

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

**DATE:** February 27, 2020

**TIME:** Executive Closed Session 6:00 P.M.  
Regular Session 7:00 P.M.

**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 Closed Session at 6:00 P.M.**

**2. 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.*

**3. Move to Executive Closed Session**

- a) CONFERENCE WITH REAL PROPERTY NEGOTIATORS. Terms of potential purchase of real property with Assessor's Parcel Numbers 002-162-001, 002-161-001, 002-162-018, 014-161- 013, 014-161-014, and 014-161-006, and 014-161-007 in the Eureka, Humboldt County, California pursuant to California Government Code § 54956.8. District negotiators: Larry Oetker, Executive Director and Ryan Plotz, District Counsel. Negotiating party: Ted Loring. Under negotiation: price and payment terms.
- b) CONFERENCE WITH LEGAL COUNSEL--EXISTING LITIGATION. (Paragraph (1) of subdivision (d) of Section 54956.9): Name of case: Humboldt Bay Harbor, Recreation and Conservation District v. Glasshouse Gardens, LLC, Humboldt Superior Court Case No. CV1901283.
- c) CONFERENCE WITH LEGAL COUNSEL—EXISTING LITIGATION. (Paragraph (1) of subdivision (d) of Section 54956.9): Name of case: Humboldt Fisherman's Marketing Association, Inc. et al. v. Humboldt Bay Harbor, Recreation and Conservation District, Court of Appeal, First District, Court Case No. A158634.
- d) CONFERENCE WITH REAL PROPERTY NEGOTIATORS. Terms of potential purchase of real property with Assessor's Parcel Numbers 401-112-021, 401-112-030 on the Samoa Peninsula, Humboldt County, California pursuant to California Government Code § 54956.8. District negotiators: Larry Oetker, Executive Director and Ryan Plotz, District Counsel. Negotiating party: Nick Keeler. Under negotiation: price and payment terms.
- e) CONFERENCE WITH REAL PROPERTY NEGOTIATORS. Terms of potential acquisition and/or lease of real property on the Samoa Peninsula, Humboldt County, with Assessor's Parcel Numbers, 401-031-056 pursuant to California Government Code § 54956.8. District negotiators: Larry Oetker, Executive Director and Ryan Plotz, District Counsel. Negotiating party: Pete Oringer, Timber Heritage Association. Under negotiation: price and payment terms.
- f) CONFERENCE WITH REAL PROPERTY NEGOTIATORS. Terms of potential purchase of real property with Assessor's Parcel Number 401-111-006 on the Samoa Peninsula, Humboldt County, California pursuant to California Government Code § 54956.8. District negotiators: Larry Oetker, Executive Director and Ryan Plotz, District Counsel. Negotiating party: Pete Jackson, Green Diamond Resource Company. Under negotiation: price and payment terms.

## **Agenda for February 27, 2020 Regular Board Meeting**

- g) CONFERENCE WITH LEGAL COUNSEL—ANTICIPATED LITIGATION. Initiation of litigation pursuant to paragraph (4) of subdivision (d) of Section 54956.9: one case (Coast Seafood).

### **4. Call to Order Regular Session at 7:00 P.M. and Roll Call**

### **5. Pledge of Allegiance**

### **6. Report on Executive Closed Session**

### **7. 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.*

### **8. Consent Calendar**

- a) Approve Payment to Zerlang & Zerlang Marine Services for Buoy 9 Emergency Chain Recovery
- b) Receive District Financial Reports for December 2019
- c) Approval of Meeting Minutes for January 23, 2020 Regular Board Meeting
- d) Approval of Invoice from City of Eureka for partial payment of PO #1470, Aerial Photo and LiDAR Acquisition 2019 for the Humboldt Bay Region
- e) Approval of Estimate #1016 from Redwood Electrical Services for Replacement of the Electric Service Panel on Dock "1"

### **9. Communications and Reports**

- a) Executive Director's Report
- b) Staff Reports
- c) District Counsel and District Treasurer Reports
- d) Commissioner and Committee Reports
- e) Others

### **10. Unfinished Business**

#### **a) Report from Humboldt Bay Harbor District's Dredge Subcommittee**

*Recommendation:* Staff recommends the Board: Receive a report from the Humboldt Bay Harbor District Dredging Sub-Committee.

*Summary:* The dredging sub-committee continues to work towards finding solutions to dredging Woodley Island Marina, Fields Landing Boat Yard, Fisherman's Channel and the other District facilities. Recently a letter was sent to the North Coast Regional Water Quality Control Board which provided specific recommended amendments to the Water Quality Control Plan for the North Coast Region to encourage dredge sediment material to be reused for climate change adaptation, habitat restoration projects, and other beneficial uses. The Committee would like to discuss the proposed amendments and other items with the Board.

