EBAs (Policies RC-2c and 3d).

Resource Conservation & Management Element Policy RC-3a requires a wetland reconnaissance or delineation report for potential wetlands impacts. A wetland delineation was prepared for the proposed project (Appendix F of this Initial Study). The City will follow Policy RC-3b, which stipulates allowances and mitigations for filling a wetland. See discussion b,c) above for a complete discussion of the project's potential wetland impacts and mitigation measures. Mitigation Measure Biological-4 is consistent with applicable General Plan policies, including RC-3j (Minimum mitigation requirements for wetland impacts) and RC-3k (Wetland functional capacity maintenance requirement), and would reduce potential wetland impacts to less than significant. As long as the City complies with these policies for filling wetland, the proposed project alignment would not be in conflict with General Plan policies adopted to protect biological resources. Therefore construction, maintenance, and use of the proposed trail would not conflict with applicable General Plan Policies and a ***less than significant impact*** would occur.

f) A number of plans aimed at protecting and/or restoring watershed processes in order to preserve and enhance wildlife habitat, in particular salmon and steelhead habitat within the Humboldt Bay Area have been prepared including Humboldt Bay Salmon and Steelhead Conservation Plan (2005) and Humboldt Bay National Wildlife Refuge Complex, Draft Comprehensive Conservation Plan (January 2009). Based on the discussions above (a-e), the proposed project would not significantly impact the Humboldt Bay watershed or impact protected fish and wildlife species, and therefore would not conflict with any conservation plans. Therefore, a ***less than significant impact*** would occur.

Mitigation – Selected Alignment (A)

Biological-1) *Pile, bridge footing, and other ground disturbing construction activities within the channels and/or below the HTLs of Butcher's Slough, Gannon Slough, Old Jacoby Creek and Brainard's Slough shall:*

(a) *Include the implementation of minimization and avoidance measures, such as isolating pile installations, bridge footing installations, and other ground disturbing activities within the channel or below the HTL from flowing water;*

(b) *Include the implementation of BMPs to avoid sedimentation and polluted runoff from draining to the creeks and sloughs from the construction sites;*

(c) *Be limited to the non-spawning seasons for the sensitive fish species that occur within these creeks and sloughs;*

(d) *Include any other measures required by, or developed in consultation with, NOAA Fisheries, FWS, COE and DFW during the requisite 404, 1603 or other permitting, to avoid impacts to sensitive fish species.*

Biological-2) *All efforts shall be made to avoid Humboldt Bay Owl's clover, Point Reyes bird's beak and Sand spurrey during trail construction. Efforts will be made to schedule construction for times when these plants are dormant or have dropped their seed. Should construction occur during times when these plants will be present the area will be surveyed and any individual Humboldt Bay Owl's clover, Point Reyes bird's beak and Sand spurrey plants*

will be flagged. If construction will impact any Humboldt Bay Owl's clover, Point Reyes bird's-beak and Sand spurrey plants these plants shall be replaced on a 1:1 basis at sites adjacent to the trail corridor or in the proposed mitigation areas determined to be suitable by a qualified botanist.

Biological-3) *The City of Arcata shall have pre-construction surveys conducted by a qualified biologist for Willow Flycatcher, Blacked-capped Chickadee, Warbling Vireo, Yellow Breasted Chat, and Yellow Warblers within the Shay Park area, and for sensitive migratory waterfowl and shorebird species in the sloughs to be crossed by the proposed trail. If the survey finds these species to be nesting within the vicinity of the proposed trail: (1) construction shall be delayed until the end of the nesting season of these species; or (2) a 150-foot wide buffer within which no construction activities may occur shall be established around occupied nest until the young have fledged.*

Biological-4) *The City of Arcata Wetland Mitigation and Monitoring Plan will replace impacted wetlands. The plan is designed to meet applicable regulatory agency (FWS, COE and DFW) requirements. At a minimum, the plan: (1) replaces the acreage of jurisdictional wetlands to be permanently impacted by the proposed trail, as set forth in Table 1, with the creation of comparable on-site wetlands on a 1:1 basis; (2) includes an estuarine wetland enhancement component of 2:1 for impacted acres of wetlands (3) includes a revegetation plan that reflects the native plant species within the wetland types to be mitigated; and (3) includes maintenance of the wetlands for a minimum of 5 years, including the replanting of any dead or dying plants within the new wetlands.*

The development of the on-site mitigation wetlands will be timed to prevent impacts to any sensitive animal species that may be present in adjacent tidal wetlands by working during low tide. A ***less than significant impact after mitigation*** *would occur with implementation of Mitigation Measure Biological-5.*

Biological-5) *The City of Arcata shall have pre-construction surveys conducted by a qualified biologist for sensitive plant and animal species on and within the vicinity of the proposed on-site wetland mitigation sites. If the surveys find sensitive species, the City shall: (1) implement all the recommendations made by the biologist to avoid significant impacts to these species; and (2) conduct any consultations with, and obtain any permits that may be required from, applicable regulatory agencies (e.g., FWS, DFW, etc.).*

Discussion - Interim Alignment (B)

The Interim Alignment would result in substantially less of an impact to all wetland types because a majority of the trail would be constructed on the existing railroad track prism rather than requiring construction of additional or new prism. This alignment would result in approximately 0.10 acres of permanent impacts to palustrine wetlands (92% less of an impact than Selected Alignment) and approximately 0.02 acres of permanent impacts to estuarine wetlands (95% less of an impact than the Selected Alignment). In addition, the Interim Alignment would only require modification/ construction of bridges over Jolly Giant Creek, the Arcata Marsh Berm Bridge, and Brainard's Slough. These bridges would result in no direct impacts to wetlands or other waters of the U.S. However, this would not change the significance determinations. Note that while the area of wetlands to be impacted is

approximated here, full quantification for each wetland type would occur for required permits if the City elects to approve this alternative instead of the Selected Alignment.

Mitigation - Interim Alignment (B)
Implement Mitigation Measures Biological-1,-2, -3, -4, and -5 (adjusted as appropriate for the reduced impact area).

Discussion - Secondary Alignment (C)
The Secondary Alignment would result in similar impacts as the Selected Alignment for all biological resource issues. However this alignment would result in less of an impact to palustrine wetlands due to its avoidance of the Shay Park area; this would not change significance determinations. Note that while the area of wetlands to be impacted is not quantified here, full quantification would occur for required permits if the City elects to approve this alternative instead of the Selected Alignment.

Mitigation - Secondary Alignment (C)
Implement Mitigation Measures Biological-1,-2, -3, -4, and -5 (adjusted as appropriate for the reduced impact area).

Issues and Supporting Information	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
CULTURAL RESOURCES: Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?				A, B, C
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?		A, B, C		
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		A, B, C		
d) Disturb any human remains, including those interred outside of formal cemeteries?		A, B, C		

Discussion - Selected Alignment (A)

a) A cultural resources investigation was conducted for the proposed project which included background research, records searches, and a field survey of the trail corridor (Appendix E). This report concluded that the proposed project would not impact any properties or features (such as bridges) listed or eligible for listing in the National Register of Historic Places or the California Register of Historical Resources (Roscoe & Associates, 2010). Therefore, ***no impact*** would occur.

b-d) The proposed project alignment runs through the City of Arcata, generally paralleling the NCRA ROW, and continues adjacent to the NCRA ROW to the Arcata Marsh. Within the Arcata Marsh, the proposed trail alignment is located predominantly on existing Marsh trails. Once crossing Butcher's Slough at the Arcata Wastewater Treatment Plant (WWTP), the trail alignment leaves the Marsh and continues parallel to the railroad tracks adjacent to South G Street. The trail continues south beyond the Arcata City Limits parallel to the railroad tracks

between Highway 101 and Humboldt Bay. Based on the above, the proposed trail alignment travels through previously disturbed lands.

An archaeological records search at the North Coast Information Center (NCIC) was conducted as part of the cultural resources investigation by Roscoe & Associates (Appendix E). According to the records search, the trail alignment does not intersect known archaeological sites. However, there are six previously recorded archaeological sites within 0.5 miles, including two sites within 0.25 miles, of the project area. Proposed alignments through property that is already disturbed (i.e. railroad prism, substantially developed parcels) have less of a potential of impacting cultural resources than alignments though property that has not been previously disturbed. As indicated above, most of the proposed trail segments are either directly adjacent to the NCRA ROW or transect urban/previously developed areas. No new archaeological sites were found or identified during the cultural resources study (Roscoe & Associates, 2010). However, there would still be a potential to unearth archaeological resources, paleontological resources, and/or human remains during trail construction. The impact would be ***less than significant after mitigation*** with implementation of Mitigation Measures Cultural-1 and -2.

Mitigation – Selected Alignment (A)

Cultural-1) *Earthmoving and excavation activities will be monitored for presence of archaeological or paleontological artifacts and immediately stopped if such activities uncover suspected cultural resources; any suspected cultural resources sites will be inspected by a qualified archaeologist, and any reporting/curation/ preservation recommendations made by the archaeologist will be implemented. Also, if human remains are uncovered, the City of Arcata and the appropriate Native American representative will be notified immediately, and the remains will be treated in accordance with all applicable federal, state, local and tribal requirements.*

Cultural-2) *If human remains are uncovered during trail construction activities, construction activities in the immediate vicinity of the remains shall be halted, the City of Arcata Planning Department, Humboldt County Coroner, Native American Heritage Commission (NAHC), and the relevant Native American representative(s) shall be notified, and the remains shall be treated in accordance with NAHC treatment and disposition requirements.*

The provision of on-site replacement wetlands required by Mitigation Biological-4 would impact approximately 1.77 acres adjacent to the proposed trail corridor. Prior to developing the mitigation wetlands a NCIC records search and reconnaissance (e.g., surface) level archaeological/paleontological field survey will be conducted by a qualified archaeologist of the mitigation wetlands to prevent potential impacts to any cultural resources that may be present. A ***less than significant impact after mitigation*** would occur with implementation of Mitigation Measures Cultural-3 and -4 below.

Cultural-3) *The City of Arcata shall have an NCIC records search and reconnaissance (e.g., surface) level archaeological/paleontological field survey conducted by a qualified archaeologist of the mitigation wetlands sites prior to development of the wetlands. If the records search indicates that archaeological resources have been previously recorded at the mitigation wetland sites, or if archaeological or paleontological resources are found on the mitigation wetland sites during the field survey and determined by the archaeologist to be*

"significant" or "unique" as defined by CEQA, required mitigation shall be identified by the consultant and implemented by the City prior to construction (including, potentially, subsurface investigations).

Cultural-4) *Implement Mitigations Cultural-1 and -2 at the mitigation wetlands sites.*

Discussion - Interim Alignment (B)

Same as the Selected Alignment for all cultural resource issues. However, this alignment would potentially replace and/or improve the existing NCRA Gannon Slough bridge. This bridge was one of four features identified in the cultural resources investigation as objects of interest including the railroad bridges over Butcher's Slough, Gannon Slough, and Jacoby Creek, and a siding remnant north of Gannon Slough. Original construction dates for the bridges could not be found during the research for the cultural resources investigation, but it is possible they contain elements constructed before 1901 (Roscoe & Associates, 2010). Still, an Archaeological Site Record for the portion of the Northwest Pacific Railroad within the Eureka-Arcata corridor was completed in 2003 by JRP, and the study concluded that this portion of the railroad "does not appear to meet the criteria for listing in the National Register of Historic Places, nor does it appear to be a historical resource for the purposes of CEQA" (Roscoe & Associates, 2010). Therefore, significance determinations would not change.

Mitigation – Interim Alignment (B)

Implement Mitigation Measures Cultural-1, -2, -3, and -4.

Discussion - Secondary Alignment (C)

Same as the Selected Alignment for all cultural resource issues.

Mitigation - Secondary Alignment (C)

Implement Mitigation Measures Cultural-1, -2, -3, and -4.

Issues and Supporting Information	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
GEOLOGY AND SOILS: Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a know fault? Refer to Division of Mines and Geology Special Publication 42.			A, B, C	
ii) Strong seismic ground shaking?			A, B, C	
iii) Seismic-related ground failure, including liquefaction?			A, B, C	
iv) Landslides?				A, B, C
b) Result in substantial soil erosion or the loss of topsoil?			A, B, C	

Issues and Supporting Information	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project, and potentially result in onsite or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?		C	A, B	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?			A, B, C	
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				A, B, C

Discussion - Selected Alignment (A)

The following Arcata General Plan: 2020 Public Safety Element policies apply to the proposed project:

- PS-2a Development within fault zone/surface rupture areas.
- PS-2b Mitigation of ground shaking hazards.
- PS-2c Mitigation of surface rupture and ground shaking hazards.
- PS-2d Requirement for and review of "Geotechnical Reports."
- PS-2g Earthquake-resistant building and infrastructure standards.
- PS-3b Grading standards for erosion and sedimentation control.
- PS-3e Geotechnical reports.

a.i) The majority of the project alignment is not bisected by any known fault and is not located within an Alquist-Priolo Special Study Zone as shown on Arcata General Plan: 2020, Safety Element Figure PS-a, Hazards Map. However, the segment between Foster Avenue and L and 13th Streets, approximately 2,500 feet (0.47 miles), is within an Alquist-Priolo Zone (Figure 2). The proposed trail also passes through a 50-foot fault zone near Arcata High School at M and 16th Streets. Since trail development would not include habitable structures it would not expose persons or structures to potential substantial fault rupture hazards, a ***less than significant impact*** would occur.

a.ii) Humboldt County is located within a seismically active region in which very large earthquakes are possible. Strong seismic shaking is a regional hazard, and is not particular to the project site. Because the proposed project would comply with California Building Code and local building codes which have been designed to allow structures to withstand strong seismic ground shaking, and because the project would comply with the site-specific recommendations of the project's Geotechnical Report, the project would not expose persons or structures to potential substantial seismic ground shaking hazards. Hence, a ***less than significant impact*** would occur.

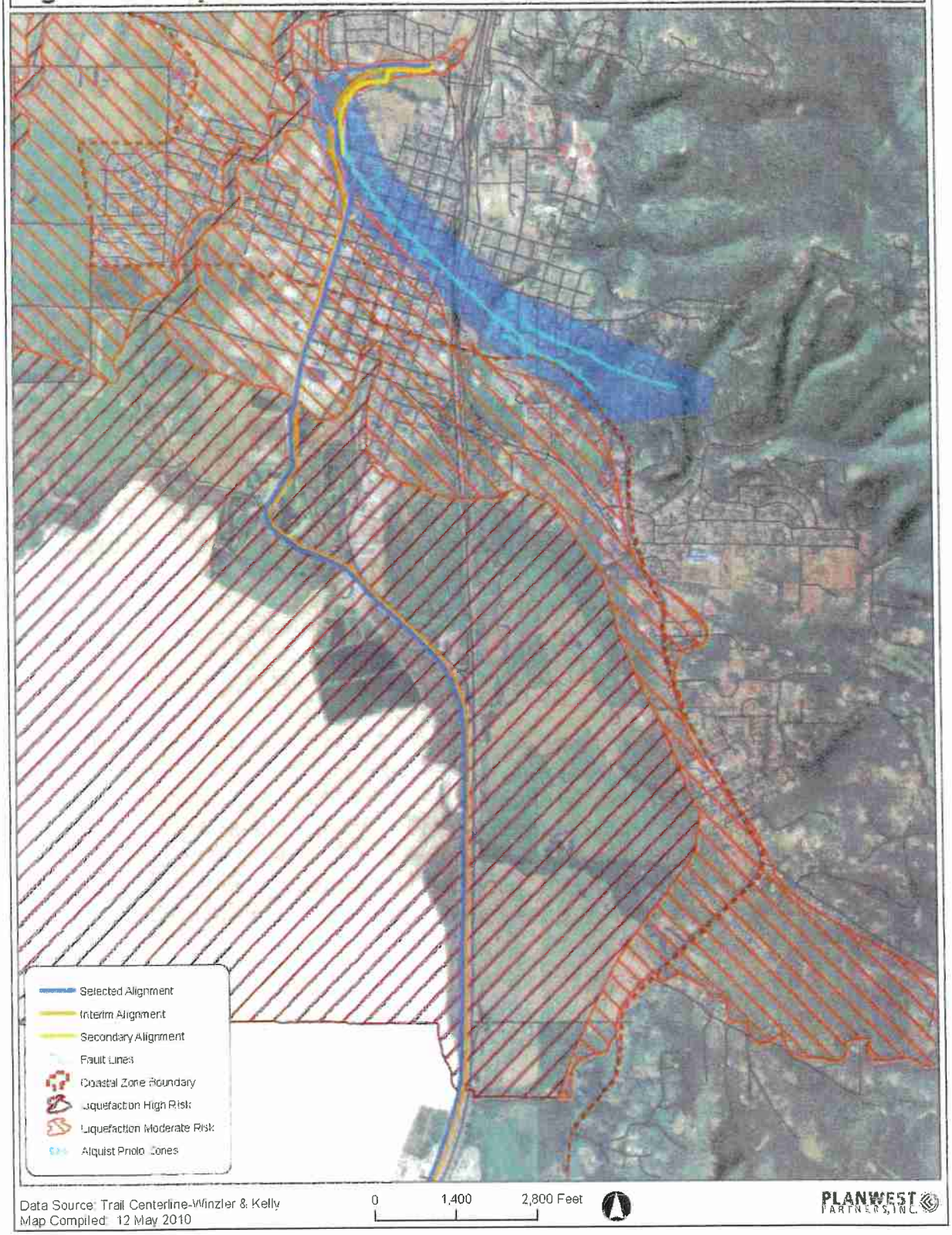
a.iii) The trail corridor is along the shoreline of the Humboldt Bay, which is underlain by coarse to fine grained alluvium consisting mostly of unconsolidated sand and silt (alluvium). According to the City of Arcata General Plan: 2020 Hazards Map, Figure PS-a, the portion of the proposed trail alignment located between Samoa Boulevard and Bracut is within an area of high liquefaction potential (Figure 2). However, trail development would not include residential

housing or critical facilities, and all bridges would be constructed with appropriate footing foundation design consistent with California Building Code and local building code requirements, and with the recommendations in the project's Geotechnical Report. Therefore, the project would not expose persons or structures to potential substantial seismically-induced ground failure and liquefaction hazards, and ***less than significant impact*** would occur.

a.iv) The proposed trail corridor is relatively flat and well away from any significant slopes. There is no evidence of recent active landslides and the potential for slope stability hazard associated with the proposed project is considered negligible. The site is not subject to the City's Hillside Development Standards, and the City does not designate the site as a landslide hazard area (City of Arcata General Plan: 2020, Figure PS-a, Hazards Map). Therefore, ***no impact*** would occur.