#### **b) Consider Adopting Resolution No. 2020-04 Amending the Woodley Island Marina Fee Schedule to Increase the Dredge Surcharge Fee**

*Recommendation:* Staff recommends the Board: Adopt Resolution 2020-04

*Summary:* On November 14, 2019, after three meetings the Board established the formation of a Subcommittee comprised of Commissioner's Dale and Doss to work with Woodley Island Marina Tenants to review the

## **Agenda for February 27, 2020 Regular Board Meeting**

proposed dredge surcharge and liveaboard fees. Three meetings of the subcommittee were held with tenants and a consensus of those present was to not increase the liveaboard fees at this time and to implement an increase to the Dredge Surcharge Fee beginning on July 1, 2020.

- c) **(1) Consideration of Adoption of Resolution 2020-03 Which Establishes Findings Relative to the Application by the County of Humboldt for the Pine Hill Road over Swain Slough Bridge Replacement Project.**  
**(2) Consideration of Granting Permit 2020-01 to the County of Humboldt for the Pine Hill Road Bridge Replacement over Swain Slough Bridge Replacement Project.**

*Recommendation:* Staff recommends the Board: (1) Adopt Resolution 2020-03 which establishes finding relative to the application by the County of Humboldt for the Pine Hill Road over Swain Slough Bridge Replacement Project and (2) Grand Permit 2020-01 to the County of Humboldt for the Pine Hill Road over Swain Slough Bridge Replacement Project.

*Summary:* The County of Humboldt applied for a District permit to replace the bridge where Pine Hill Road crosses Swain Slough. The existing bridge is a 63 ft long, 20 ft wide, three span structure with a concrete deck on timber stringers and concreted abutments that was constructed in 1955. A Caltrans inspection in 2011 determined that the bridge is structurally deficient and functionally obsolete.

### **11. New Business**

- a) **Discuss, Review, and Authorize the Executive Director to Execute the Samoa Peninsula Infrastructure Workgroup Agreement.**

*Recommendation:* Staff recommends the Board: Authorize the Executive Director to execute the Agreement.

*Summary:* Staff from the Harbor District, Humboldt County, Humboldt Bay Municipal Water District, Samoa Peninsula Community Services District, City of Eureka, and City of Arcata have been meeting to discuss how we can work together to complete upgrades and maintenance to the public infrastructure on the Samoa Peninsula. Since the infrastructure is owned and managed by several different governmental agencies, there is a need to coordinate our efforts in order to effectively manage and plan for future development opportunities.

- b) **Consideration of Resolution 2020-02, A Resolution Designating Business Matters, Appointment and Authorization for the Humboldt Bay Harbor, Recreation and Conservation District for Calendar Year 2020.**

*Recommendation:* Staff recommends the Board Adopt Resolution 2020-02

*Summary:* Annually the Board approves a Resolution which appoints specific staff and/or consultants, established financial limitations, legal notice designations, meeting schedules, and other business matters of the District.

### **12. Administrative and Emergency Permits**

### **13. Adjournment**

## COMMISSIONERS

1<sup>st</sup> Division

Larry Doss

2<sup>nd</sup> Division

Greg Dale

3<sup>rd</sup> Division

Stephen Kullmann

4<sup>th</sup> Division

Richard Marks

5<sup>th</sup> Division

Patrick Higgins

**Humboldt Bay**  
**Harbor, Recreation and Conservation District**  
 (707) 443-0801  
 P.O. Box 1030  
 Eureka, California 95502-1030



**STAFF REPORT – HARBOR DISTRICT MEETING**  
**February 27, 2020**

**TO:** Honorable Board President and Harbor District Board Members

**FROM:** Larry Oetker, Executive Director

**DATE:** February 18, 2020

**TITLE:** **Approve Payment to Zerlang & Zerlang Marine Services for Buoy 9 Emergency Chain Recovery.**

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**STAFF RECOMMENDATION:** Approve a payment, using Federal Emergency Management funding, to Zerlang & Zerlang Marine Services for their search for and recover the buoy 9 chain that was damaged during a local, State, and federally declared emergency.

**BACKGROUND:** A February 2019 storm resulted in severe shoaling at the Humboldt Bay entrance, particularly in the area of the Buoy No. 9 marker. The shoaling presented an immediate danger to boats, ships and other watercraft. During the storm, Buoy No. 9 broke free, leaving the buoy chain buried in the substrate. In order to remove the life threatening conditions, the US Army Corps of Engineers (USACOE) determined that the shoaling conditions around Buoy No. 9 area required emergency dredging. However, due to Buoy No. 9's dislodged and buried anchor and chain they would not be able to fully remove the hazard.

The US Army Corps of Engineers (USACOE), US Coast Guard, and US Navy Divers were unable to retrieve the chain. The District requested the assistance of Zerlang & Zerlang Marine Services and they dragged the area. After several attempts, an anchor and chain was recovered from the area and the USACOE was able to begin dredging operations in April 2019.

The emergency situation did not allow time for the Harbor District to go through standard procurement procedures for search and recovery of the chain. Hence, in early March 2019, the District procured Zerlang & Zerlang Marine Services to search for and recover the chain. Zerlang & Zerlang Marine Services conducted the work as requested. The total cost for the effort was \$46,693. In December 2019, the Harbor District received federal (Federal Emergency Management Agency (FEMA)) and state (California Office of Emergency Services (CalOES)) funding to pay Zerlang & Zerlang Marine Services for the work provided.

**DISCUSSION:** Funding received from FEMA and CalOES is intended to pay Zerlang & Zerlang Marine Services for their efforts to search for and recover the Buoy 9 chain. There is no cost to the Harbor District for this payment.

**ATTACHMENTS:**

- A. Harbor District letter regarding procurement of Zerlang & Zerlang Marine Services for recovery of the Buoy 9 chain.
- B. Invoice from Zerlang & Zerlang Marine Services to the Harbor District for efforts related to recovery of the Buoy 9 chain.
- C. Notice of obligation of funds from FEMA and CalOES to the Harbor District for efforts related to the recovery of the buoy 9 chain.

COMMISSIONERS

1<sup>st</sup> Division  
Larry Doss  
2<sup>nd</sup> Division  
Greg Dale  
3<sup>rd</sup> Division  
Stephen Kullmann  
4<sup>th</sup> Division  
Richard Marks  
5<sup>th</sup> Division  
Patrick Higgins

**Humboldt Bay**  
**Harbor, Recreation and Conservation District**  
(707) 443-0801  
P.O. Box 1030  
Eureka, California 95502-1030



October 15, 2019

**RE: Procurement for search and recovery of Buoy 9 chain in response to Humboldt Bay emergency shoaling.**

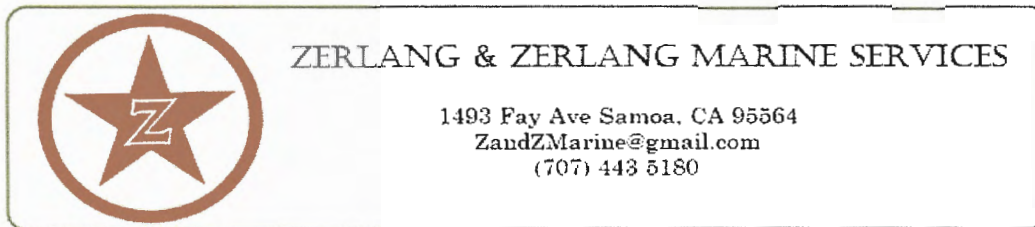
To whom it concerns,

A storm at the end of February 2019 resulted in severe shoaling at the Humboldt Bay entrance, particularly in the area of the Buoy 9 Marker. The shoaling presented an immediate danger to boats, ships and other watercraft. During the storms, Buoy 9 broke free, leaving the buoy chain buried in the substrate. The US Army Corps of Engineers was unable to dredge the area because the dredge equipment could be damaged by the buried chain. The emergency nature of the situation did not allow time for the Harbor District to go through standard procurement procedures for search and recovery of the chain. Hence, in early March, 2019, I contacted Leroy Zerlang with Zerlang & Zerlang Marine Services and requested that they mobilize their resources to search for and recover the chain. I subsequently reported to the Harbor District Board of Commissioners that I had procured the services of Zerlang & Zerlang Marine Services.

Sincerely,

A handwritten signature in black ink, appearing to read "Larry Oetker".

Larry Oetker, Executive Director



Larry Oetker  
601 Startare Drive  
Eureka, CA 95501

09/30/2019

RE: Humboldt Bay Buoy #9 Chain Search

Zerlang & Zerlang Marine Services supplied the support vessel AJAX and MR. "C" STREET for the TECLUTSA and provided lines, anchors, grapples, shore support, weather watch. Coordinated tugs, Coast Guard, divers, USCG dive team, USCG ATON.

04/01/2019	14 hrs x \$90.00—Prep for dragging	\$1,260.00
04/02/2019	11 hrs x \$90.00— Crew Tug AJAX	\$990.00
04/03/2019	7 hrs x \$90.00— Crew Tug AJAX	\$630.00
04/04/2019	9 hrs x \$90.00— Repair grapple	\$810.00
04/11/2019		
04/13/2019	12.25 hrs x \$90.00—Demobilize	<u>\$1,102.50</u>
		\$4,792.50

Zerlang & Zerlang Marine Services did not charge for any equipment used, T/V AJAX, boom truck, or work boat MR. "C" STREET.

Leroy Zerlang has 106 hours on this project at no charge.

HALCYON— rigid hull inflatable tended to divers while in surf and towed magnetometer.