Fig. 2: Earthquake Hazards

Arcata Rail with Trail



b) The City would implement and maintain erosion control measures during construction and implementation of the project. Construction activities that would potentially disturb soil include: removing vegetation, cutting slopes, digging, moving and filling ground material, and moving heavy equipment on site. During the project's construction phase, the City would practice and/or enforce temporary erosion control measures on all disturbed areas. After construction, the City would implement permanent erosion control measures as necessary. All disturbed areas would be re-vegetated with native, non-invasive species or non-persistent hybrids that would serve to stabilize site conditions. For the duration of the project, the City would follow applicable erosion control measures as defined in the City's Land Use Code and Best Management Practices (BMP) Manual. Implementing these measures would avoid substantial erosion or topsoil loss. Therefore, the impact would be ***less than significant***.

c, d) See responses a.iii and a.iv regarding liquefaction and landslides, respectively. The proposed trail would be constructed on unconsolidated bay sediments and that could potentially involve some lateral spreading, subsidence, expansion, and/or instability. However, because trail construction would adhere to the site-specific recommendations of the project's Geotechnical Report which have been formulated to ensure the provision of adequate foundations and support for the proposed trail, and because the trail would not involve new residences or habitable structures, it would not create substantial risks to life or property. Therefore, the impact would be ***less than significant***.

e) The proposed trail would not involve the construction or use of septic tanks or an onsite wastewater disposal system. Therefore, ***no impact*** would occur.

Discussion - Interim Alignment (B)

Same as the Selected Alignment for all geology and soils issues.

Discussion - Secondary Alignment (C)

Same as the Selected Alignment for all geology and soils issues except (c). Although this alignment would be located on a slope that is shown on the City of Arcata's General Plan: 2020, Safety Element Figure PS-a, Hazards Map as greater that 15%, it would primarily occupy an existing service road on the high school property. In addition, any trail construction in this area would require a supplemental Geotechnical Report including slope stability and bank stabilization recommendations which would be formulated to avoid substantial slope instability and landslides. This impact would be ***less than significant after mitigation*** with implementation of Mitigation Measure Geology-1.

Mitigation - Secondary Alignment (C)

Geology-1 *Prior to project activities that would impact the slope on the high school property, the City of Arcata shall have a Supplemental Geotechnical Report prepared for this area and shall implement any slope stability and bank stabilization recommendations made in the report.*

Issues and Supporting Information	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
GREENHOUSE GAS EMISSIONS: Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?				A, B, C
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				A, B, C (beneficial)

Discussion - Selected Alignment (A)

This section discusses greenhouse gas emissions and sea level rise resulting from global climate change, and qualitatively assesses the impacts of the proposed project on global climate change.

a) i) Greenhouse Gas Emissions In 2002 the California legislature declared that global climate change was a matter of increasing concern for the state's public health and environment, and enacted laws requiring the state Air Resources Board (ARB) to control GHG emissions from motor vehicles (Health & Safety Code §32018.5 et seq.). CEQA Guidelines define greenhouse gases to include carbon dioxide (CO_2), nitrous oxide (N_2O), hydrofluorocarbons, perfluorcarbons, and sulfur hexafluoride. The California Global Warming Solutions Act of 2006 (Assembly Bill 32) definitively established the state's climate change policy and set GHG reduction targets (Health & Safety Code §38500 et seq.). The State set its target at reducing greenhouse gases to 1990 levels by 2020.

According to *Recommendations by the Association of Environmental Professionals on How to Analyze GHG Emissions and Global Climate change in CEQA Documents* (March 5, 2007), an individual project does not generate enough GHG emissions to significantly influence global climate change. Rather, global climate change is a cumulative impact. This means that a project may participate in a potential impact through its incremental contribution combined with the contributions of all other sources of GHG. In assessing cumulative impacts, it must be determined if a project's incremental effect is "cumulatively considerable." (CEQA Guidelines §15064(i)(1) and §15130).

In 2011 the CEQA Guidelines, Section 15064.4 Appendix G were modified to include thresholds of significance for Greenhouse Gases. The project would have potential significant impacts if the project would:

□ Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment;
□ Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases

Due to the nature of the proposed project (trail project), the City has determined that it is appropriate to assess potential GHG impacts qualitatively – as allowed by CEQA Guidelines §15064.4(a)2.

There are two ways that the proposed project could produce GHGs: 1) during fuel combustion while the project is being constructed; and 2) operational emissions from lighting associated with the trail and vehicles used by those driving to the site to use the facility. Construction GHG emissions include emissions produced as a result of material processing, emissions produced by onsite construction equipment, and emissions arising from traffic delays due to construction. The proposed project would be under various stages of construction for one or more years but the construction-related greenhouse gas emissions would be short-term. Therefore, the project construction phase would not significantly increase greenhouse emissions.

Lighting impacts will result from trail lighting that will incorporate up to 70 pedestrian scale lights placed adjacent to the trail. Timers and photo cells will be used to regulate the lights which will be spaced at between a minimum of 50 feet and a maximum 150 feet apart. It is estimated that LED lights will require an average of 35 watts to produce the 0.5 to 1.0 foot candle standard set forth in the Humboldt County Regional Pedestrian Plan. Calculations for annual kilowatt hours of electricity required for the additional lighting resulted in an additional 6769 KWH/Yr. The EPA http://www.epa.gov/cleanenergy/energy-resources/calculator.html shows that the new lights will generate 4.8 additional metric tons of CO_2 equivalent annually.

The trail's route through Arcata, together with its non-motorized transportation improvements will contribute positively to State and City efforts to reduce greenhouse gas emissions. Trail operation and the project's bicycle and pedestrian improvements would potentially reduce motorized-vehicle trips. The result would be a reduction in overall motorized vehicle miles traveled (VMT), which would reduce greenhouse gas emissions. Calculations for the trail's associated reduced CO_2 emissions were generated using the Recommended Monetized Values listed in the TIGER BCA Resource Guide. These calculations show an annual potential reduction of 236.76 tons of CO2 emissions. Based on these findings the overall the project would have ***no impact***; and with a reduction in motorized VMT the impact could be considered ***beneficial***.

ii) Climate Change and Sea Level Rise - The 2012 California Emergency Management Agency and the California Natural Resources Agency (CNRA) published *California Adaptation Planning Guide – Defining Local and Regional Impacts –(July 2012)* identifying climate change impacts (temperature, precipitation, sea level rise, intensification of coastal storms, ocean acidification, and wind) that will affect a wide range of community structures, functions, and populations. The Guide states "seasonal precipitation patterns, including the timing, intensity, and form of precipitation, are projected to change. Precipitation differs from temperature in that it has greater spatial variability and is more difficult to predict. Climate models demonstrate less consistency in projecting the amount and timing of precipitation and rain vs. snowfall patterns (IPCC, 2007; CNRA, 2009). Potential environmental impacts of these changes include coastal flooding/inundation, loss of coastal ecosystems, coastal erosion, shifts in ocean conditions (pH, salinity, etc.), and salt water intrusion (CNRA, 2009). The combination of sea level rise and possible intensification of coastal storms presents a threat to coastal development and infrastructure. Two primary climate change impacts could affect the immediate shoreline and ocean and this project: sea level rise and changed storm frequency and severity.

According to the International Panel on Climate Change sea level has risen about seven inches over the last century due to global melting of land-based ice and thermal expansion (IPCC, 2007; CNRA, 2009; NAS 2012). Climate change projections estimate a range of sea level rise along the California Coast between 43 and 56 inches by 2100 (COCAT 2010; NAS 2012). This projected sea level rise includes global changes in sea level from thermal expansion and glacial melting, as well as regional changes in land elevation due to uplift and subsidence. As with other climate impacts, there is variation but general agreement among the various models (IPCC, 2007). In addition to SLR, "climate models project two important trends: higher sea level extremes resulting from increasing storm intensity and more frequent extreme events" (CEC, 2009, p. 50). The combination of SLR and potential increased storm frequency and severity is problematic: "Most severe impacts result from the coincidence of sea level rise with storm surge, tides, and other climatic fluctuations (like El Niño)" (CEC, 2009, p. 49).

The State of California Sea level Rise Interim Guidance Document (October 2010) provides projections on future sea level rise as follows:

YEAR	AVERAGE OF MODELS	RANGE OF MODELS
2030	7 in (18 cm)	5-8 in (13-21 cm)
2050	14 in (36 cm)	10-17 in (26-43 cm)
2070	Low 23 in (59 cm) Medium 24 in (62 cm) High 27 in (69 cm)	17-27 in (43-70 cm) 18-29 in (46-74 cm) 20-32 in (51-81 cm)
2100	Low 40 in (101 cm) Medium 47 in (121 cm) High 55 in (140 cm)	31-50 in (78-128 cm) 37-60 in (95-152 cm) 43-69 in (110-176 cm)

Table 3: Sea Level Rise Projections using 2000 as the baseline year

Note: These projections do not account for catastrophic ice melting, so they may underestimate actual SLR. The SLR projections included in this table do not include a safety factor to ensure against underestimating future SLR. For dates after 2050, three different values for SLR are shown – based on low, medium, and high future greenhouse gas emission scenarios. These values are based on the Intergovernmental Panel on Climate Change emission scenarios as follows: b1 for the low projections, A2 for the medium projections and A1FI for the high projections.

The state guidance document on SLR provides considerations that influence exposure, including trends in relative local mean sea level. Relative sea level is the sea level relative to the elevation of the land. In California, the land elevation along the coast is changing due to factors including tectonic activity and subsidence.

The portions of the proposed project located along Humboldt Bay could be subject to coastal flooding when climate change associated sea level rise and storm events is considered. The design life of the trail is projected to be at least 20 years. All but 800 feet of the trail will be built to elevations greater than 9.5 feet (NAVD 88) with many portions of the trail being over 10 feet. MHHW is currently 6.95 feet. Mean monthly maximum tide is 8.1 feet. Even the lowest sections of the trail provide 0.9 feet of additional elevation to account for sea level rise. The lowest 800 feet of trail elevations are a minimum of 0.23 feet higher than the worst case sea level rise 2030 estimate (21cm, 0.67ft) and the majority of the trail is 0.73 feet higher. Estimates for the year 2050 show sea level elevations of 0.83 feet to 1.42 feet above the 2000 base year elevations. The entire trail is at elevations that are above the 2050 best case scenario (8.1+ .83- 8.92) and all but 800 feet is designed to accommodate the mean monthly maximum tide (8.1

+ 1.42= 9.52) worst case scenario of estimated sea level rise for more than 35 years. The lowest 88 feet of trail are adjacent to existing salt marsh habitat on Humboldt Bay. The 2013 *Analysis Of The Costs And Benefits Of Using Tidal Marsh Restoration As A Sea Level Rise Adaptation Strategy In San Francisco Bay* published by the Bay Institute found that " Tidal marsh can reduce storm wave heights by over 50% depending on water depth and marsh width. This finding suggests that flow risk management is improved significantly when areas of tidal marsh exist between the developed shoreline and open waters of the Bay." The report also stated that "using tidal marsh in combination with a levee constructed at the landward edge of the marsh, the size of the levee could be reduced significantly while still providing the same level of flood protection benefit as would be provided by a larger levee that was not fronted by tidal marsh." The study found that wave attenuation increased with width of marsh and that a wider marsh will be effective for longer in areas where there is shoreline retreat. The salt marsh width adjacent to the lowest sections of trail is 450 to 70 feet wide. Therefore while there will be times under storm conditions when the trail may be flooded, this study suggests it will occur less frequently due to the adjacent salt marsh habitat. However, the trail is designed to withstand occasional flooding from storm events. Trail signage will also include storm flooding and tsunami warning information. Because the project as designed will accommodate sea level rise for at least 20 years and possibly up to 35 years, the project will have a ***less than significant impact*** associated with projected sea level rise.

b) The City is actively participating in the Cities for Climate Protection (CCP) Campaign and is a member of the California Climate Action Registry. The City developed a Greenhouse Gas Reduction Plan (August 2006) to reduce locally generated greenhouse gas emissions. In this plan the City committed to decrease its greenhouse gas emissions by 20% below 2000 levels by the year 2010. The plan focuses on six action areas: energy efficiency, renewable energy, sustainable transportation, waste and consumption reduction, carbon sequestration and other methods, and cross-cutting approaches. In addition, implementing the Community Greenhouse Gas Reduction Plan helps fulfill objectives of General Plan Policy RC-8, Energy Resources Management and specifically Policy Rc-8c: – Promote Energy Efficient Transportation. It is City Policy to reduce the need for motor vehicle trips within the city and between the city and other destinations, and to reduce per-trip energy consumption… such as bike and pedestrian paths… shall be used to make these reductions.

The City of Arcata completed its first Greenhouse Gas Inventory in 2004, and most recently updated it in 2006. Calculations were corrected and/or refined in the updated inventory, which will serve as the model for monitoring future emission trends and reduction targets. The table below shows the 2006 Inventory of CO_2 emissions for sectors within City limits, including Humboldt State University, but excluding Highways 101 and 299. The 2006 Inventory shows that greenhouse gas emissions by sector were distributed as follows:

Sector	% of Total Emissions
• Commercial	33%
• Residential	21%
• Transportation	26%
• Industrial	18%
• Waste	2%

Aside from community transportation emissions, the City has calculated its community greenhouse gas emissions based largely on energy usage as reported by PG&E. The numbers include year 2000 methane emissions from cattle within Arcata, but do not account for carbon sequestration from forestland, which offsets some of the community's greenhouse gas emissions. The project would accomplish the following "Sustainable Transportation" measures that are outlined in the Community Greenhouse Gas Reduction Plan:

- **Improve Bicycle Infrastructure** (Create more bike lanes on existing roads.)
- **Improve Pedestrian Infrastructure** (Create and maintain sidewalks, paths & walkways).
- **Educate to Discourage Driving and Create Incentives to Lessen Driving** (Promote walking, bicycling, and taking public transportation, and traffic taming design.)

The proposed project implements the above measures adopted for the purpose of reducing greenhouse gas emissions. Therefore, a ***beneficial impact*** would occur.

Discussion - Interim Alignment (B)

Same as the Selected Alignment for all greenhouse gas emission issues. Note the Interim Alignment would result in slightly less construction emissions than the Selected Alignment because portions of the trail would be constructed on the existing railroad track prism rather than requiring construction of additional or new prism. However, this would not change the significance determinations.

Discussion - Secondary Alignment (C)

Same as the Selected Alignment for all greenhouse gas emission issues.

Issues and Supporting Information	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
HAZARDS AND HAZARDOUS MATERIALS: Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				A, B, C
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?		A, B, C		
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				A, B, C
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?		A, B, C		
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				A, B, C
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				A, B, C
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				A, B, C
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				A, B, C

Discussion - Selected Alignment (A)

a) The proposed project consists of the development of a Class 1, ADA Accessible, non-motorized, 4.5 mile long multi-use trail. Other than the use of oil, diesel, asphalt, paints, and other materials typical of construction activities, the project would not transport, use, or dispose of hazardous materials, and thus would not create a significant hazard to the public associated with these materials. ***No impact*** would occur.

b, d) Portions of the trail would occur within the NCRA ROW which may contain contaminants often found along rail lines (e.g., heavy metals, hydrocarbons, chlorinated compounds, pesticides, and PCBs). The proposed trail corridor is characterized by several uses, including the NCRA's North West Pacific rail line, City of Arcata surface streets and shoulders, existing trails within

the Arcata Marsh & Wildlife Sanctuary, and the tops of several levees. The trail would bisect or occur within the vicinity of several areas where industrial or waste uses have historically occurred, including the Shay Park area, the area roughly from 13th Street to Samoa Boulevard in downtown Arcata, "Mount Trashmore" within Arcata Marsh, and the Bracut Industrial Park. The following response is based on a Phase I Environmental Site Assessment (ESA) prepared for the proposed project. The ESA includes a hazardous materials records search conducted by Environmental Data Resources, Inc. (EDR) which lists recorded hazardous materials/waste sites within specified search radii of the trail corridor, file reviews for those listed sights thought to have a potential to be impacted by the proposed trail, a hazardous materials field reconnaissance of the trail corridor conducted by Winzler & Kelly (W&K), and an interpretation of findings prepared by W&K. The ESA is included in its entirety as Appendix F of this Initial Study.

No hazardous materials storage drums or tanks, and no visual evidence of soil contamination, was noted during the field survey of the trail corridor. However, the EDR records search identified 22 recorded hazardous materials/waste sites within 1/8th mile of the trail alignment (Figure 3). Trail construction would have "no impact" with respect to 16 of the 22 hazardous materials/waste sites because the sites are too far away, do not involve hazardous materials contamination, and/or have been remediated. However, seven of the 22 sites involve potential contamination and either occur in or within close proximity to the trail alignment. These sites are listed in Table 3 below.

Table 3
Listed Hazardous Materials/Waste Sites with the Potential to be Impacted by the Project

Phase I Map ID/ EDR Map ID	Site Name	Address	Nature of Potential Hazard[1]	Database Listing[2]
2/2	Arcata High School	1720 M St.	Historical leaking USTs containing fuels – although case closed in 1994, potential MTBE groundwater contamination if MTBE not previously investigated	FINDS, HIST CORTESE, LUST, HIST UST, SWEEPS UST, HAZNET
3/4	Beatrice Fisch Trust	1461 M St.	Petroleum spill – potential soil and/or groundwater contamination	HIST CORTESE, LUST, SLIC, HAZNET
7/5	Hitt Family Bypass Trust	1188 13th St.	Groundwater impacted by diesel - although case closed in 2003.	LUST, HIST CORTESE
4/6	M Street Property	1215 M St.	Brownfield site – potential groundwater contamination	US BROWNFIELDS
1/10	Reliable Equipment Co.	1217/1219 11th St.	Historical leaking USTs containing fuels – although case closed in 2007, residential MTBE reported in groundwater from adjacent well	HIST CORTESE, LUST, HIST UST
5/14	Arcata Corp, HWMA	1220 Fifth St.	Gasoline leak - potential groundwater contamination	RCRA-SQG, FINDS, NPDES, HIST CORTESE, SLIC, HAZNET
6/16	Little Lake Industries	46 South I St.	Petroleum leak – potential soil and/or groundwater contamination	HIST CORTESE, LUST, SLIC, CHIMIRS, CDL, HAZNET, ENVIROSTOR

[1] *W&K, 2009b.*
[2] *See EDR Hazardous Materials Records Search for description of database listings.*
Source: Environmental Data Resources (EDR), Hazardous Materials Records Search, December 4, 2009.

Known impacted soils and groundwater contamination is not anticipated to be encountered within the trail corridor if excavation does not occur immediately adjacent to the sites listed above. If excavation does occur immediately adjacent to these sites, soil and groundwater contamination may be encountered based on the description and history of the listed sites and the shallow depth to groundwater in the area. This is especially true adjacent to the Reliable Equipment Company at the corner of 11th and L Streets where residual groundwater contamination may be present. In addition, while evidence of contamination was not encountered during the field reconnaissance of the trail corridor, W&K's past experience with other railroad properties leads to the conclusion that soil and/or groundwater contamination may exist within those portions of the trail corridor that follow the NCRA ROW. With the implementation of the recommended mitigation measures below, a ***less than significant impact after mitigation*** would occur.

c) The proposed project consists of the development of a Class 1, ADA Accessible, non-motorized, 4.5 mile long multi-use trail, and although the trail is proposed within less than ¼-mile of Arcata High School, it would not emit hazardous emissions or acutely hazardous materials, substances, or waste. Therefore, ***no impact*** would occur.

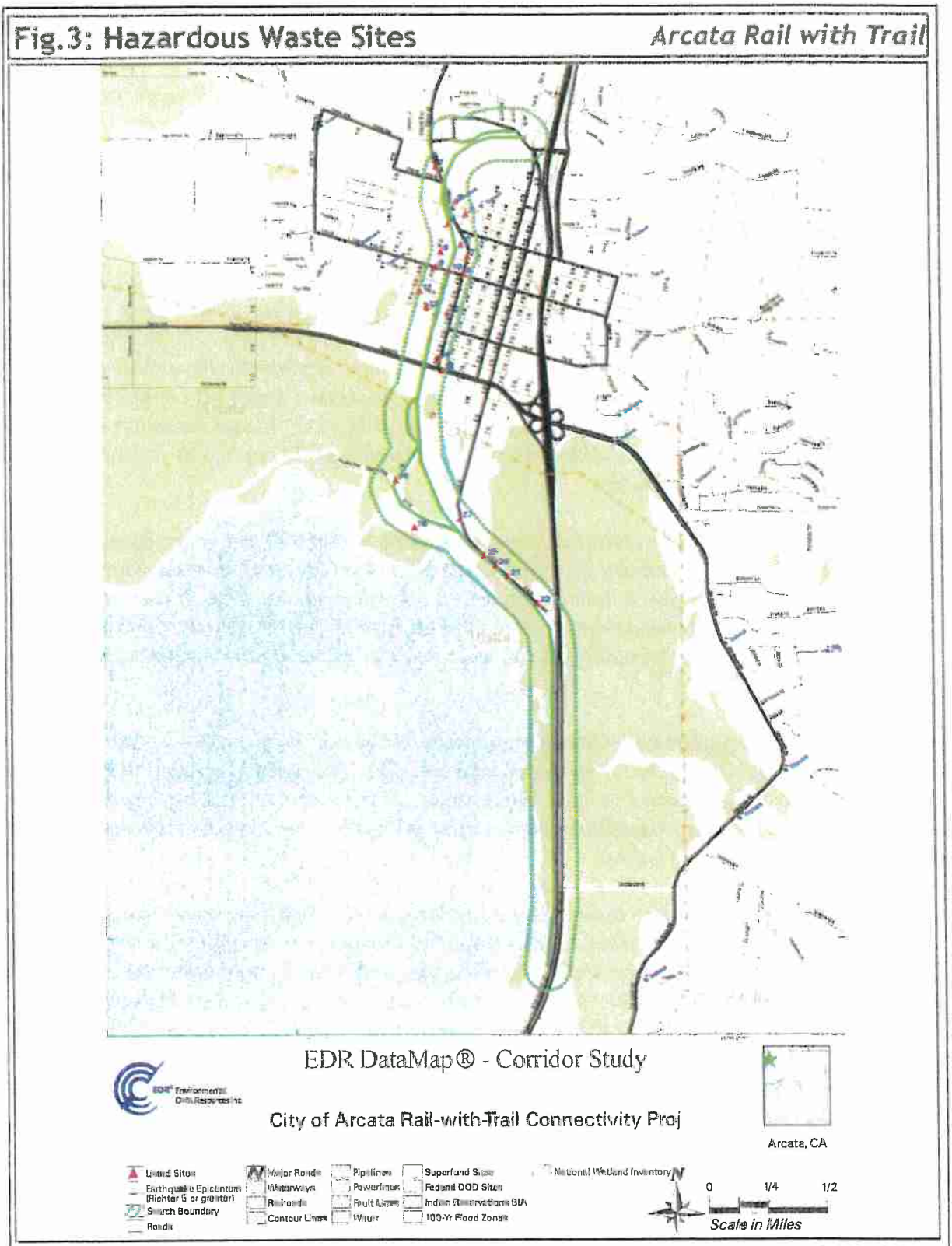
e-f) The proposed trail corridor is not located within an airport land use plan, within two miles of a public airport or public use airport, or within the vicinity of a private airstrip. In addition, the project would not include new residential development or employee space, and would not include structures which could potentially represent a hazard to aviation. Thus, the project would not have the potential to result in airport-related safety hazards for people residing or working in the project area. ***No impact*** would occur.

g) Emergency response and evacuation planning in the project area is the responsibility of the City of Arcata Police Department (APD) and the Arcata Fire Protection District (AFPD). The APD and AFPD provide critical emergency response services and leadership, and serve as the community's primary response agencies under the City's Emergency Response Plan. The Plan outlines response responsibilities during seismic events, tsunamis, slope failure, floods, storms, fires, and hazardous materials spills, and includes evacuation planning. The proposed project would not impair implementation of or physically interfere with implementation of the Plan because the project: (1) would not block existing streets; (2) would not include residential or other development that would significantly increase the number of people exposed to potential emergencies; (3) would not generate traffic congestion during an emergency; and (4) would not include uses that would require amendment of the City's emergency planning (such as a chemical storage facility or large industrial plant). Therefore, ***no impact*** would occur.

h) The project site is located in an urban setting and within three miles or less of the AFPD's Downtown Arcata Fire Station located at 631 9th Street. The site does not occur within a State Responsibility Area (SRA) for fire protection, does not occur within an area of steep slopes or forest, and would not result in the intermixing of residences with wildlands. For these reasons, the project would not expose people or structures to a significant risk of loss, injury or death involving wildland fires, and ***no impact*** would occur.

Fig. 3: Hazardous Waste Sites

Arcata Rail with Trail



Source: Environmental Data Resources Inc.

Mitigation – Selected Alignment (A)

Hazards -1) *Pre-construction soil borings shall be conducted to characterize the soil and groundwater at the following locations:*

- *Adjacent to the NCRA ROW where the alignment follows the RR track; and*
- *Adjacent to Reliable Equipment Co. on the corner of 11th and L Streets.*

Laboratory analytical results of samples collected from these borings shall be utilized to ascertain whether health and safety concerns are present and to determine necessary soil and/or groundwater disposal options.

Hazards -2) *Project construction contractors shall report any evidence of potential soil contamination, or any unearthing of storage drums or other potential sources of hazardous materials/wastes, to the City of Arcata. If determined by the City to be warranted, a Phase II Environmental Site Assessment shall be conducted, including a hazardous materials field survey, borings, and soil testing to determine if hazardous materials contamination is present, and if yes, the spatial extent of the contamination. If contamination is found, the City shall have the site remediated to the satisfaction of the applicable federal, state and county regulatory agencies.*

Hazards-3) *If any dewatering is required during construction within 300 feet of any of the recorded hazardous materials/waste sites listed in Table 1, the City shall have the water proposed for removal tested for contamination prior to dewatering activities. If the water is found to contain regulated contaminants, the City shall have the water remediated to the satisfaction of the applicable federal, state and county regulatory agencies prior to removal.*

The provision of on-site replacement wetlands required by Mitigation Biological-4 would impact approximately 1.77 acres adjacent to the proposed trail corridor. The wetland mitigation sites that have been identified and are not anticipated to have the potential to expose persons to any hazardous materials that may be present. A ***less than significant impact after mitigation*** would occur with implementation of Mitigation Measure Hazards-4 below.

Hazards-4) *The City of Arcata shall have a Phase I Environmental Site Assessment (e.g., EDR records search, interviews, historical research, and reconnaissance-level field survey) conducted by a qualified engineer or hazardous materials consultant of the mitigation wetlands sites prior to development of the wetlands. If the Phase I indicates that un-remediated hazardous materials sites are listed by government records as occurring on the mitigation wetlands sites, or if the field survey finds hazardous materials contains/tanks or evidence of hazardous materials contamination, required mitigation shall be identified by the consultant and implemented by the City prior to construction.*

Discussion - Interim Alignment (B)

Same as Selected Alignment for all hazards and hazardous materials issues

Mitigation – Interim Alignment (B)

Implement Mitigation Measures Hazards-1, -2, -3, and -4.

Discussion - Secondary Alignment (C)

Same as Selected Alignment for all hazards and hazardous materials issues. Note that the Secondary Alignment would be closer to Arcata High School than the other alignments. However, it would not emit hazardous emissions or acutely hazardous materials, substances, or waste, and therefore the significance determinations would not change.

Mitigation - Secondary Alignment (C)

Implement Mitigation Measures Hazards-1, -2, -3, and -4.

Issues and Supporting Information	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
HYDROLOGY AND WATER QUALITY: Would the project:				
a) Violate any water quality standards or waste discharge requirements?			A, B, C	
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?			A, B, C	
c) Substantially alter the existing drainage pattern of the site or area, including through stream or river course alteration, in a manner which would result in substantial erosion or siltation onsite or offsite?			A, B, C	
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding onsite or offsite?			A, B, C	
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?			A, B, C	
f) Otherwise substantially degrade water quality?			A, B, C	
g) Place housing within a 100-year flood hazard Area 1as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?			A, B, C	
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?			A, B, C	
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?			A, B, C	
j) Inundation by seiche, tsunami, or mudflow?			A, B, C	

Discussion - Selected Alignment (A)

a, f) To protect water quality, the City applies a number of programs and practices to all new development and redevelopment projects that would directly or indirectly discharge runoff into storm drains, creeks, streams, rivers, the ocean, or other receiving water bodies in the City. These programs and practices provide a framework of appropriate measures and feasible "best management practices" (BMPs) for protecting water quality. The City implements these policies through the Arcata General Plan, Land Use Code, and the City's BMP Manual which includes provisions to minimize potential pollutants entering the waterways and gives guidance for City facilities and activities with identified pollutant sources. Because the proposed project would be required to adhere to these requirements, and because the project would not generate or discharge wastewater or industrial flows to wetlands, creeks, waters of the U.S., or Humboldt Bay, the project would not violate any water quality standards or waste discharge requirements, or otherwise substantially degrade water quality. A ***less than significant impact*** would occur.

c, e) Receiving water bodies within the project area include: Jolly Giant Creek, Butcher's Slough, Gannon Slough, Jacoby Creek, Old Jacoby Creek, Brainard's Slough (which Rocky Gulch and Washington Gulch flow into), an unnamed drainage channel parallel and to the east of Highway 101 (herein referred to as the Highway 101 slough), an unnamed drainage ditch parallel and between the NCRA ROW and Highway 101, and Arcata Bay (Figure 4). Due to Highway 101 and associated existing earth dikes and site elevations, the trail would not drain to the slough channel to the east of the highway. Trail construction activities, including bridge and crossing improvements, would occur within and adjacent to water courses as summarized below and in Table 2. Following is a summary of the water crossings that are part of the proposed project.

Jolly Giant Creek is in a culvert for much of the area through the City of Arcata. In the immediate vicinity of the proposed trail alignment, the creek was daylighted/restored (1997) as well as through Shay Park (former lumber deck) along the RR ROW. The creek was also daylighted for a short segment on the west side of Alliance (referred to as Stonehenge). This creek is not tidally influenced and as such the limits of agency jurisdiction is defined at the OHWM.

Arcata Marsh Berm Bridge would be at a location in which the City of Arcata recently created a berm around a restored pond. The proposed bridge would span a large drainage channel, allowing the project to go from the elevated railroad prism to the elevated top of the berm, spanning the drainage channel. This drainage channel is not tidally influenced, and as such the limits of agency jurisdiction is defined at the OHWM. The bridge would consist of four equally-sized bridge decks totally a 93 foot span. This bridge would not require the installation of new piles.

Butcher's Slough has an existing bridge crossing near the City WWTP which currently carries the City's primary sanitary sewer conveyance pipeline (welded to the underside of the existing bridge). The water in the slough is tidally influenced (brackish) and receives up-gradient freshwater inputs from Jolly Giant Creek. A new 72 foot span bridge is proposed adjacent to the existing bridge in order to accommodate appropriate width for both bicycle and pedestrian traffic. This bridge would require the installation of four new piles, none of which are proposed within the water (i.e., below HTL). Pile driving near water's edge would be necessary.

Gannon Slough has tidegates controlling waters that enter the slough from the City of Arcata and surrounding pasturelands, and is free-flowing within the proposed alignment. There is an existing railroad bridge and Caltrans Highway 101 bridge. A new bridge with 180 foot span would be installed between the two existing bridges. This bridge would require the installation of 16 new piles, 13 of which are proposed within the water (i.e., below HTL). Pile driving near water's edge would be necessary for the other three piles.

Jacoby Creek flows freely into Arcata Bay. Currently there is a railroad bridge and a Caltrans Highway 101 bridge over the creek/tidal estuary. The Caltrans bridge is being replaced as part of the Highway 101 Improvement Project, and as analyzed in a DEIR for that project (Caltrans, 2007). The Caltrans bridge includes pedestrian/bicycle crossing as part of the highway improvements. Therefore, the proposed project would utilize the upgraded bridge that Caltrans is constructing and would not require additional work within the Jacoby Creek crossing. No additional piles in water are required. Piles may be necessary adjacent/above the HTL in order to tie to the Caltrans bridge.

Old Jacoby Creek flows under the highway and is controlled by a tide gate with a large culvert. The new bridge would span approximately 124 feet. This bridge would require the installation of six new piles, two of which are proposed within the water. Pile driving near water's edge would be necessary for the other four piles.

Brainard's Slough formed from the Washington Gulch and Rocky Gulch drainages, the confluence of which is on the east side of the freeway before crossing under Highway 101 via a single reinforced box culvert, then under the tracks via two 48-inch corrugated metal pipe culverts. There is one tide gate at the location where the box culvert dumps out on the west side of the freeway between the freeway and the tracks. A new bridge with 148 foot span is planned. This bridge would require the installation of 6 new piles, 5 of which would be within the water. Pile driving near water's edge would be necessary for the other pile.