04/03/2019	5 hrs x \$260.00	\$1,300.00
04/04/2019	4 hrs x \$260.00	\$1,040.00
04/11/2019	3 hrs x \$260.00	<u>\$780.00</u>
		\$3,120.00

Alpha Diving Industries

04/03/2019	3 Divers x 5 hrs = 15 hrs x \$130.00	\$1,950.00
04/04/2019	3 Divers x 4 hrs = 12 hrs x \$130.00	\$1,560.00
04/11/2019	2 Divers x 3.5 hrs = 7 hrs x \$130.00	<u>\$910.00</u>
		\$4,420.00

	<p>ZERLANG &amp; ZERLANG MARINE SERVICES</p> <p>1493 Fay Ave Samoa, CA 95564 ZandZMarine@gmail.com (707) 443 5180</p>
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Coos Bay Towboat hourly rate for Tug TECLUTSA is usually \$1,950.00 per hour with a three hour minimum. At this rate, the invoice for TECLUTSA *would be* \$76,050.00 before discount. CBT gave discounted rates for Tug TECLUTSA, five crew, fuel, insurance, etc to assist in getting port re-opened. The following charges are COST ONLY:

04/03/2019	Tug TECLUTSA	11 hrs x \$950.00	\$10,450.00
04/04/2019	Tug TECLUTSA	6 hrs x \$500.00	\$3,000.00
04/11/2019	Tug TECLUTSA	11.5 hrs x \$950.00	\$10,925.00
04/12/2019	Tug TECLUTSA	10.5 hrs x \$950.00	<u>\$9,975.00</u>
			\$34,350.00

  
\_\_\_\_\_  
Leroy Zerlang  
Zerlang & Zerlang Marine Services





**Cal OES**  
GOVERNOR'S OFFICE  
OF EMERGENCY SERVICES

December 6, 2019

Adam Wagschal  
Director of Harbor Operations  
Humboldt Bay Harbor District  
601 Startare Drive  
Eureka, California 95501-0765

Subject: Notification of Obligation  
Public Assistance and CDAA Grant Programs  
FEMA-4434-DR-CA, Cal OES ID: 023-91018

Dear Mr. Wagschal:

**Obligation Notification** The California Governor's Office of Emergency Services has attached the Grant Summary and the Project Application Summary for Federal Package #59, and the Exhibit C for State Supplement #0. Please see the table below for further obligation details.

Obligation Details	Package/Supplement Obligation Amount	Cumulative Amount Obligated
Federal-Public Assistance	\$36,998	\$36,998
State-California Disaster Assistance Act (CDAA)	\$10,175	\$10,175
<b>Total</b>	<b>\$47,173</b>	<b>\$47,173</b>

**Payment Process** For this disaster, funds will be paid in accordance with the following disbursement table:

Project Status	Federal Funds Disbursement Process	State Funds Disbursement Process
Small Projects less than 100% complete	Automatic advance of federal share and administrative allowance	Automatic advance of state share and administrative allowance. Retention held until 100% complete
Small Projects 100% complete	Automatic payment of federal share and administrative allowance	Automatic payment of state share and administrative allowance
Large Projects less than 100% complete	Advance administrative allowance only. All other funds (less retention) will be paid on a reimbursement basis	Advance administrative allowance only. All other funds (less retention) will be paid on a reimbursement basis
Large Projects 100% complete	Automatic payment of federal share and administrative allowance for entire project	Automatic payment of state share and administrative allowance

3650 SCHRIEVER AVENUE • MATHER, CA 95655  
GRANTS PROCESSING UNIT  
(916) 845-8110 • (916) 636-3880 FAX

## HUMBOLDT BAY HARBOR, RECREATION, AND CONSERVATION DISTRICT

Monthly Cash Flow Analysis

For The Months Ended December 31, 2019 and November 30, 2019

	<u>12/31/19</u>	<u>11/30/19</u>
<b><u>Account Balances</u></b>		
Checking	\$ 90,165	\$ 16,080
Savings	13,916	5,524
Tariff	1,227	204
County Treasury	194,314	98,994
Cash on hand	1,280	1,280
<b>Total Cash</b>	<b>300,902</b>	<b>122,082</b>
Add: Accounts Receivable (less doubtful accounts)	502,817	419,814
Less: Accounts Payable	(204,438)	(277,775)
Available Cash and Receivables	<u>\$ 599,281</u>	<u>\$ 264,121</u>
<b><u>Change in Cash Balance</u></b>		
Balance, Beginning of Month	\$ 122,082	\$ 869,594
Monthly Deposits	748,797	129,597
Monthly Payments	(569,977)	(877,109)
Balance, End of Month	<u>\$ 300,902</u>	<u>\$ 122,082</u>
<b><u>Monthly Payments Summary</u></b>		
Significant/Unusual Expenses:		
Dredging payments		\$ 633,000
BBVA bond and loan payment	\$ 234,425	
Prepaid January health insurance	34,058	
Figas Construction piling removal retainer	8,000	
Pacific Affiliates services	11,000	
CSDA annual membership fee	7,077	
Samoa outfall maintenance		54,500
Annual State Water Quality Control Board disposal fee	21,679	
Semi-annual property tax expense	11,505	19,637
Sub-total, Unusual Expenses	<u>327,744</u>	<u>707,137</u>
General operating expenses and other misc. expense	242,233	169,972
Total Cash Payments	<u>\$ 569,977</u>	<u>\$ 877,109</u>
<b><u>Monthly Deposits Summary</u></b>		
Significant/Unusual Revenues:		
Property taxes and interest income	\$ 549,320	
Interest Payment on NMTC note receivable	40,187	
Sub-total, Unusual Revenues	<u>589,507</u>	-
General revenues	159,290	\$ 129,597
Total Cash Receipts	<u>\$ 748,797</u>	<u>\$ 129,597</u>

3:20 PM

## Humboldt Bay Harbor, Recreation & Conservation District Balance Sheet

02/20/20

As of December 31, 2019

Accrual Basis

	Dec 31, 19
<b>ASSETS</b>	
<b>Current Assets</b>	
<b>Checking/Savings</b>	
10901 · RESTRICTED - COUNTY TREASURY	302,090.88
10600.1 · Cash in bank, Tariff BBVA	1,226.58
10700.1 · Cash in bank, Water BBVA	13,915.70
10200.1 · Cash in BBVA, Checking	80,448.08
10000 · PETTY CASH ON HAND	150.00
10100 · CHANGE FUND ON HAND	400.00
10111 · COIN MACHINE FUND	730.00
10200 · CASH IN BANK, CHECKING	9,716.76
10400 · CASH IN COUNTY - FUND 2720	163,911.23
10500 · CASH IN COUNTY - FUND 3872	30,403.20
10902 · RESTRICTED CASH OFFSET	-302,090.88
<b>Total Checking/Savings</b>	300,901.55
<b>Accounts Receivable</b>	
12000 · ACCTS RECEIVABLE	806,640.07
<b>Total Accounts Receivable</b>	806,640.07
<b>Other Current Assets</b>	
12600 · Note Receivable - NMTC	5,849,375.00
12100 · ALLOW FOR BAD DEBTS	-303,888.93
12200 · TAXES RECEIVBLE	-34,033.66
12300 · INTEREST RECEIVBLE	1,673.61
12700 · PREPAID EXPENSES	44,072.60
12800 · LEASE RECEIVABLE	29,420.82
12900 · Accounts Receivable FSM	25.85
<b>Total Other Current Assets</b>	5,586,645.29
<b>Total Current Assets</b>	6,694,186.91
<b>Fixed Assets</b>	
14900 · DOG RANCH PROPERTY	7,507.70
14800 · SHIPWRECK PROPERTY	45,088.05
<b>CAPITAL ASSETS, NET</b>	
16900 · Dredge	1,215,423.27
16800 · REDWOOD TERMINAL 2	2,613,169.43
16700 · AQUAPONICS PILOT FACILITY	96,036.61
16600 · TABLE BLUFF LIGHTHOUSE	361.44
16500 · HOMELAND SECURITY EQUIPMENT	2,254,007.60
16400 · REDWOOD DOCK PROPERTY	3,010,194.30
16100 · MARINA DREDGE, CONSTR IN PROGRES	139,687.95
16000 · KING SALMON	15,143.99
15900 · DREDGING COSTS	215,226.78
15800 · SHELTER COVE	2,386,247.10
15700 · FL BOAT BLDG & REPAIR FACILITY	4,302,259.53
15600 · MARINA	10,529,004.29
15500 · MARINA, RESTAURANT COMPLEX	34,100.00
15200 · OPERATING EQUIPMENT	314,098.74
15100 · OFFICE EQUIPMENT	193,303.88
15000 · AUTOMOTIVE EQUIPMENT	95,639.08
17000 · ACCUMULATED DEPRECIATION	-16,172,019.17
<b>Total CAPITAL ASSETS, NET</b>	11,241,884.82
<b>Total Fixed Assets</b>	11,294,480.57
<b>Other Assets</b>	
19000 · Deferred Outflows of PERS	290,427.00
<b>Total Other Assets</b>	290,427.00
<b>TOTAL ASSETS</b>	<b>18,279,094.48</b>
<b>LIABILITIES &amp; EQUITY</b>	
<b>Liabilities</b>	