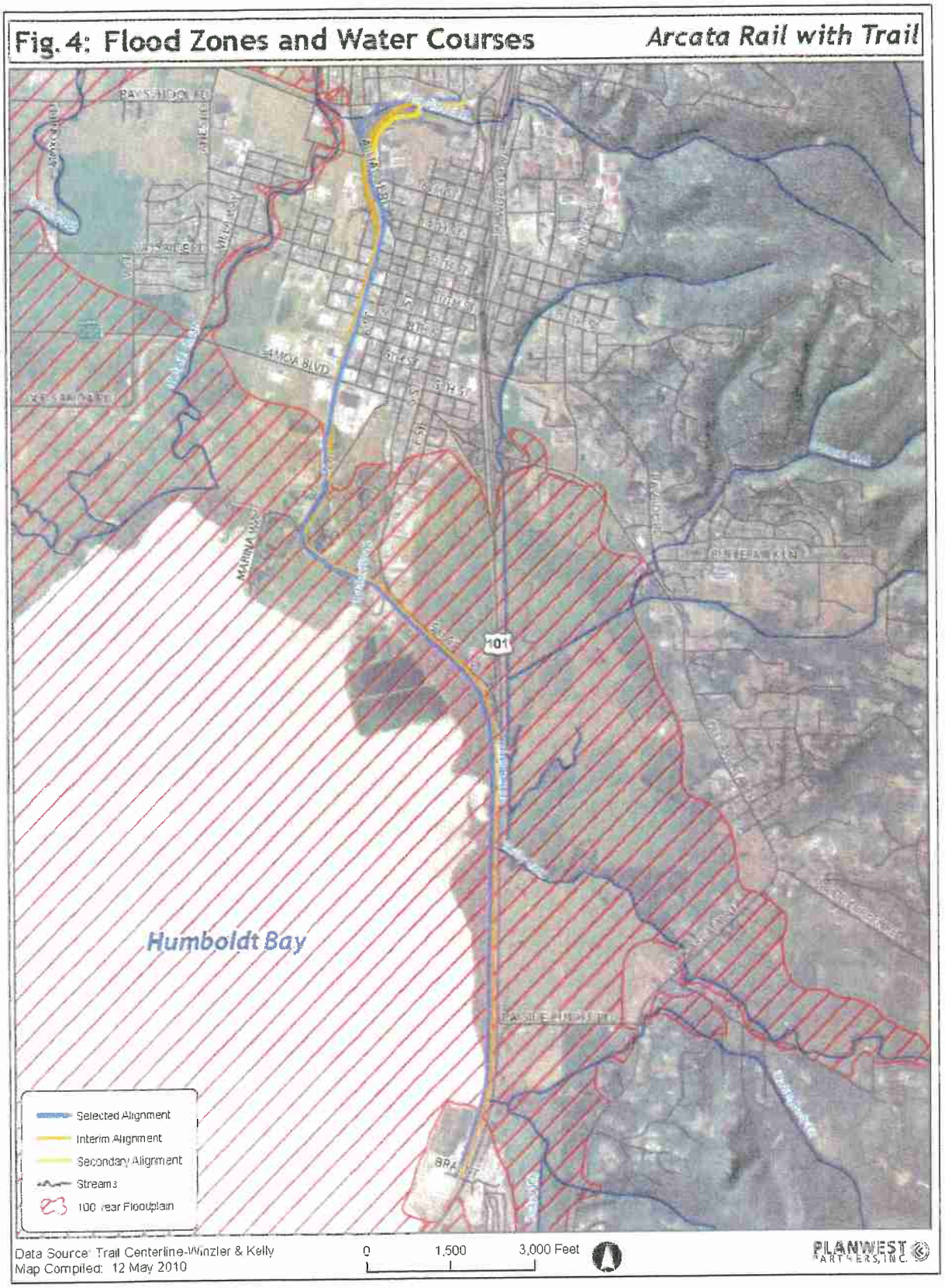


Fig. 4: Flood Zones and Water Courses
Arcata Rail with Trail
Humboldt Bay
Selected Alignment
Interim Alignment
Secondary Alignment
Streams
100 Year Floodplain
Data Source: Trail Centerline-Winzler & Kelly
Map Compiled: 12 May 2010
0
1,500
3,000 Feet
PLANWEST PARTNERS, INC.

As indicated above, proposed crossings at the Arcata Marsh Berm Bridge, and Butcher's Slough, would not require piles directly in the channels or below the OHWM/ HTL, while proposed crossings at Gannon Slough, Old Jacoby Creek and Brainard's Slough would require piles below the HTL. As part of bridge construction, temporary coffer dams and dewatering within those dams would be required below the HTL at Gannon Slough. Any such construction and coffer dam use would be accompanied by minimization and avoidance measures, developed in consultation with NOAA Fisheries, FWS and DFW during permit review, to isolate bridge footing construction from flowing water and avoid sedimentation and erosion. In addition, existing drainage patterns would be maintained, with existing drainage from the trail corridor continuing to drain to the City's existing drainage system and/or to existing drainage ditches.

During trail construction: (1) heavy construction equipment would be used within the vicinity of surface waters, and this equipment could deposit contaminates (fuel, oil, etc.) on the ground which could be carried to surface waters in stormwater runoff; and (2) fuel, oil, paints and other hazardous materials could potentially be stored along the trail alignment during trail construction and represent a potential spill hazard. However, the City of Arcata applies the following regulations and requirements to all new development that would directly or indirectly discharge runoff into storm drains, creeks, streams, rivers, the Bay, and other receiving water bodies in order to protect water quality:

- City of Arcata Storm Water Management Program (SWMP; 2003);
- City of Arcata Stormwater Best Management Practices (BMP Manual, part of the City's adopted SWMP; 2003);
- City of Arcata Storm Water Ordinance (Ord. 1319; this comprehensive ordinance is The City's mechanism to enforce water quality standards; 2001); and
- City of Arcata Grading, Erosion and Sediment Control Code (Ord. 1255)

All construction activities would utilize BMP's such as scheduling excavation and grading work for dry weather and avoiding these activities during wet weather, avoiding runoff while applying water for dust control, covering stockpiled soil with tarps or plastic sheeting if precipitation is expected, utilizing revegetation for erosion control after clearing, grading, and excavating, and planting permanent vegetation immediately after construction. The above regulations and requirements have been formulated to avoid significant stormwater quality impacts. In addition, applicable permits from the COE, RWQCB, DFW, FWS, Coastal Commission (including Clean Water Act Section 404, and 401 Water Quality Certification, etc.), City and County grading permits would be obtained prior commencement of construction activities. With the implementation of these regulations and requirements, project construction activities would not create or contribute runoff water which would provide substantial additional sources of polluted runoff or result in substantial erosion or siltation onsite or offsite during construction. Therefore, a ***less than significant impact*** would occur.

The proposed trail would include an average asphalt trail surface width of 10 feet (not including an additional 4 to 30 feet of unpaved pervious trail shoulder). During operation, stormwater runoff from the paved trail surface would drain to adjacent lands, existing natural drainages, drainage ditches, sloughs, or the Bay. However, because the asphalt trail would be utilized by non-motorized modes of transportation, urban runoff (e.g., runoff potentially containing

contaminants, including contaminants deposited from motor vehicles such as fuels, oils, antifreeze and rubber) would not be generated. In addition, trail operation would be subject to the City's water quality protection regulations and requirements set forth above. Thus, the project would not create or contribute runoff water which would provide substantial additional sources of polluted runoff or result in substantial erosion or siltation onsite or offsite during operation and would not otherwise substantially degrade water quality. Therefore, a ***less than significant impact*** would occur.

b) The proposed trail alignment and greater City of Arcata are underlain by the 718,263 acre Mad-Redwood Groundwater Basin (Humboldt County, 2002). Annual recharge of the Basin exceeds water withdrawals, and thus the basin is not in overdraft (Ibid.). The proposed trail would be developed on several existing surfaces, including:

(1) Vacant land and NCRA ROW: From approximately Larson Park to 13th Street, 8th Street to the levee approximately 1,050 ft south of Samoa Boulevard, I Street to the beginning of the Arcata Marsh trail, and the Arcata WWTP to Bracut (approximately 19,075 feet);
(2) Roadways: From approximately 13th Street to 8th Street (approximately 1,663 feet);
(3) Levees: From approximately 1,050 feet south of Samoa Boulevard to I Street (approximately 875 feet); and
(4) Trails: From approximately 875 feet west of the I Street/railroad tracks intersection to the Arcata WWTP (approx. 1,750 feet).

Trail development would occur on a mix of pervious and impervious surfaces. Assuming that approximately 4.5 miles of trail would be developed (e.g., the vacant land/ NCRA ROW, levees and existing trails), and assuming an average asphalt trail surface width of 10 feet (not including the unpaved pervious trail shoulder), approximately 5 acres of impervious surfaces would result under the project. This increase in impervious surface would represent less than 0.0002% of the total surface area of the Mad-Redwood Groundwater Basin. In addition, this impervious surface would have little if any impact on groundwater recharge because the minimal amount of runoff generated from the 10 foot wide trail would simply drain to adjacent lands, natural drainages, drainage ditches, sloughs, or the Bay, similar as currently occurs, and would percolate to the groundwater. Furthermore, there are no known water wells within the immediate vicinity of the proposed trail, and much of the trail is proposed adjacent to Humboldt Bay where saltwater intrusion negates the presence of wells. Finally, no large-scale increase in water demand would occur, nor are groundwater wells proposed. For all these reasons, the project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the water table. Therefore, ***a less than significant impact*** would occur.

d) The proposed project would redefine ditches along Highway101 following existing drainage patterns. Overland runoff along open areas in Arcata Marsh would drain to the existing city drainage system or follow existing drainage patterns. The proposed trail would be located directly adjacent to the existing railroad prism or be constructed on existing roads or levees (e.g., maintain existing drainage patterns).

The existing drainage system along the western edge of Highway 101 between Jacoby Creek and Brainard's Slough consists of a drainage ditch between the edge of the highway and the existing railroad track prism. The proposed trail would extend from the railroad prism into a portion of the existing drainage ditch, resulting in less available drainage ditch volume for storm discharges. A hydrologic and hydraulic analysis of this drainage was prepared to evaluate the potential impacts of the decrease in drainage capacity (Appendix G). This analysis included calculations of peak runoff and velocity rates and ditch capacity for a 100 year storm event. The results show that ditch capacity would not be exceeded during the analyzed storm event. The project would not substantially alter the existing drainage pattern of the site, alter the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site. Therefore, a ***less than significant impact*** would occur.

g, h, i) The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs) indicate portions of the proposed trail corridor lie within both Zone A and Zone C designated Floodplains. Zone A is defined as "*Areas of 100-year flood; Base Flood Elevations and flood hazard factors not determined.*" Zone C is defined as "*Areas of Minimal Flooding-Outside of the 100-year Base Floodplain Area.*" The proposed project would result in some filling in FEMA Flood Zone A within the trail corridor between South I Street and Bracut (Figure 4). However, the fill for the trail would not support a structure that would be subject to flood insurance (i.e. residential/ commercial structure) and the proposed amount of fill in Zone A (approximately 4.5 acres) related to the total floodplain area (1,440 acres) would not result in substantial loss of functional floodplain (0.31%) (Appendix G). When compared to the total area available for inundation of floodwaters, the proposed project would result in placement of negligible amounts of fill in the floodplain. The proposed project would not develop housing or critical facilities, and would not place structures within a 100-year flood hazard area which would impede or redirect flood flows or expose people or structures to a significant risk involving flooding. Therefore, a ***less than significant impact*** would occur.

j) The Humboldt County Web GIS database identifies the area along the Bay from Samoa Boulevard to Bracut and beyond as a "tsunami evacuation area" and may be subject to tsunami inundation. However, because the proposed project would not include the development of residential units or other occupiable structures, and because mitigation for the potential tsunami inundation hazard already exists along the Bay in the form of tsunami hazard warning signs and a Countywide tsunami early warning system, the impact would be ***less than significant***.

Discussion - Interim Alignment (B)

The Interim Alignment would require less fill than the Selected Alignment because portions of the trail would be constructed on the existing railroad track prism rather than requiring construction of additional or new prism. However, this would not change the significance determinations.

Discussion - Secondary Alignment (C)

Same as Selected Alignment for all hydrology and water quality issues.

Issues and Supporting Information	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
LAND USE AND PLANNING: Would the project:				
a) Physically divide an established community?				A, B, C
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?			A, B, C	
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?			A, B, C	

Discussion - Selected Alignment (A)

a) The proposed project would provide non-motorized connectivity from northern Arcata at Larson Park (near Sunset Avenue and the Arcata Skate Park), through the City of Arcata and the Arcata Marsh, and along the eastern edge of Humboldt Bay south to the Highway 101 and Bracut intersection. The proposed project would not remove existing streets, would not develop impediments to cross-town vehicular, pedestrian or bicycle movement, and would not otherwise physically divide an established community. Therefore, ***no impact*** would occur.

b) The proposed project would be located mostly within NCRA ROW or City Street ROW, with some parcels owned by City of Arcata, U.S. Fish and Wildlife Service (Humboldt Bay Wildlife Refuge), and private ownership. The proposed trail corridor occurs within multiple land use and zoning designations - primarily undesignated ROW, City parks designated PF, private property designated IL and RL, and the Arcata Marsh and Wildlife Sanctuary designated NR (Figures 5 and 6). All these City land use designations and zones permit trail development. Therefore, the proposed project would not conflict with existing General Plan land use designations or zoning.

Applicable Land Use and Planning policies adopted for the purpose of avoiding or mitigating environmental effects can be found throughout the Arcata General Plan; mostly in the Land Use Element, Transportation Element, and the Resource Conservation & Management Element. The General Plan also identifies policies meant to avoid/ mitigate environmental impacts related to air quality and cultural resources, discussions of which can be found in the applicable sections of this Initial Study. Resource Conservation & Management Element Policy RC-3a requires a wetland reconnaissance or delineation report for potential wetlands impacts. A wetland delineation was prepared for the proposed project (Appendix F of this Initial Study). The City will follow Policy RC-3b, which stipulates allowances and mitigations for filling a wetland (see the Biological Resources section of this Initial Study for a complete discussion of wetland impacts and mitigation measures). These mitigation measures are consistent with applicable General Plan policies, including RC-3j (Minimum mitigation requirements for wetland impacts) and RC-3k (Wetland functional capacity maintenance requirement), and would reduce potential impacts to less than significant. As long as the City complies with these policies for filling wetland, the proposed project alignment would not be in conflict with General Plan policies adopted to avoid or mitigate environmental effects on wetlands.