## Humboldt Bay Harbor, Recreation &amp; Conservation District

## Balance Sheet

02/20/20

As of December 31, 2019

Accrual Basis

	Dec 31, 19
<b>Current Liabilities</b>	
<b>Accounts Payable</b>	
20000 · ACCOUNTS PAYABLE	207,438.19
<b>Total Accounts Payable</b>	207,438.19
<b>Credit Cards</b>	
20112 · US Bank Visa	509.52
<b>Total Credit Cards</b>	509.52
<b>Other Current Liabilities</b>	
24002 · Groundlease Current Def Income	60,092.31
24000 · Ground Lease Deferred Income	3,906,000.00
<b>Payroll tax &amp; Withholding Liab</b>	
21900 · UNION DUES DEDUCTIBLE	3.00
21701 · PERS DEFERRED COMPENSATION	100.00
21700 · PERS RETIREMENT	17.03
21300 · STATE UNEMPLOYMENT TAX	147.61
2100 · PAYROLL LIABILITIES	-31,543.21
<b>Total Payroll tax &amp; Withholding Liab</b>	-31,275.57
20100 · LEASE PAYABLE TO HBDA	1,476.00
20200 · NOTES PAYABLE	1,352,909.53
20400 · ACCRUED WAGES PAYABLE	15,456.92
20500 · ACCRUED INTEREST	27,800.46
20600 · ACCRUED VACATION PAYABLE	27,863.05
20800 · DEPOSITS ON HAND	
20809 · HAUL OUT DEPOSIT	-1,080.00
20808 · WAIT LIST DEPOSIT	1,900.00
20801 · KEY DEPOSITS ON HAND	12,620.00
20802 · PLUG DEPOSITS ON HAND	920.00
20803 · SLIP DEPOSITS ON HAND	41,966.90
20804 · STORAGE DEPOSITS	3,540.65
20806 · LEASE SECURITY DEPOSIT	41,383.42
20807 · STORAGE DEPOSIT - REDWOOD DOCK	2,750.26
<b>Total 20800 · DEPOSITS ON HAND</b>	104,001.23
22000 · DEFERRED LEASE INCOME	84,442.00
28000 · DEFERRED INCOME	116,290.94
28500 · OTHER DEFERRED CREDITS	196,132.28
<b>Total Other Current Liabilities</b>	5,861,189.15
<b>Total Current Liabilities</b>	6,069,136.86
<b>Long Term Liabilities</b>	
24003 · Groundlease Current Offset	-60,092.31
24001 · Gound Lease Amortization	-229,091.54
27200 · Deferred Inflows of PERS	159,317.00
27000 · Net Pension Liability	921,868.00
25700 · BOND PAYABLE 2014 REFINANCING	2,400,035.12
25800 · BBVA Loan Payable	1,239,274.58
25600 · Note Payable-Coast Seafoods Co.	1,053,809.15
25500 · OPEB Liability	394,887.00
25200 · CONTRACTS PAYABLE	71,558.22
25900 · LESS CURRENT PORTION	-1,352,909.53
<b>Total Long Term Liabilities</b>	4,598,655.69
<b>Total Liabilities</b>	10,667,792.55
<b>Equity</b>	
30500 · INVESTMENT IN FIXED ASSETS	
30505 · Change In Invest Fixed Assets	343,687.22
30500 · INVESTMENT IN FIXED ASSETS - Other	9,134,021.36
<b>Total 30500 · INVESTMENT IN FIXED ASSETS</b>	9,477,708.58

## Humboldt Bay Harbor, Recreation &amp; Conservation District

## Balance Sheet

02/20/20

As of December 31, 2019

Accrual Basis

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	<u>Dec 31, 19</u>
30900 · RESTRICTED FUND BALANCE	302,090.86
31200 · GENERAL FUND BALANCE	
31205 · General Fund Invest Fixed Asset	-343,687.22
31000 · FUND BALANCE - TIDELANDS TRUST	-1,872,303.20
31200 · GENERAL FUND BALANCE - Other	10,414.64
	<hr/>
Total 31200 · GENERAL FUND BALANCE	-2,205,575.78
Net Income	37,078.27
	<hr/>
Total Equity	7,611,301.93
	<hr/>
<b>TOTAL LIABILITIES &amp; EQUITY</b>	<b><u>18,279,094.48</u></b>

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# Humboldt Bay Harbor, Recreation & Conservation District Profit & Loss

02/20/20

Accrual Basis

## July through December 2019

	Jul - Dec 19
<b>Ordinary Income/Expense</b>	
<b>Income</b>	
<b>Dredging Revenue</b>	
41318 · Dredging Surcharge - T	42,428.08
<b>Total Dredging Revenue</b>	42,428.08
<b>Float Replacement Account</b>	
41418 · Float Replacement	27,496.53
<b>Total Float Replacement Account</b>	27,496.53
<b>Harbor Surcharge</b>	
40908 · Harbor Improvement Surcharge-T	52,753.34
<b>Total Harbor Surcharge</b>	52,753.34
<b>Utility Surcharge</b>	
40409 · Utility Surcharge - NT	38,178.16
40418 · Utility Surcharge, Marina Dock	26,175.14
<b>Total Utility Surcharge</b>	64,353.30
<b>Tax Revenue</b>	
43809 · TIMBER YIELD TAX GUAR G/NT	6,000.00
43609 · HOMEOWNERS EXEMPT G/NT	7,002.00
43509 · Property Tax Revenues	555,373.00
<b>Total Tax Revenue</b>	568,375.00
<b>Other Revenue</b>	
45909 · Other Revenue - NT	5,338.41
45908 · Other Revenue - T	583,186.81
<b>Total Other Revenue</b>	588,525.22
<b>Interest Revenue</b>	
43109 · Interest Income - NT	81,378.00
43108 · Interest Income - T	2,103.23
43318 · Interest On Del Accts - T	0.00
<b>Total Interest Revenue</b>	83,481.23
<b>Rent Income</b>	
41108 · Rents, Tidelands Leases - T	203,965.51
40318.1 · Transient Rentals - T	46,029.59
40519 · Equipment Rent - NT	1,122.50
40809 · Yard Rent - NT	23,127.12
41309 · Storage - NT	33,448.30
41409 · Upland Rent - NT	
41409.2 · Redwood Terminal 2 - NMTC	30,046.14
41409 · Upland Rent - NT - Other	309,184.09
<b>Total 41409 · Upland Rent - NT</b>	339,230.23
40218 · Slip Rents - T	195,135.04
<b>Total Rent Income</b>	842,058.29
<b>Fees</b>	
40108 · PERMITS-T	1,100.00
41818 · Late Charges/Interest - T	5,188.94
45608 · Chevron - Ports O&M - T	16,175.00
41819 · Late Charges/Interest - NT	16,374.04
40509 · Travel Lift Fees - T	2,209.00
40609 · Haul Out Fees - T	27,945.50
41308.1 · Poundage - T	5,025.39
<b>Total Fees</b>	74,017.87
<b>Sales</b>	

## Humboldt Bay Harbor, Recreation &amp; Conservation District

## Profit &amp; Loss

02/20/20

July through December 2019

Accrual Basis

	Jul - Dec 19
40109 · Sales, Retail - NT	250.00
40119 · Concession Sales - NT	21,801.65
<b>Total Sales</b>	<b>22,051.65</b>
<b>Donations</b>	
46519 · Donations - Lighthouse	2.40
<b>Total Donations</b>	<b>2.40</b>
<b>Total Income</b>	<b>2,365,542.91</b>
<b>Gross Profit</b>	<b>2,365,542.91</b>
<b>Expense</b>	
66900 · Reconciliation Discrepancies	200.00
57018 · Bank Service Charges	1.35
<b>Personnel Expenses</b>	
<b>Salaries/Wages</b>	
50100 · Salaries & Wages - NT	390,819.59
50108 · Salaries & Wages - T	710.37
Salaries/Wages - Other	0.00
<b>Total Salaries/Wages</b>	<b>391,529.96</b>
<b>Payroll Burden</b>	
6560 · Workers' Comp	17,127.68
50500 · Payroll Benefits, Other - NT	191,417.84
50508 · Payroll Benefits, Other - T	55,659.21
50510 · PAYROLL BENEFITS M/A	8,758.38
<b>Total Payroll Burden</b>	<b>272,963.11</b>
<b>Commissioners Fees</b>	
50200 · Commissioner's Salaries - NT	8,820.00
50210 · COMMISSIONERS SALARIES M/A	3,780.00
<b>Total Commissioners Fees</b>	<b>12,600.00</b>
<b>Total Personnel Expenses</b>	<b>677,093.07</b>
<b>Advertising &amp; Promotion</b>	
51000 · Advertising & Promotion - NT	208.00
51018 · ADVERTISING & PROMOTION M/T	678.38
<b>Total Advertising &amp; Promotion</b>	<b>886.38</b>
<b>Communications</b>	
51400 · Communications - NT	10,155.87
51408 · Communications - T	2,078.97
<b>Total Communications</b>	<b>12,234.84</b>
<b>Conference &amp; Meetings</b>	
51500 · Conferences & Meetings - NT	12,044.29
51508 · Conferences & Meetings - T	1,166.56
<b>Total Conference &amp; Meetings</b>	<b>13,210.85</b>
<b>Dues, Subscriptions &amp; Licences</b>	
51600 · Dues & Subscriptions - NT	28,167.00
51608 · Dues & Subscriptions - T	265.00
<b>Total Dues, Subscriptions &amp; Licences</b>	<b>28,432.00</b>
<b>Elections &amp; Government Fees</b>	
51700 · Elections & Prop Tax Assess-NT	69,154.28
<b>Total Elections &amp; Government Fees</b>	<b>69,154.28</b>
<b>Insurance</b>	
51800 · Insurance - NT	34,754.85