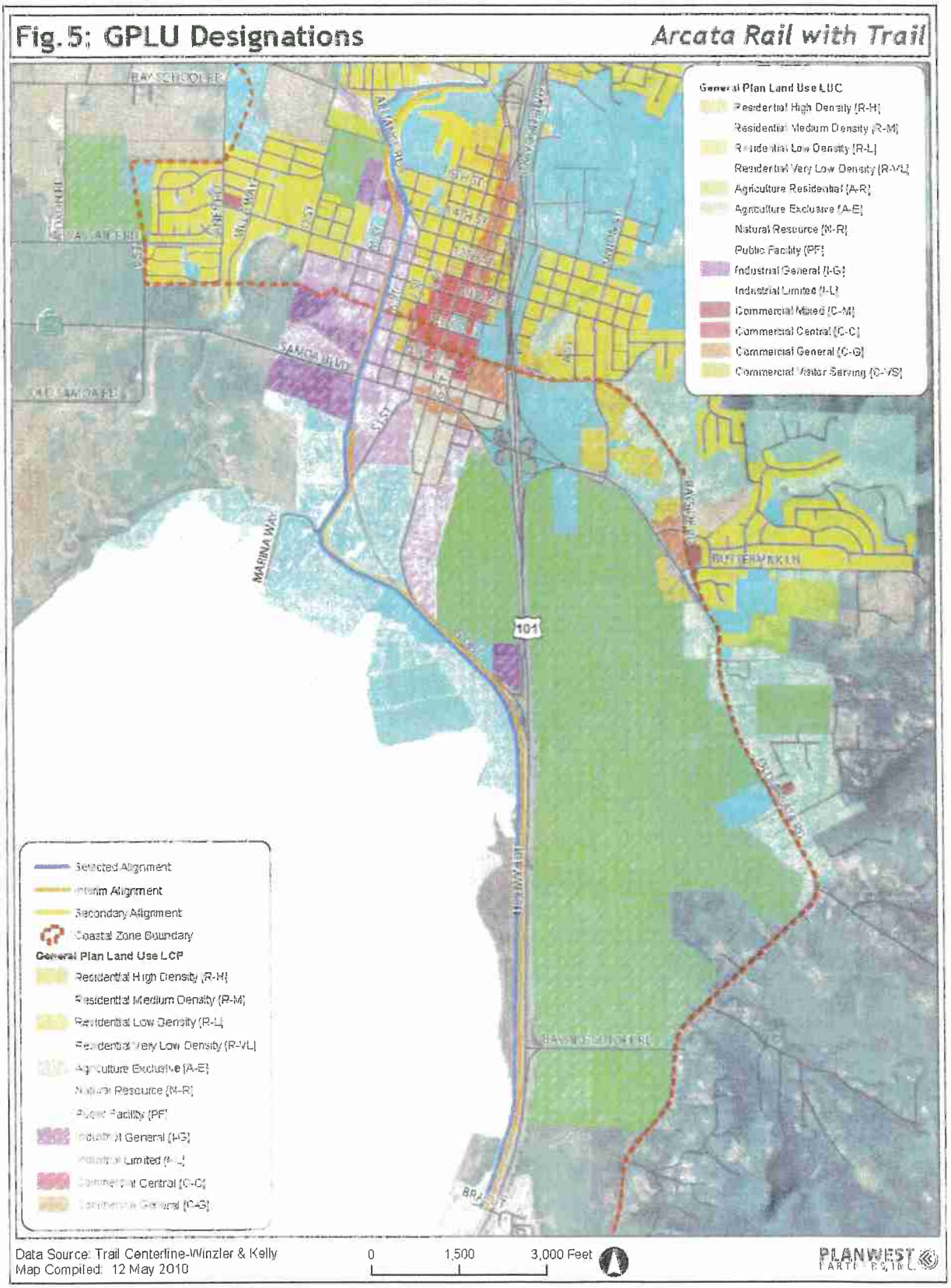
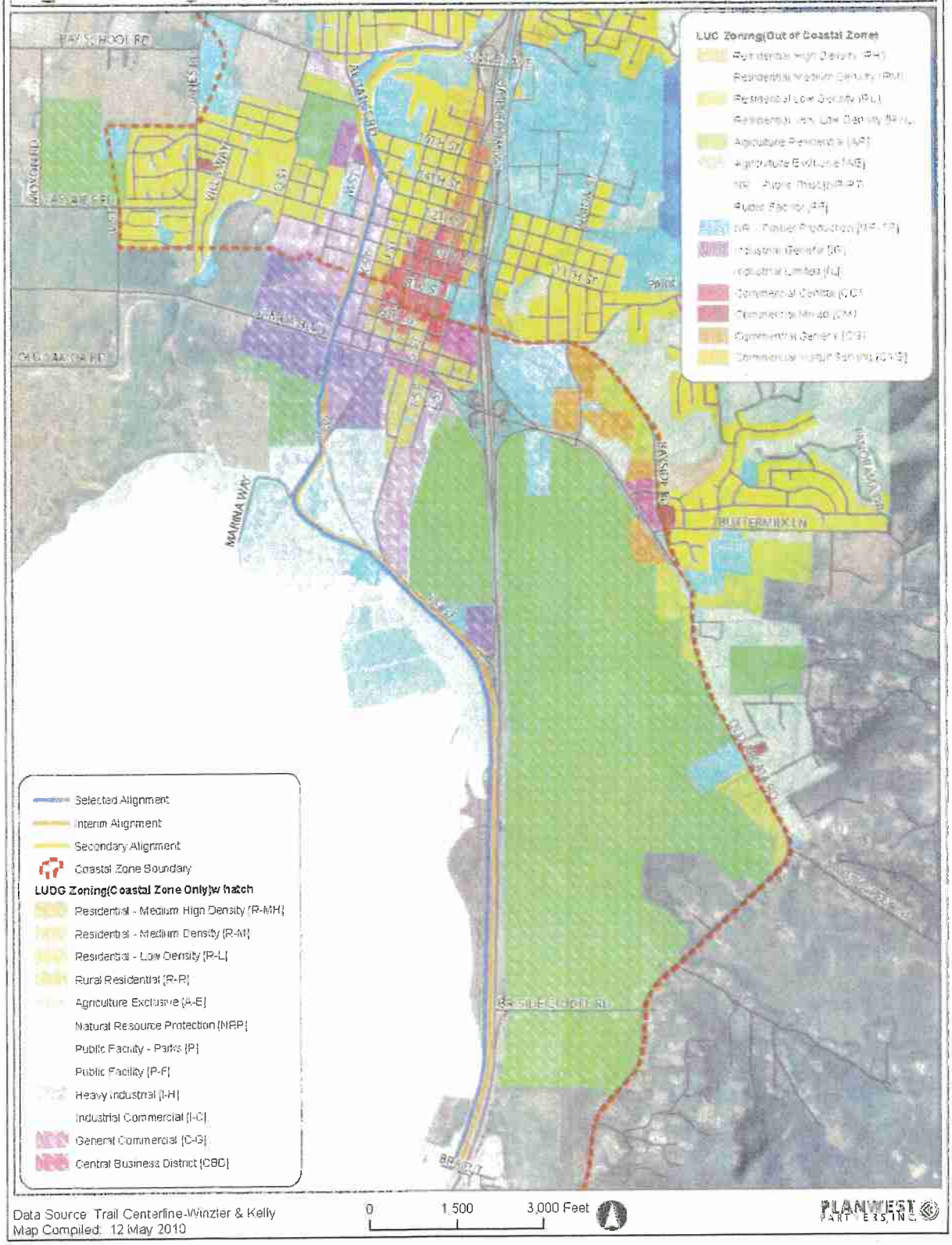


Fig. 5: GPLU Designations
Arcata Rail with Trail
General Plan Land Use LUC
Residential High Density (R-H)
Residential Medium Density (R-M)
Residential Low Density (R-L)
Residential Very Low Density (R-VL)
Agriculture Residential (A-R)
Agriculture Exclusive (A-E)
Natural Resource (N-R)
Public Facility (PF)
Industrial General (I-G)
Industrial Limited (I-L)
Commercial Mixed (C-M)
Commercial Central (C-C)
Commercial General (C-G)
Commercial Visitor Serving (C-VS)
Selected Alignment
Interim Alignment
Secondary Alignment
Coastal Zone Boundary
General Plan Land Use LCP
Residential High Density (R-H)
Residential Medium Density (R-M)
Residential Low Density (R-L)
Residential Very Low Density (R-VL)
Agriculture Exclusive (A-E)
Natural Resource (N-R)
Public Facility (PF)
Industrial General (I-G)
Industrial Limited (I-L)
Commercial Central (C-C)
Commercial General (C-G)
101
MARINA WAY
Data Source: Trail Centerline-Winzler & Kelly
Map Compiled: 12 May 2010
0
1,500
3,000 Feet
PLANWEST

Fig. 6: Zoning Designations

Arcata Rail with Trail



Other agencies that regulate the filling of wetlands are the U.S. Army Corps of Engineers (COE) and the State Water Resource Control Board (SWRCB), plus the National Marine Fisheries Service (NMFS) as part of COE permit process, and the California Department of Fish and Wildlife (DFW). Since the proposed project would affect COE and SWRCB "jurisdictional wetlands," the City must obtain the necessary permit(s) to comply with respective regulations including Clean Water Act Section 404, and 401 Water Quality Certification, and DFG 1600 Permit. By implementing permit requirements and the Biological Resource Mitigation Measures, the City would not conflict with applicable federal and state wetland regulations. Based on the above, a ***less than significant impact*** would occur.

c) The City does not have a habitat conservation plan or a natural community conservation plan that would apply to any part of the proposed trail corridor. The City does have the "Arcata Creeks Management Plan" (1991) which guides "management of creeks that flow through Arcata in order to provide the fullest realization of the creeks' beneficial uses." The City has designed and planned the proposed project to comply with all City policies, codes, and plans, which includes supporting and complying with the "Arcata Creeks Management Plan." Therefore, a ***less than significant impact*** would occur.

Discussion - Interim Alignment (B)

Same as Selected Alignment for all land use and planning issues.

Discussion - Secondary Alignment (C)

Same as Selected Alignment for all land use and planning issues. However, this alignment would bisect a parcel with Residential Low Density land use designation and zoning located on Alliance and 16th Streets. This parcel is owned by the City, is small, located on a slope, and not ideal for residential development. Therefore, the significance determinations would not change.

Issues and Supporting Information	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
MINERAL RESOURCES: Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				A, B, C
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				A, B, C

Discussion - Selected Alignment (A)

a-b) No mineral resources and no mineral resource extraction currently occurs within any part of the proposed trail corridor. The proposed trail would not affect the availability of a known mineral resource that would be of value to the region, nor would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a specific, general plan or other land use plan. Therefore, ***no impact*** would occur.

Discussion - Interim Alignment (B)

Same as Selected Alignment for all mineral resource issues.

Discussion - Secondary Alignment (C)

Same as Selected Alignment for all mineral resource issues.

Issues and Supporting Information	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
NOISE: Would the project:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			A, B, C	
b) Exposure of persons to or generation of excessive groundborne noise levels?			A, B, C	
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			A, B, C	
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			A, B, C	
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				A, B, C
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				A, B, C

Discussion - Selected Alignment (A)

a, c) Current conditions within the project area generate no, or low intermittent noise associated with use of the NCRA ROW and existing Arcata Marsh trails as pedestrian pathways. The majority of the area is within existing transportation ROW through both urban and natural resource land uses. The project area is exposed to off-site noise caused primarily by traffic on adjacent City Streets and Highway 101.

For measuring noise levels and setting noise standards, the City uses the Community Noise Equivalent Level (CNEL) and the Day/Night Noise Level (L_{dn}). The L_{dn} measure averages a weighted noise over a 24-hour period, and adds 5 dBA (A-weighed decibel) to noise levels between 7:00 p.m. and 10:00 p.m. The CNEL uses the same methodology, plus adds 10 dBA to noise levels between 10:00 p.m. and 7:00 a.m.

The project would be subject to the following Arcata General Plan Policy N-3b noise standard:

Maximum Allowable Transportation Noise Source Exposure

LAND USE	OUTDOOR ACTIVITY AREAS L_{dn}/CNEL, dB
Playgrounds, Neighborhood Parks	70

Source: Arcata General Plan: 2020, Table N-2 excerpt

The project site is located adjacent to City streets and Highway 101; General Plan Figure N-b shows projected noise contours for these areas as 65 dB (Figure 7). Therefore, the project site is not expected to be subject to noise levels in excess of General Plan standards, and any potential exposure would be ***less than significant.***

Operational noise associated with trail use and maintenance activities would be generated adjacent to limited noise-sensitive uses (residences, Arcata High School). However, the noise would include pedestrian/bicycle activity noise and occasional landscaping and trail repair which are typical of an urban setting. For the overall trail alignment, this incremental increase in noise would not expose persons to noise levels in excess of applicable standards and would not represent a substantial increase in noise. Therefore, a ***less than significant impact*** would occur.

b) During the construction phase, earth-moving and compacting activities would generate groundborne vibration or groundborne noise; the level of vibration or noise would typically be moderate. These activities would be temporary, during the initial stage of construction. In addition, pile driving machines would be used for driving piles for proposed bridge replacements over Butcher's Slough, Gannon Slough, Jacoby Creek, and Rocky Gulch. While these pile driving activities could generate high levels of groundborne vibration and noise, they would be temporary, and they would occur along Humboldt Bay between the Arcata WWTP and Bracut which is well away from existing noise-sensitive uses (e.g., residences, schools, etc.). Finally, the proposed project would not include heavy industrial activities, blasting, or other activities that could create excessive groundborne noise levels or vibration. Therefore, a ***less than significant impact*** would occur.

d) Construction activities would temporarily increase ambient noise levels, mainly from heavy equipment and construction-related truck traffic. Constructing the trail would include using heavy equipment for earth moving, grading and compaction, paving, and hauling. The construction phase would increase localized truck trips to transport materials and equipment to and from the proposed trail corridor. Construction-related noise would be unavoidable; however, its temporary and intermittent nature would moderate the environmental impact. The proposed project would comply with all applicable City policies to abate construction-related noise impacts. General Plan Policy N-5d which requires limiting construction activity to the hours of 8 a.m. and 7 p.m. Monday through Friday, and between 9 a.m. and 7 p.m. on Saturdays, and Policy N-5e which requires that all construction equipment be maintained in good working order and fitted with factory approved mufflers.

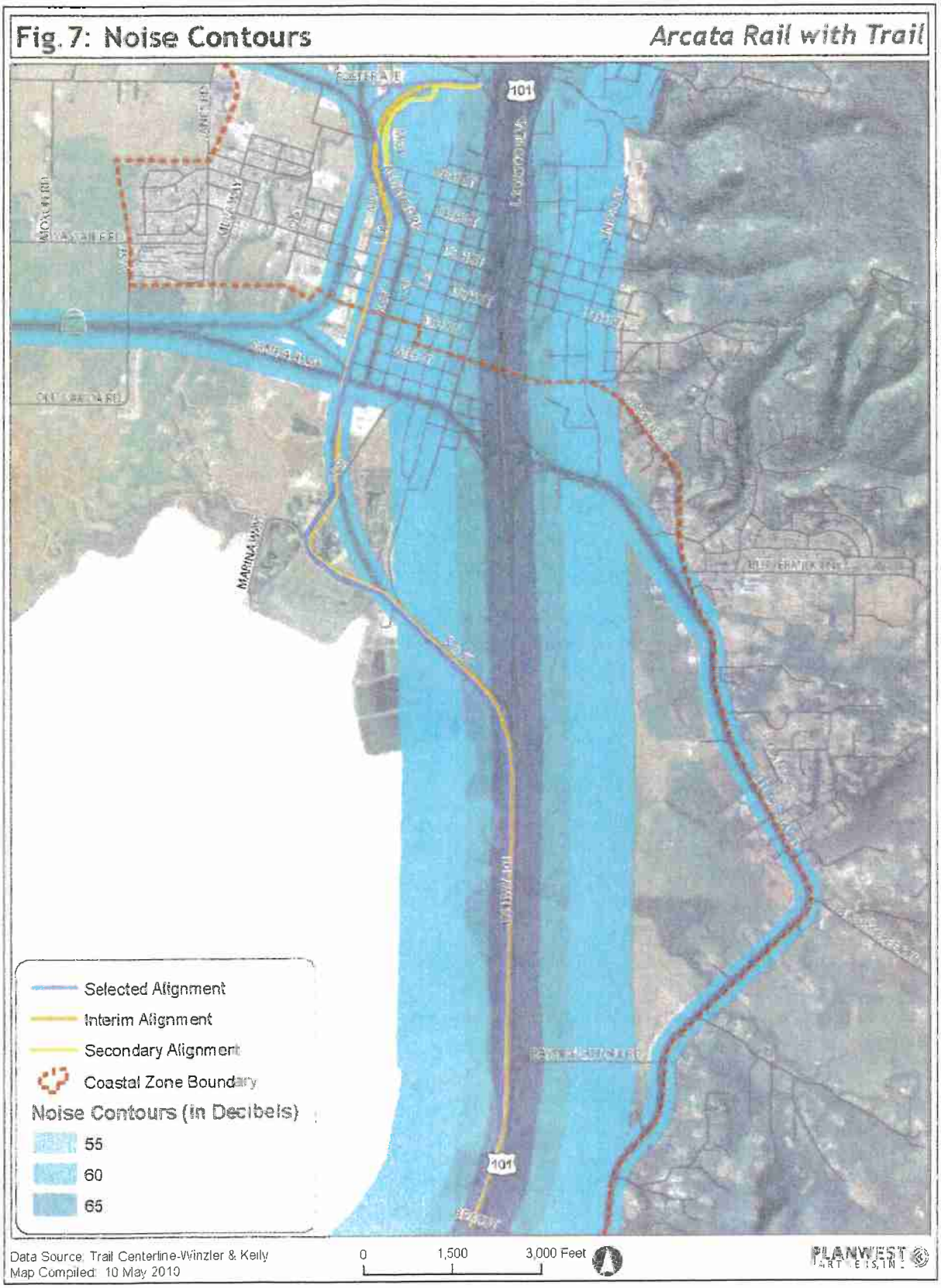


Fig. 7: Noise Contours
Arcata Rail with Trail
101
Selected Alignment
Interim Alignment
Secondary Alignment
Coastal Zone Boundary
Noise Contours (in Decibels)
55
60
65
Data Source: Trail Centerline-Winzler & Kelly
Map Compiled: 10 May 2010
0
1,500
3,000 Feet
PLANWEST

Construction related noise could be temporarily disruptive to adjacent residences along the proposed trail alignment. However, these residences already experience daily urban traffic noise from adjacent streets. Since construction noise would be temporary and limited to daytime hours per above policies, the project's impact would be ***less than significant.***

e-f) The project site is not located within 2 miles of a public airport or in the vicinity of a private airstrip, and thus would not expose people working or residing in the area due to excessive noise levels. ***No impact*** would occur.

Discussion - Interim Alignment (B)

Same as Selected Alignment for all noise issues.

Discussion - Secondary Alignment (C)

Same as Selected Alignment for all noise issues. While some construction activities would occur on the Arcata High School property under this alignment, they would not result in significant construction noise because: (1) since the trail would be constructed on an existing service road, the need for heavy construction equipment use would be limited; (2) construction activities would be temporary; (3) construction noise would be required to comply with Arcata General Plan Policies N-5d and -5e and other City requirements; and (4) the High School buildings closest to the proposed trail include the gymnasium, wood shop and metal shop which cannot be considered particularly noise sensitive.

Issues and Supporting Information	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
POPULATION AND HOUSING: Would the project:				
a) Induce substantial population growth in the area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				A, B, C
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				A, B, C
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				A, B, C

Discussion - Selected Alignment (A)

a-c) No existing housing occurs within the project corridor and the proposed project would not directly or indirectly induce substantial population growth, would not displace existing housing or people, and would not necessitate the construction of replacement housing. Therefore, ***no impact*** would occur.

Discussion - Interim Alignment (B)

Same as Selected Alignment for all population and housing issues.

Discussion - Secondary Alignment (C)

Same as Selected Alignment for all population and housing issues.

Issues and Supporting Information	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
PUBLIC SERVICES: Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
a) Fire protection?			A, B, C	
b) Police protection?			A, B, C	
c) Schools?				A, B, C
d) Parks?			A, B, C	
e) Other public facilities?				A, B, C

Discussion - Selected Alignment (A)

a, b) Emergency response and evacuation in the project area is the responsibility of the APD located at 736 F Street, and the AVFD located at 631 9th Street and 3235 Janes Road. These provide critical emergency response services and serve as the community's primary response agencies under the City's Emergency Response Plan. Both the APD and AVFD are part of the multiagency Standardized Emergency Management System emergency response network. In addition, a California Highway Patrol (CHP) office is located at 255 East Samoa Boulevard and regularly provides back-up services to APD within city limits and serves as the primary emergency responders along the Highway 101 corridor. The Humboldt County Sheriff's Office also serves the Highway 101 Corridor.

The project would not result in significant adverse effects on service ratios for the police or fire departments. This is because: (1) trail users already work or reside in the area and would not represent an increased service population; and (2) the proposed trail corridor is already served by AVFD, APD, CHP and County Sheriff so that the trail would not require extension of fire and police protection services into areas not already served. Although there may be increased use of certain areas, the overall impact to fire and police services would be ***less than significant***.

The existing L Street corridor through the City contains the railroad track and a narrow vehicle travel lane that lacks striping, although two-way traffic and some parking is permitted. The proposed improvements allow for bike access on L Street as well as a segregated trail along this corridor. L Street is primarily designed for local access vehicular travel between 8th and 11th Streets. Since L Street is a minor rather than a primary north-south corridor, and there are multiple alternative existing north-south routes both east and west of L Street, the calming of vehicular travel along L Street under the proposed project would not have substantial adverse impacts on fire and police emergency access or response times. Traffic calming measures include traffic humps and yield or stop signs at 8th, 9th and 10th Streets. Between 7th and 11th Streets a new 8 to 10 foot wide segregated multi-use trail will be placed on the west side of the railroad tracks.

c) The proposed trail corridor would occur in the Arcata Elementary School District and the Northern Humboldt Union High School District. The proposed project would not result in significant adverse effects on school district service ratios or school facilities for the same reasons discussed above for fire and police protection services. Therefore, ***no impact*** to schools would occur.

d) The proposed trail would represent a new area-serving recreational facility, and would connect a number of existing City parks including Larson Park, Arcata Skate Park, Shay Park, and the Arcata Marsh. Therefore, in terms of the provision of, and access to, park and recreational facilities, the proposed project would have a beneficial impact.

The proposed project would also increase connectivity between existing City parks, and thus could potentially increase park usage. However, the proposed trail would not contribute to any substantial physical deterioration of City parks. This is because the City reviews park funding and park maintenance requirements on an annual basis, and provides the required funding and maintenance needed to maintain its parks consistent with its General Plan and City Parks & Recreation Master Plan. Therefore, a ***less than significant impact*** would occur.

e) No other public facilities or public services apply to the project. Therefore, ***no impact*** would occur.

Discussion - Interim Alignment (B)

Same as Selected Alignment for all public service issues.

Discussion - Secondary Alignment (C)

Same as Selected Alignment for all public service issues.

Issues and Supporting Information	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
RECREATION:				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				A, B, C (beneficial)
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				A, B, C

Discussion - Selected Alignment

a) The proposed trail would increase recreational opportunities within Arcata and is an important piece of developing a regional active transportation network. It is identified in both the City Parks & Recreation Master Plan (2009, adoption pending) and the Pedestrian and Bicycle Master

Plan (2010) as a priority bicycle project. The entire trail would be an overall recreational benefit to the community and would represent a net increase of multi-use trails in the area.

The proposed trail could incrementally increase the use of existing neighborhood and regional parks or other recreational facilities such as Larson Park, Shay Park, and the Arcata Marsh. However, for the same reasons discussed under public services above, the proposed project would not cause substantial physical deterioration of facilities and would have an overall ***beneficial impact*** to regional recreational facilities.

b) The proposed project is a trail project and would not require the construction or expansion of other recreational facilities which could result in adverse physical effects. However, construction and operation of the proposed trail itself could have adverse physical effects. These potential adverse physical effects are discussed in the other sections of this Initial Study, and ***no impact*** would occur beyond these adverse physical effects.

Discussion - Interim Alignment (B)

Same as Selected Alignment for all recreation issues.

Discussion - Secondary Alignment (C)

Same as Selected Alignment for all recreation issues.

Issues and Supporting Information	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
TRANSPORTATION/TRAFFIC: Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation systems, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.			A, B, C	
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?			A, B, C	
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				A, B, C
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			A, B, C	
e) Result in inadequate emergency access?			A, B, C	
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?			A, B, C	

Discussion - Selected Alignment (A)

a, b) The proposed multi-use trail would provide increased opportunities and routes for safe non-motorized travel within the City, as well as for commuters traveling to/from Eureka (Figure 8). The proposed trail would generally be accessed from the following locations: northern trailhead, southern trailhead, street intersections, and adjacent trails in the Arcata Marsh, and at a large turn-out on South G Street.

The project has been designed to meet the operational needs of adjacent and intersecting roadways, the railway system, area businesses, and a variety of potential trail users. Planning, design, and implementation standards were derived from the following sources: City of Arcata General Plan Transportation Element, the current editions of the California Department of Transportation Highway Design Manual, Chapter 1000 "Multi-use Path Planning and Design", the U.S. Department of Transportation, Federal Highway Administration "Manual on Uniform Traffic Control Devices – California Supplement (CAMUTCD)" and the American Association of State Highway and Transportation Officials' (AASHTO) "Guide for Development of Bicycle Facilities." Additional guidance concerning the design of rails-with-trails facilities was considered, including NCRA's "Trail Projects in the NWP Line Rights-of-Way" and the U.S. Department of Transportations' "Rails-with-Trails: Lessons Learned."

The portion of the proposed trail along L Street, the Urban Interface Trail, would be designed to encourage non-motorized transportation both along the roadway and separated pathway. Existing vehicle use of L Street is very low as it is un-striped and relatively narrow and there are multiple alternative north-south routes both east and west of L Street. Therefore, the proposed project would not have substantial adverse impacts to the City's circulation system.

There are approximately 20 existing 45-degree un-striped parking spaces on L Street between 9th and 10th Streets, and 7 parallel parking spaces between 8th and 9th Streets. These 45 degree spaces are not official parking spaces (e.g., being used by a used car dealer or auto mechanic to store cars). All commercial and residential uses along L Street are required by City Land Use Code policies to provide on-site parking for customers/ residents as applicable. The proposed design would include some parallel parking between 9th and 10th Streets and there is sufficient parking on adjacent streets for any additional parking needs, therefore, any loss of parking on L Street would be less than significant.

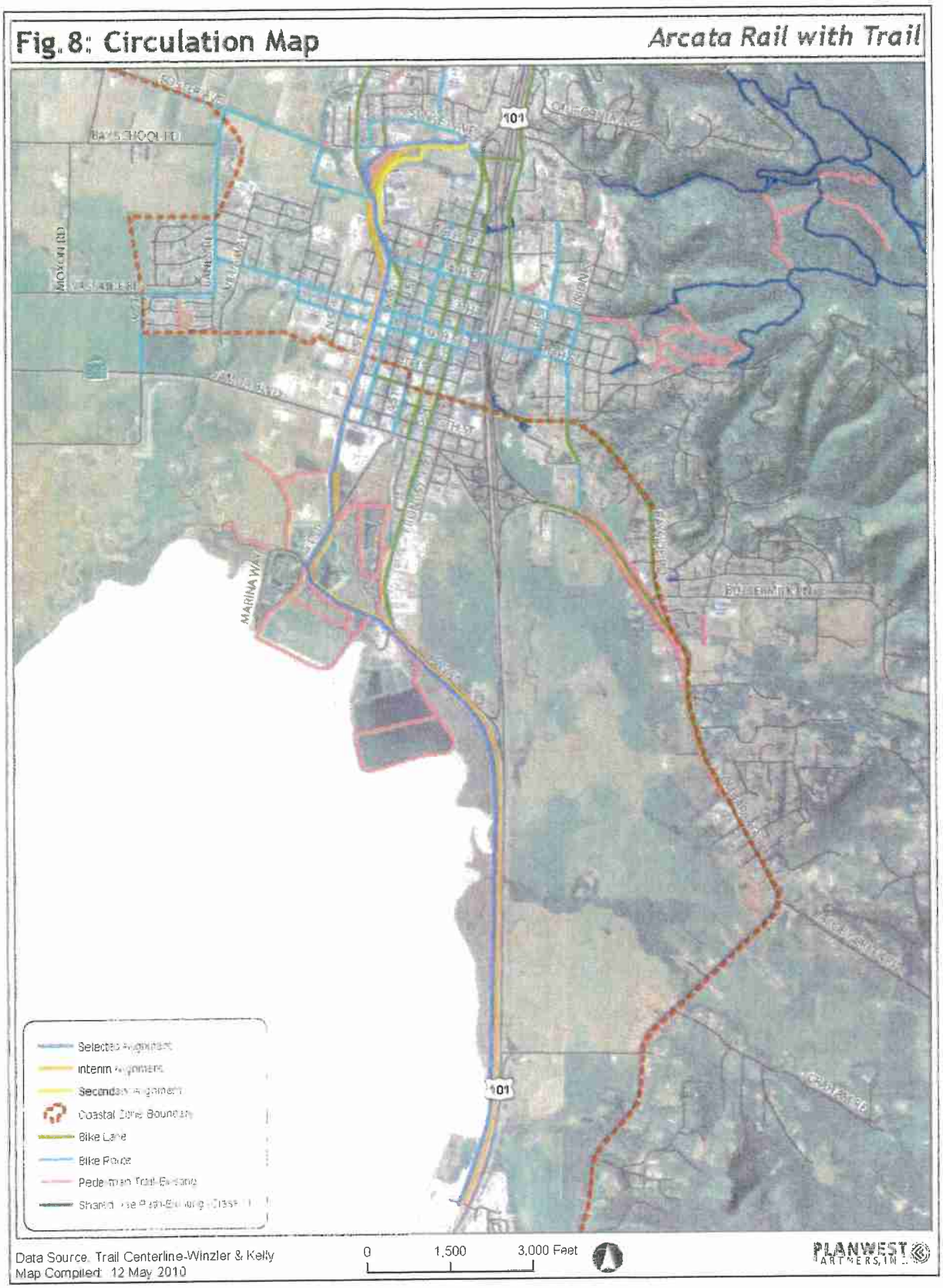


Fig. 8: Circulation Map
Arcata Rail with Trail
101
MARINA WAY
Selected Alignment
Interim Alignment
Secondary Alignment
Coastal Zone Boundary
Bike Lane
Bike Route
Pedestrian Trail-Existing
Shared Use Path-Existing Class I
Data Source: Trail Centerline-Winzler & Kelly
Map Compiled: 12 May 2010
0
1,500
3,000 Feet
PLANWEST PARTNERS, INC.

The proposed project would include new parking facilities for trail users at the southern trailhead (Bracut) and at the WWTP. The southern trailhead parking would include two - four new parking spaces, including one ADA space. This parking would be accessed from the Highway 101 turn-off for Bracut, with two spaces located on each side of the entrance (east of the existing gate and west of the railroad tracks). The WWTP trailhead parking area would be located in an existing gravel pull-out adjacent to the WWTP. This area would be improved with up to ten parking spaces, benches, interpretive signage, and landscaping. Although this parking area would be accessed via the WWTP turn-off from South G Street, it would be outside the existing fenced WWTP and would not interfere with WWTP access or operations.

The proposed project would not increase vehicle traffic on City streets; in fact, the project could potentially decrease vehicle trips within the City by encouraging non-motorized travel. It would not conflict with effective circulation system performance or intersection level of service standards. Based on the above, the project: (1) would not conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system; (2) would take into account all modes of transportation, including mass transit and non-motorized travel; and (3) would take into account other components of the transportation system, such as intersections, streets, pedestrian paths, and bicycle paths. Therefore, a ***less than significant impact*** would occur.

c) The proposed project would not be located near an airport, would have no impact on air traffic patterns, would not substantially increase air traffic levels, and would not result in substantial safety risks. Therefore, ***no impact*** would occur.

d) Trail development could affect transportation/traffic safety: (1) along existing City Streets; (2) at existing City street crossings; (3) at access points along Highway 101; and (4) along existing Arcata Marsh trails. The proposed trail would be separated from all existing City streets by curbs, striping, fences, or other features. Along L Street roadway design focuses on encouraging both motorized and non-motorized transportation. The narrow street width (around 12 feet) would keep vehicle speeds very low and encourage safe driving. Trail safety features in this segment may include, trail lighting, intersection signage, speed humps and tables at intersections, and landscaping. In addition to the existing travel lane, a bike and pedestrian pathway will be constructed west of the railroad tracks to provide a multiuse segregated path. With the provision of these proposed features, substantial hazards due to design features would be avoided along L Street.

The trail would intersect and/or cross the following streets (from north to south): Sunset Avenue, Foster Avenue, Alliance Road, M Street, 12th Street, 11th Street, 10th Street, 9th Street, 8th Street, Samoa Boulevard (Hwy 255), I Street, City of Arcata WWTP Driveway (accessing South G St), and Bracut Industrial Park Driveway (accessing Highway 101). In general, roadway and driveway crossings would be ADA accessible and include warning signage and markings both on the trail and the approaching vehicular way. The trail would include yellow centerline striping and additional warning signage and striping approaching intersections with existing roads and railroad crossings. In addition, signage would be added along the trail warning users of curves, bends, and other hazardous situations. Speed control can only be maintained through signage and striping; speed bumps or other surface irregularities are not permitted to control the speed of bicycles and other non-motorized vehicles. The above design features would be implemented at the intersections as shown in the detailed Design Plans, Appendix I, and would avoid substantial hazards at those trail crossings.

In compliance with FHWA and Caltrans standards for a Class I Bikeway, segments of the trail adjacent to roadways would be separated by at least 5 feet and include a physical barrier (concrete barrier or fence). The proposed trail along Highway 101 would meet all Caltrans safety requirements including physical barriers where necessary between the trail and Highway 101. The proposed trail would also be elevated above the highway travel lanes to approximately the elevation of the existing railroad tracks. This would keep trail users separated from vehicles traveling on Highway 101.

The proposed trail would be directly adjacent to an inactive rail line. There is a perceived hazard associated with trails adjacent to active rail lines; however the project has been designed to meet all applicable NCRA policies and includes the following safety design features: fencing (now or when rail service is restored) between the trail and the RR track along the entire alignment with a minimum setback of 8.5 feet from RR centerline, RR crossing pavement markings and signage at all crossing locations, minimum 45° angle for all trail/RR crossings, and the City would work with NCRA to install additional bar crossing as required if the RR becomes active. These features would avoid any substantial conflicts between the rail line (which is currently inactive) and trail users.

The proposed trail would overlay existing trails within the Arcata Marsh that are used by walkers, runners, bicyclists, and bird watchers. There could be potential conflicts between these users and bicyclists due to the difference in these activities. However, since the proposed trail would have striping, signage, and unpaved shoulders on both sides which could be used by birdwatchers and other uses who want to get out of the main travel lanes, substantial safety related conflicts between trail users and bird watchers would be avoided.

In addition to design safety features, a Trail Safety Plan is included as part of the proposed project to satisfy the 2009 NCRA Policy and Procedures Manual requirements for a public agency proposing a rail-with-trail facility. As specified in the NCRA Policy and Procedures Manual, the public agency shall prepare a Safety Plan including certain design, maintenance and operations measures. Each required topic is discussed in this plan as follows:

- Section 2.2: Trespassing and Crime Prevention. Topics include trespassing reduction and crime prevention strategies, such as regulatory signage, emergency access and identification of a Trail Manager within the City of Arcata.
- Section 2.3: Emergency Response. Topics include emergency response procedures and responsibilities.
- Section 2.4: Security and Patrols. Topics include signage, establishment of a coordinated and responsive patrol service and other security measures.
- Section 2.5: Trail Barrier Design Standards. Topics include recommended barrier systems and RR ROW access.

With incorporation of the design features described above and compliance with the safety standards outline in the Trail Safety Plan, the proposed project would not substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses. Therefore, a ***less than significant impact*** would occur.

e) The proposed trail would be adjacent to existing street and highway systems. Emergency access to the project area already exists from these streets, and would continue to exist under the proposed project. Bollards would be placed at trail intersections and entrances to prevent all but emergency and maintenance vehicles from entering. See the Public Services discussion in this Initial Study for additional information regarding potential fire and police protection impacts. Since the trail corridor is already served by AVFD, APD, CHP and the County Sheriff, the trail would not slow or hinder emergency response, the trail would not require additional emergency services, and there would be emergency access to all trail segments, a ***less than significant impact*** would occur.

f) Both the Arcata General Plan: 2020 and the Pedestrian and Bicycle Master Plan (2010) emphasize the City's desire to "create and maintain a balanced transportation system ...to reduce the percentage of trips that are made by automobile and provide the opportunity and facilities to divert trips from automobiles to other modes (General Plan Transportation Element Policy T-1)." The following Arcata General Plan: 2020 policies are also applicable to the proposed project:

- T-5a Overall bicycle route system and connectivity.
- T-5b Class I bikeways.
- T-5g Pedestrian pathways and multi-use trails.

The proposed project would construct a Class I bikeway that would encourage the City's Bicycle & Pedestrian Master Plan goal to "work towards achieving 50% of all trips that begin and end in Arcata being made by non-motorized modes by year 2020." In addition this Plan identifies the proposed project as a priority bicycle project (Humboldt Bay Trail - Arcata Segment, Table 5.5). Furthermore, the entire trail would be constructed to Americans with Disabilities Act (ADA) standards. The proposed project would thus help implement rather than conflict with adopted policies, plans and programs regarding public transit, bicycle, and pedestrian facilities and would not decrease the performance or safety of such facilities. Therefore, a ***less than significant impact*** would occur.

Discussion - Interim Alignment (B)

Same as Selected Alignment for all transportation/ traffic issues except the Interim Alignment would cross Alliance Street slightly further north (at 17th Street) than the Selected Alignment. However, the significance determinations would not change.

Discussion - Secondary Alignment (C)

Same as Selected Alignment for all transportation/ traffic issues.

Issues and Supporting Information	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
UTILITIES AND SERVICE SYSTEMS: Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				A, B, C
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				A, B, C
c) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			A, B, C	
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?			A, B, C	
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			A, B, C	
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			A, B, C	
g) Comply with federal, state, and local statutes and regulations related to solid waste?			A, B, C	

Discussion - Selected Alignment (A)

a, b) The proposed trail would not involve construction or use of facilities that contribute wastewater to the City's WWTP, and would not require or result in new, or expansion of existing, water or wastewater treatment facilities. Therefore, ***no impact*** would occur.

c) Where existing storm drainage facilities exist adjacent to the trail, short extensions or modifications to the inlets would allow runoff from the trail to enter the existing storm drain system. Where possible drainage from the trail will be retained and infiltrated adjacent to the trail prior to directing drainage to existing facilities. Where new paving or new surface work would occur over existing utilities, all necessary elements (such as existing valve boxes, manhole lids, electrical vaults, etc.) would be raised to the new elevation of the trail surface. Because drainage facilities are proposed to accommodate stormwater runoff from the proposed trail, because these drainage facilities would consist mainly of maximizing infiltration of stormwater

and connection to existing drainage facilities, and because large-scale expansion of existing drainage facilities would not be required, the proposed project would not require the construction of drainage facilities that would cause significant environmental effects. Therefore, a ***less than significant impact*** would occur.

d, e) See responses a) and b) regarding water and wastewater facilities. The proposed trail would not create an increased demand for domestic water service or wastewater treatment capacity. The project would require relatively small quantities of water during the construction phase (e.g. for dust control and concrete/asphalt applications) and water for landscaping, until the new vegetation is established. The project's water demands would not be significant and could be met by existing entitlements and resources. Therefore, the project would not result in the need for the construction of new water or wastewater treatment facilities, or the expansion of existing facilities. A ***less than significant impact*** would occur.

f, g) The proposed trail would generate limited solid waste during both construction and operation. Construction solid waste would include the one-time temporary generation of construction waste associated with the proposed development of an approximately 4.5 mile trail. Recyclable construction materials (e.g. scrap metal, wood, concrete, glass) could be shipped to local businesses for reuse, with non-recyclable materials sent to the Humboldt Waste Management Authority (HWMA) transfer station in Eureka.

Operational solid waste would be generated by trail users. Trash and recycling receptacles are currently provided by the City of Arcata at Larson Park and in the Arcata Marsh and Wildlife Sanctuary. These receptacles are periodically emptied by City of Arcata and would be sufficient to accommodate any trash generated by trail users. All of the project's solid waste disposal needs would comply with federal, state, and local statutes and regulations related to solid waste. Existing services and contracts for the City/HWMA are adequate to handle the project's short-term and long-term waste disposal needs. Therefore, a ***less than significant impact*** would occur.

Discussion - Interim Alignment (B)

Same as Selected Alignment for all utility and service systems issues.

Discussion - Secondary Alignment (C)

Same as Selected Alignment for all utility and service systems issues.

Issues and Supporting Information	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
MANDATORY FINDINGS OF SIGNIFICANCE:				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal		A, B, C		

Issues and Supporting Information	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?				
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?			A, B, C	
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			A, B, C	

Discussion - Selected Alignment (A)

Certain mandatory findings of significance must be made to comply with CEQA Guidelines §15065. The proposed project has been analyzed, and it has been determined that with implementation of the mitigation measures recommended in this Initial Study, it would not:

- Substantially degrade environmental quality;
- Substantially reduce fish or wildlife habitat;
- Cause a fish or wildlife population to fall below self-sustaining levels;
- Threaten to eliminate a plant or animal community;
- Reduce the numbers or range of a rare, threatened, or endangered species;
- Eliminate important examples of the major periods of California history or pre-history;
- Achieve short term goals to the disadvantage of long term goals; or
- Have environmental effects that will directly or indirectly cause substantial adverse effects on human beings.
- Have possible environmental effects that are individually limited but cumulatively considerable when viewed in connection with past, current, and reasonably anticipated future projects;

a) Construction of the proposed trail has the potential to adversely affect waters of the U.S., wetlands and potential habitat for several endangered fish species, though it would not threaten self-sustaining levels of these fish species or endangered plant or animal species. The potential impacts to biological species would be ***less than significant with incorporation of mitigation measures*** (see the Biological Resources Section of this Initial Study for a complete discussion of potential biological impacts and mitigation measures).

The proposed trail would not eliminate important examples of California's history or prehistory. See the Cultural Resources Section of this Initial Study for a complete discussion of potential cultural impacts and mitigation. The project's potential impacts on historic and prehistoric resources would be reduced ***to less than significant with the incorporation of mitigation measures*** (see the Cultural Resources section of this Initial Study for mitigation measures).

b) Many of the items reviewed as part of this Initial Study would result in no impact or were considered to have less than significant impacts, and where appropriate, findings were made with reference made to the Arcata General Plan: 2020 and specific studies prepared for the project. The potentially significant effects of the project would be avoided or reduced to less than significant due to the project design and the incorporation of mitigation measures identified in this Initial Study. Because the proposed project would not result in significant impacts after mitigation, and because the proposed project is a trail project rather than a development project that could add to existing and future population growth and development in the area, the proposed project would not contribute to any significant cumulative impacts which may occur in the area in the future. Therefore, the impact would be ***less than significant.***

c) The proposed project has been designed to be consistent with General Plan policies and zoning requirements, and measures to reduce project impacts to the environment have been identified in this Initial Study to avoid significant project-related environmental effects. In addition, the proposed project would not displace existing residents or employees, generate substantial pollution, or generate a substantial demand for public services or utilities. Therefore, the proposed project would not cause substantial adverse effects on human beings, either directly or indirectly and a ***less than significant impact*** would occur.

Discussion - Interim Alignment (B)

Same as Selected Alignment for all mandatory findings of significance.

Discussion - Secondary Alignment (C)

Same as Selected Alignment for all mandatory findings of significance.

REFERENCES

Alta Planning + Design (Alta), 2010. *Arcata Rail with Trail Operations Plan.*

American Council of Engineering Companies, 2011. *California Environmental Quality Act CEQA Guidelines*

Bay Institute, The, 2013 *Analysis Of The Costs And Benefits Of Using Tidal Marsh Restoration As A Sea Level Rise Adaptation Strategy In San Francisco Bay,* ESA, PWA, February 2013.

California Emergency Management Agency and the California Natural Resources Agency (CNRA), 2012. *California Adaptation Planning Guide – Defining Local and Regional Impacts –(July 2012)* . http://resources.ca.gov/climate_adaptation/docs/APG_Defining_Local_and_Regional_Impacts.pdf

Californian Energy Commission, 2009. *Climate Change Scenarios And Sea Level Rise Estimates For The California 2009 Climate Change Scenarios Assessment.* August 2009. *http://www.energy.ca.gov/2009publications/CEC-500-2009-014/CEC-500-2009-014-F.PDF*

California Natural Resources Agency (CNRA). *2009 California Climate Adaptation Strategy.* http://www.energy.ca.gov/2009publications/CNRA-1000-2009-027/CNRA-1000-2009-027-F.PDF

Caltrans, 2007. *Eureka-Arcata Route 101 Corridor Improvement Project DEIR.* SCH# 2001092035. Prepared by the U.S. Department of Transportation Federal Highway Administration (FHWA) and California Department of Transportation (Caltrans), District 1, for the Humboldt County Association of Governments (HCAOG). July 3, 2007.

City of Arcata, 2000. *General Plan: 2020 and Local Coastal Land Use Plan.* Amended October 2008. www.cityofarcata.org

City of Arcata, 2006a. *Community Greenhouse Gas Reduction Plan*. August 2006. http://www.cityofarcata.org/document-center?fid=1827

City of Arcata, 2006b. *Update Greenhouse Gas Inventory*. http://www.cityofarcata.org/document-center?fid=1827

City of Arcata, 2010. *Pedestrian & Bicycle Master Plan*. Department of Public Works. http://www.cityofarcata.org/document-center?fid=1846

Coastal and Ocean Working Group California Climate Action Team, 2010. *State Of California Sea-Level Rise Interim Guidance Document.* October 2010. *http://www.opc.ca.gov/webmaster/ftp/pdf/agenda_items/20100911/14.%20SLR/1011_COPC_SLR_Interim_Guidance.pdf*

Department of Transportation, 2012. *Recommended Monetized Values listed in the TIGER BCA Resource Guide.* January 2012. http://www.dot.gov/sites/dot.dev/files/docs/TIGER_BCA_RESOURCE_GUIDE.pdf

Environmental Data Resources Inc. (EDR), 2009. *Hazardous Materials Records Search.* December 2009

Hendrix, Michael & Wilson, Cori, Michael Brandman Associates Principal Authors; Contributing Authors: Tony Held, Ph.D., Terry Rivasplata, et al., Jones & Stokes. *Recommendations by the Association of Environmental Professionals (AEP) on How to Analyze Greenhouse Gas Emissions and Global Climate Change in CEQA Document.* March 5, 2007.

Humboldt County, 2002. *Humboldt County General Plan Update, Natural Resources and Hazards Report.* Prepared by Dyett & Bhatia for Humboldt County. September 2002.

Humboldt County, 2008. *Humboldt County Regional Pedestrian Plan,* Alta Planning + Design Redwood Community Action Agency, SHN Consultant Engineers

Intergovenmental Panel on Climate Change (IPCC). *IPCC Fourth Assessment Report, Climate Change 2007.* http://www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4_syr.pdf

National Academy of Sciences - Board on Earth Science and Resources, 2012. *Sea-Level Rise for the Coasts of California, Oregon, and Washington: Past, Present, and Future (2012) http://dels.nas.edu/Report/Level-Rise-Coasts/13389?bname=besr*

Roscoe & Associates, 2009. *Archaeological Records Search.* December 2009.

Roscoe & Associates, 2010. *Cultural Resources Investigation of the Rails with Trails Project.*

Winzler & Kelly (W&K), 2010a. *Wetlands Delineation for Arcata Rail with Trail Project.* May 2010.

Winzler & Kelly (W&K), 2010b. *Hazardous Materials Corridor Study, Phase I Environmental Site Assessment, Arcata Rail with Trail Project.* May 2010.

Winzler & Kelly (W&K), 2010c. *Arcata Rail with Trail Hydrologic Analysis Technical Memorandum.* May 2010.

Winzler & Kelly (W&K), 2009a. *Natural Features Inventory Arcata Rail with Trail Connectivity Project.* December 2009.

Winzler & Kelley (W&K), 2009b. *List of hazardous materials/waste sites with potential impacts.* December 2009.

ATTACHMENTS

- Rails Trails Lighting On Time Calculations for Conversion to Tons CO_2

Rails Trails Lighting On time calculation for conversion to tons CO_2

	LIGHTS ON	CIVIL SUN-RISE		LIGHTS OFF	AM HRS ON		CIVIL SUNSET	LIGHTS ON	LIGHTS OUT	PM HRS ON		TOTAL HRS ON	UNIT CONV.	DAYS /MO.	HOURS / MONTH
	AM	AM		AM			PM	PM	1:00 AM						
JAN	5:30	7:41		7:30	2:00		4:59	17:00	1:00	8:00		10:00	10	31	310
FEB	5:30	7:27		7:30	2:00		5:33	17:00	1:00	8:00		10:00	10	28	280
MAR	5:30	6:51		6:30	1:00		6:07	18:00	1:00	7:00		8:00	8	31	248
APRIL	5:30	7:00		6:30	1:00		7:40	19:30	1:00	5:30		6:30	6.5	30	195
MAY	5:30	6:15		6:30	1:00		8:12	20:00	1:00	5:00		6:00	6	31	186
JUN	5:30	5:47		6:30	1:00		8:41	20:30	1:00	4:30		5:30	5.5	30	165
JULY	5:30	5:48		6:30	1:00		8:52	20:30	1:00	4:30		5:30	5.5	31	170.5
AUG	5:30	6:12		6:30	1:00		8:33	20:30	1:00	4:30		5:30	5.5	31	170.5
SEPT	5:30	6:43		6:30	1:00		7:50	20:00	1:00	5:00		6:00	6	30	180
OCT	5:30	7:13		7:30	2:00		7:00	19:00	1:00	6:00		8:00	8	31	248
NOV	5:30	6:49		7:30	2:00		5:11	17:00	1:00	8:00		10:00	10	30	300
DEC	5:30	7:21		7:30	2:00		4:49	17:00	1:00	8:00		10:00	10	31	310

2763 HRS / YR

70	X	35	=	2450 X	2763	=	6,769,350	/ 1000	=	6,769
LIGHTS		WATTS / LIGHT		WATTS	HOURS / YR		WATT-HR/YR			KWH/YR

* times obtained for sunrise and sunset from
www.sunrisesunset.com/calendar for 2013
Assumes programable controller timer to adjust monthly
This number could be reduced by banking lights and not
keeping all of them on until 1:00 am

- Tiger Grant CO_2 Savings

TIGER 3 *Calculations Derived from Recommended Monetized Values Used in the TIGER BCA Resource Guide*

Vehicle Trips Saved Calculation

Total Vehicle Trips per year reduced for commuting to work only: 60,122

	1	2	3	4	5	6	7	8	9	10	11
Round Trip Length in miles	Number of Trips	Total Miles	Total Gas in gallons	Total Cost saved through gas reduction	Total CO_2 Tons Emissions	Value of CO_2 Emissions Reductions-2012	Reduced NOx tons	Reduced SOx tons	Reduced VOC tons	Reduced PM10 tons	Value of Reduced Nox, Sox, VOC, PM10
1	1,202	1202.44	59.23	$231	0.55	12.29	0.01	0.00	0.02	0.00	199.73
2	3,006	6012.2	296.17	$1,155	2.74	61.45	0.06	0.00	0.08	0.00	998.66
3	6,012	18036.6	888.50	$3,465	8.23	184.36	0.19	0.01	0.23	0.00	2995.98
4	6,012	24048.8	1184.67	$4,620	10.97	245.81	0.25	0.02	0.31	0.01	3994.64
5	6,012	30061	1480.84	$5,775	13.72	307.27	0.31	0.02	0.38	0.01	4993.30
6	7,215	43287.84	2132.41	$8,316	19.75	442.46	0.45	0.03	0.55	0.01	7190.35
7	3,607	25251.24	1243.90	$4,851	11.52	258.10	0.26	0.02	0.32	0.01	4194.37
8	3,925	24048.8	1184.67	$4,620	10.97	245.81	0.25	0.02	0.31	0.01	3994.64
9	4,809	37876.86	1865.86	$7,277	17.28	387.16	0.39	0.03	0.48	0.01	6291.56
10	3,607	36073.2	1777.00	$6,930	16.46	368.72	0.37	0.02	0.46	0.01	5991.96
14	5,411	75753.72	3731.71	$14,554	34.57	774.31	0.78	0.05	0.96	0.02	12583.12
16	4,810	76956.16	3790.04	$14,785	35.12	786.60	0.79	0.05	0.98	0.02	12782.85
20	6,012	120244	5923.35	$23,101	54.87	1229.06	1.24	0.08	1.53	0.03	19973.20
Total	**60,122**	**518,853**	**25,559**	**$99,681**	**236.76**	**5303.41**	**5.36**	**0.35**	**6.60**	**0.14**	**86184.37**

1. Total Number of Trips is based on 289 new commuters x 4 days per week x 52 weeks per year 12.45 86199.46
3. Gallons of gas is averaged at 20.3mpg using EPA MOBILE6.2 Fuel economy calculation
4. Cost savings through reduced gas is calculated at $3.90/gallon - current Humboldt County Price is $4.03/gallon
5. See below calculation for total CO_2 emissions
6. Value for reduced CO_2 emissions are generated using the Recommended Monetized Values listed in the TIGER BCA Resource Guide Page 6 Social Cost of Carbon
7. 10. NOx, SOx, VOC, and PM10 are calculated using ICLEI's emissions calculator software
11. Values provided for reduced emissions are generated using the Recommended Monetized Values listed in the TIGER BCA Resource Guide Page 5

11c

EXHIBIT B

PROPOSAL SHEET

Portable Electrical Vibracore System

Proposed Item	Proposed Amount
Portable Electrical Vibracore System	11,740.-
Training	2,100.-
Shipping and Handling Costs	285.-
Taxes	N/A
Total Proposal	$14,125.

REFERENCES: Please include names, addresses, and phone numbers of at least three comparable jobs. Please use additional sheet.

I, Paul D. Higley (Name), representing Specialty Devices, Inc (Firm)

do hereby certify the above proposal as true and correct.

reference our Quotation 031416B enclosed

RECEIVED
MAR 14 2016
H.B.H.R. & C.D.

Specialty Devices, Inc

Specialty Devices, Inc. 2905 Capital Street, Wylie, Texas, USA, 75098
Ph: 972-429-7240 **Fax**: 972-429-7243 www.SpecialtyDevices.com

QUOTATION 030216b

March 14, 2016

To: Capt. Tim Petrusha
Director of Harbor Operations/Bar Pilot
Port of Humboldt Bay
P.O.Box 1030
Eureka, CA 95502-1030
Office: (707)443-0801 Cell: (707)834-4939 Fax: (707)443-0800
tpetrusha@humboldtbay.org

Hello Capt. Petrusha,

Thank you for the opportunity to provide you with a quote for our VibeCore-D4. This document is intended to serve as our quotation for the portable electric Vibracore System. We believe our VibeCore-D4 will more than meet your needs and in many ways will be a better device than the specification we are addressing. The differences between our VibeCore-D4 and your specification are discussed below. The costs are provided below and other than the differences discussed here, we are fully compliant with your request. We have also included a list of references in an attached document.

We have a vibracore system that will likely perform at least as well if not better than the one in your specification but does not meet your specification in a few ways. We believe the differences are to your advantage and would like to be able to respond to your request. So I am writing this note to you in hopes that you will consider our quotation.

The differences and why we believe this unit will meet your needs are addressed below.

Briefly,
We run from 2 12 volt car batteries as it is safer, quieter and more suitable for small boat operation
We create likely a little more energy in the core tube but do so more efficiently so we can use a slightly smaller motor.
We investigated the trade off in frequency versus distance in motion and found 7,000 rpm best for the tube we typically use.

Now some more detail on why this should be to your advantage.

1. Our VibeCore-D runs from 24 vdc not 115 vac. The reasons are 24 vdc is safer on a boat deck and we get all the power we need from a pair of car batteries. A generator is very good at providing a reasonable amount of power for a very long time. A vibracore only needs 30 seconds to a couple of minutes of power to penetrate 10 or 20 feet into the bottom. A car battery is excellent at providing a very large amount of power for a short period (for example in starting a car motor) and two batteries are a lighter, more portable and safer than a gasoline powered device and 115 vac on deck. Not to mention quieter and more reliable.

2. To penetrate the sediment, a vibracore needs to get as much of the energy produced from the motor used to accelerating the core tube up and down. If you have a 1 hp motor in a pressure housing that weighs about 90 lbs. you must accelerate the 90 lbs. up and down to get the tube to move up and down. Most of the energy is spent moving the motor housing, not the tube. We have a 0.8 hp. motor in a housing that weighs 58 lbs. so more of the energy goes into moving the tube than the 90 lb. unit with a 1 hp. motor. However, the 58 lb. vibracore head is too light to work well as we also found about 90 lbs. with this type of vibecore works well. So we add a 30 lb. weight ring. If this weight ring was firmly attached to the head we would lose the same energy as the other unit. So the weight ring is suspended over a set of rubber bumpers that act as springs. The bumpers compress and decompress with 98 to 99% efficiency, returning the energy stored in spring compression to motion in the core tube. This means we get the downward force of the 88 lbs. but do not lose the energy in accelerating the 30 lbs. of weight ring. The result is that VibeCore-D should get considerably more energy into accelerating the core tube than a 1 hp. unit with a rigid 90 lb. vibracore head.

3. Frequency. The VibeCore-D can be adjusted to work in the specified range of 8,000 to 10,000 rpm by readjusting the offset weights. However, we have found the average penetration to be best at 7,000 rpm. The ideal frequency does depend on the water content, grain size distribution in the sediments and the length and wall thickness of the core tube. Since many of these vary with the conditions of the sites and the type of core tube you use we looked at frequencies of 4,000 to 11,000 rpm and found a happy medium at 7,000 rpm. We also found that once you get above 6,000 rpm the difference was minimal unless you got over 10,000 rpm at which pint the displacement reduced to the point that penetration decreased. There is a trade-off between the frequency of operation and the displacement of a cycle. We can adjust your unit to operate at the higher frequency but do not recommend it. This operating frequency needs to be set during the build process and is not normally adjusted once produced. We can quote the higher frequency but would not recommend it.

The VibeCore-D meets all the other requirements of your request. The VibeCore-D4 includes a manual with operating instructions and standard care procedure, a 1 year limited warrantee and an extensive tool and spares kit including stainless steel core catchers, attachment rivets, drill guide for the core tube, and core tube caps.

Thank you for the opportunity to provide you with a quote for the VibeCore-D4. This letter is intended to provide you with purchase cost details for the VibeCore-D4 sampler. .

Costs Purchase

Item	Model	Description	Qty.	Purchase USD
1	VibeCore-D4	4" core sampler with 125' cable with switch box, spares tool kit,, (1) 30-pound weight ring, (1) 4" tube adapter for your choice of tubing, and operating manual	1	$10,950.
2	AL8CT4"x10'	4" Aluminum core tube 0.125" wall 10 foot $ 330 each	2	$ 660.
3	PCCT4"x10'	4" clear Polycarbonate core tube	2	$ 130.
4	Training	1 day VibeCore-D4 on-site training by SDI includes travel, per diem, labor	1	$2,100.
5	SHIP	Shipping VibeCore-D4 and core tube w/ tool and spares kit to Eureka	1	$ 285.

The VibeCore is usually in stock and able to be shipped within a week of receipt of order. Shipment of options or other purchased items is available in 1 to 30 days from receipt of authorization. The equipment costs are FOB our office. The quotation is valid for 90 days. Purchases are subject to SDI's Limited Manufacturer's Warranty and Liability Limits. SDI maintains comprehensive general liability insurance in 1,000,000 limits with an umbrella policy that increases the limit to 2,000,000.

I trust that this provides you with the information that you require and we look forward to the opportunity to work with you. We anticipate that mutually agreeable terms and conditions will be negotiated. Thank you for considering Specialty Devices, Inc. Please allow us to help by calling us at 972.429.7240 or contact us via email at PDHigley@Specialtydevices.com or rposey@specialtydevices.com. 24/7 support is available at 214 732 8446.

Best Regards,

Paul D. Higley
Specialty Devices, Inc.
972.429.7240 Voice
972.429.7243 Fax

Specialty Devices, Inc

Specialty Devices, Inc. 2905 Capital St., Wylie, Texas 75098 USA
Ph: 972-429-7240 **Fax**: 972-429-7243 www.SpecialtyDevices.com

VibeCore Client References

1,.

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Senior Marine Scientist
Pi Environmental, LLC
O:760.730.5909
C:805.705.5632
www.pienvironmental.com

2.
Johann (Hans) Biberhofer
Sediment Scientist/Scientifique des sédiments
Watershed Hydrology and Ecology Research Division| Division de la recherche hydrologique et écologique sur les bassins hydrologiques
Water Science and Technology Directorate | Direction de la science et de la technologie de l'eau
Science and Technology Branch | Direction générale des sciences et de la technologie
Environment Canada | Environnement Canada
National Water Research Institute | Institut national de recherche sur les eaux
867 Lakeshore Road| 867, chemin Lakeshore

Burlington (Ontario) L7S 1A1

3.

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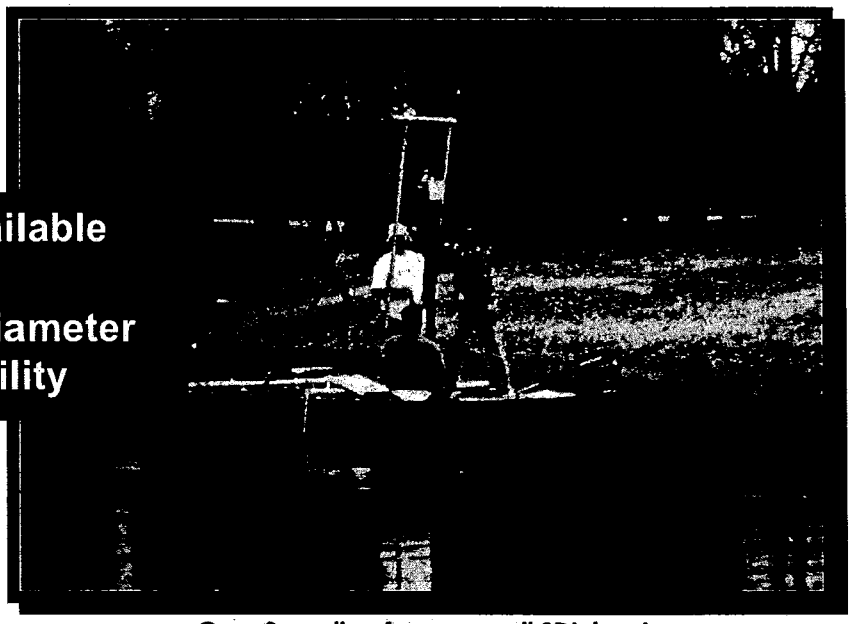
1000 Heritage Center Circle, Suite 141
Round Rock, TX 78664
512-736-6485
www.lrewater.com
Jordan.Furnans@LREWater.com

USW Since 2003
- Very Satisfied, No Issues.
- Used I Water Depth of 100 Ft And Less
- Cave Compliness From 3 To 18 Ft
- Typically Deploy 6 At A Time, Battery Works for All 6 Easily

4.
Chisty Briles, Assistant Professor
University of Colorado, Denver
CHRISTY.BRILES@UCDENVER.EDU

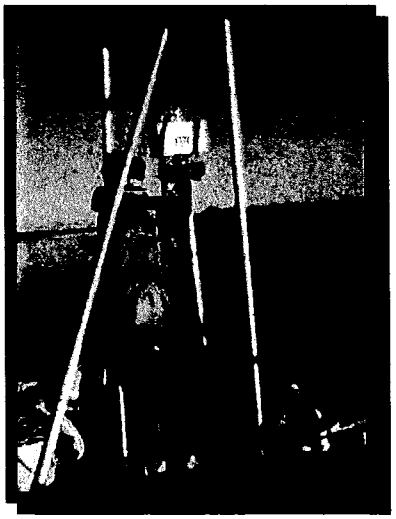
3" VibeCore-D



Core Sampling from a small SDI boat

- High frequency vibration acquires near undisturbed cores
- Ideal sampler for sediment geophysical parameters, contaminants, and trace metals
- Unique near zero "core compression" for accurate true depth of sample recovery
- Options for up to 30 foot long core samples from up to 200 foot water depths.
- Aluminum, Polycarbonate or Acrylic, 2" or 3" and now 4" core tubes, soft liners available.
- Designed for small boat operation. Powered by two 12 volt batteries.
- Core Keepers in Stainless Steel or Aluminum available for very soft or coarse sand sediments.
- Out-performs piston and gravity corers, equal or better the performance of heavier vibracores

Core Sampling in the Canadian Artic



Core sampling in a River Delta

- Integral "floating" top vent and seal helps collect very soft sediment samples
- Unique, power saving "Energy Storage" weight ring design increases effectiveness
- Quick-change and long-life core tube mount makes core tube mounting a simple operation.
- "Float and Weight" VibeCore Guide available for deep water or higher current sites
- Simple, safe low-voltage car battery power, no generator or compressor needed on a small boat.
- Install core catchers as needed. No Core Liner required.

Feature	VibeCore-D
Input Voltage	22-28 VDC
Normal Active Time per core sample	30 sec. to 1 minute typical
Active time per 80 AH Battery	100 minutes
Estimated Cores per battery Charge	> 75 cores
Operating Frequency	6,000 to 7,000 cpm
Working Water Depth (ft.)	100 ft. (400 ft. optional)
Core Head Dimensions (in.)	10¼ Long x 14 Wide x 23 High
Core Tube Materials	Aluminum, Acrylic, Polycarbonate, or Stainless Steel
Core Tube Diameter	2", 3" , 4"
Core tube wall	0.050" to 0.125" (typical)
Air Weight (core head)	77 lbs. (88 lbs. D4)
In-Water Weight Core Head	46 lbs. (57 lbs. D4)
Shipping Weight	120 lbs.
Typical Core Compression	≥ 90% recovery
Operating Temperature	2 to 45 C
Storage Temperature	-20 to 60 C
Supplies available from SDI include ;	Keepers, graduated core pushers, core cutters, core splitters, core caps, tube adapters, sample jars and containers, sampling tools

Core Sampling Made Easy

SDI

Specialty Devices, Inc.

2905 Capital St., Wylie, Texas, USA. 75098
Ph: 972-429-7240 **Fax:** 972-429-7243
PDHigley@SpecialtyDevices.com www.SpecialtyDevices.com

Made in USA

European Representative . AQUIFER CONSULTANCY info@aquiferadvies.nl **Netherlands**

Portable Electrical Vibracore System
Purchase Agreement

THIS AGREEMENT, MADE THIS _____ DAY OF _____ 2016, by and between the Humboldt Bay Harbor, Recreation and Conservation District, hereinafter called the "DISTRICT" and _____ doing business as (an individual), or (a partnership), or (a corporation), hereinafter called "SUPPLIER."

WITNESSETH: That for and in consideration of payments and agreements hereinafter mentioned:

1. SUPPLIER will provide the Portable Electrical Vibracore System described in Exhibit A, which is incorporated by reference as part of this Agreement.

2. SUPPLIER will furnish all of the equipment and other services necessary for the transportation and delivery of the Portable Electrical Vibracore System described in Exhibit A.

3. SUPPLIER will commence the assembly of the Portable Electrical Vibracore System upon notice of award and will complete the transportation and delivery of same on or before 5:00 PM, _____ unless the period for completion is extended otherwise by agreement of the DISTRICT.

4. SUPPLIER agrees to deliver the Portable Electrical Vibracore System described in the Proposal Specifications, (Exhibit A) and comply with terms therein for the sum of $ _____.

5. Payment will be made as defined in EXHIBIT A, SECTION IV.

6. This Agreement shall be binding upon all parties hereto and their respective heirs, executors, administrators, successors, and assigns.

7. SUPPLIER shall at its own cost and expense, procure and maintain a policy of Workers' Compensation or Employer's liability insurance for the protection of its' employees engaged in the work required by this agreement.

8. SUPPLIER shall be responsible for procuring any necessary shipping costs for the delivery and the costs or fees for any transportation permits, and shall be responsible for any sales tax on the components used in the work.

9. SUPPLIER shall be responsible for all costs of shipping property to DISTRICT.

10. SUPPLIER shall correct any defective work subsequently discovered on all incomplete, inaccurate, or defective components and/or parts rendered by SUPPLIER and shall be

remedied by SUPPLIER on demand without cost to DISTRICT for a period of one (1) year on the housing of components and one (1) year on all internal parts commencing on the date of acceptance of Portable Electrical Vibracore System by the DISTRICT.

IN WITNESS WHEREOF, the parties hereto have executed, or caused to be executed by their duly authorized officials, this Agreement in quadruplicate, each of which shall be deemed and original on the date first above written.

Humboldt Bay Harbor, Recreation &
Conservation District

ATTEST:
(Seal)

By_____
Jack Crider
Executive Director

_____
Secretary

_____
SUPPLIER (Seal)

By _____

_____
Address

Reviewed:

_____
District Counsel

EXHIBIT A

PROPOSAL SPECIFICATION
Portable Electrical Vibracore System

SECTION I. SCOPE OF WORK

The successful proposer will supply to Humboldt Bay Harbor, Recreation and Conservation District a new complete Portable Electrical Vibracore System.

Items to be supplied:

1- 115VAC, 1HP, electric vibratory power head, capable of penetrating depositional material in salt or fresh water to a depth of 100 meters, vibratory frequency in the range of 8,000RPM to 10,000RPM,

1- 100 foot submersible 115VAC, 15A single phase, power cable

2- Attachable weights that can be added on to the system for additional penetration

1- Flange incorporating a check valve and having the ability to hold a 4.00" OD core tube of either metal or plastic.

Accessories to be included are:

2- Aluminum metal pipes (core tubes) of length 10' with specifications of 4.00" OD and 0.125" wall thickness.

2- Clear plastic pipes (core tubes) of length 10' with specifications of 4.00" OD and 0.125" wall thickness.

2- Stainless steel core nose that will fit and attach via rivets to the core tubes.

1- Stainless steel sediment core catcher that will fit and attach via rivets to the core tubes.

1- Drill hole jig, for drilling holes to accommodate the drill hole pattern of the core catcher.

A warranty of at least 1 year will be included and cover all major working parts.

SECTION II. LOCATION OF DELIVERY

The **SUPPLIER** will deliver the, Portable Electrical Vibracore System to 601Startare Drive, Eureka, California.

SECTION III. INSURANCE

A. Public Liability

The **SUPPLIER** shall take out and maintain, throughout the period of this contract comprehensive general liability insurance with minimum limits $1,000,000 combined single limit (CSL), or $1,000,000 bodily injury per occurrence and $1,000,000 property damage per occurrence, covering all bodily injury and property damage arising out of its operation under this agreement.

SECTION IV. PAYMENT

Payment for the Portable Electrical Vibracore System specified in these provisions will be made as follows: 50% upon acceptance of proposal and execution of order. 25% upon delivery of the Portable Electrical Vibracore System. Remaining 25% when training is completed.

SECTION V. WARRANTY AND TRAINING

Warranty and Training:

Warranty	One (1) year parts and labor warranty from completion and delivery of the Portable Electrical Vibracore System.
Training	The Harbor District requests a one day training on the set up and operation of the Portable Electrical Vibracore System upon delivery. The training will be held at 601 Startare Drive, Eureka, CA, and the cost will be included in the proposal. Manuals for Harbor District Maintenance staff on the proper use, care, maintenance, and operation of the Portable Electrical Vibracore System will be provided at no extra cost.

EXHIBIT B

PROPOSAL SHEET

Portable Electrical Vibracore System

Proposed Item	**Proposed Amount**
Portable Electrical Vibracore System	_____
Training	_____
Shipping and Handling Costs	_____
Taxes	_____
Total Proposal	_____

REFERENCES: Please include names, addresses, and phone numbers of at least three comparable jobs. Please use additional sheet.

I, _____, representing _____
Name Firm

do hereby certify the above proposal as true and correct.