## Humboldt Bay Harbor, Recreation &amp; Conservation District

## Profit &amp; Loss

02/20/20

July through December 2019

Accrual Basis

	Jul - Dec 19
51808 · Insurance - T	5,292.97
<b>Total Insurance</b>	<b>40,047.82</b>
<b>Office Supplies</b>	
52100 · Outside Services - NT	16.13
51900 · Office Supplies - NT	13,324.54
51908 · Office Supplies - T	3,579.86
51918 · OFFICE EXPENSE M/T	235.20
<b>Total Office Supplies</b>	<b>17,155.73</b>
<b>Maintenance Supplies</b>	
52010 · Maintenance Supplies - NT	12,771.16
52008 · Maintenance Supplies - T	108.81
<b>Total Maintenance Supplies</b>	<b>12,879.97</b>
<b>Permits</b>	
51618 · Permits - T	23,079.00
51610 · Permits - NT	250.00
<b>Total Permits</b>	<b>23,329.00</b>
<b>Utilities</b>	
52909 · Utilities - NT	157,363.28
52918 · Utilities - T	19,468.75
53000 · Water, Sewer, & Refuse - NT	104,449.96
53008 · Water, Sewer, & Refuse - T	23,666.60
<b>Total Utilities</b>	<b>304,948.59</b>
<b>Fuel</b>	
50400 · IMPUTED AUTO VALUE G/A	509.60
51208 · Vessel Fuel	2,221.97
51218 · Automotive, Fuel - T	5,522.48
51200 · Automotive, Fuel- NT	5,566.92
<b>Total Fuel</b>	<b>13,820.97</b>
<b>Accounting/Auditing Services</b>	
52500 · Accounting Fees - T	11,313.00
52508 · Accounting Fees - NT	3,771.00
<b>Total Accounting/Auditing Services</b>	<b>15,084.00</b>
<b>Legal Services</b>	
52300 · Legal Fees - NT	8,329.99
52308 · Legal Fees - T	2,880.51
<b>Total Legal Services</b>	<b>11,210.50</b>
<b>Planning Services</b>	
52208 · Planning Fees - T	16,666.00
52200 · Planning Fees - NT	10,957.00
<b>Total Planning Services</b>	<b>27,623.00</b>
<b>Engineering Services</b>	
52400 · Engineering Fees - NT	21,441.44
52408 · Engineering Fees - T	3,846.54
<b>Total Engineering Services</b>	<b>25,287.98</b>
<b>Other Professional/Outside Serv</b>	
52110 · OUTSIDE SERVICES M/A	1,009.52
52109 · Outside Services, Other - NT	2,444.75
52118 · Outside Services, Other - T	66,841.00
<b>Total Other Professional/Outside Serv</b>	<b>70,295.27</b>



## Humboldt Bay Harbor, Recreation &amp; Conservation District

## Profit &amp; Loss

02/20/20

July through December 2019

Accrual Basis

	<u>Jul - Dec 19</u>
<b>Small Tools</b>	
52800 · Small Tools - NT	306.03
52808 · Small Tools - T	475.38
<b>Total Small Tools</b>	<u>781.41</u>
<b>Maintenance - Facilities</b>	
52708 · Repairs & Maint, Facilities - T	79,014.65
52709 · REPAIRS & MAINTENANCE G/NT	551.92
52719 · Repairs & Maint, Facilities - N	13,933.57
<b>Total Maintenance - Facilities</b>	<u>93,500.14</u>
<b>Maintenance - Equipment</b>	
52718 · Repairs & Maint, Equip - T	3,311.42
52710 · Repairs & Maint, Equip - NT	10,104.74
51209 · Automotive, Repairs - NT	6,610.00
<b>Total Maintenance - Equipment</b>	<u>20,026.16</u>
<b>Maintenance - IT</b>	
57008 · Maintenance, IT Equip - T	2,066.82
57009 · Maintenance, IT Equip - NT	3,464.72
<b>Total Maintenance - IT</b>	<u>5,531.54</u>
<b>Dredging Expense</b>	
55608 · Dredging Expense - T	25,853.19
56708 · Dredging - GT	166,500.00
56718 · Dredging - MT	465,330.00
<b>Total Dredging Expense</b>	<u>657,683.19</u>
<b>Rent Expense</b>	
54308 · Redwood Terminal 2 Lease Expns	62,124.50
<b>Total Rent Expense</b>	<u>62,124.50</u>
<b>Interest Expense</b>	
55119 · INTEREST EXPENSE M/NT	19,698.00
55109 · Interest Expense - NT	40,254.23
55108 · Interest Expense - T	56,454.15
<b>Total Interest Expense</b>	<u>116,406.38</u>
<b>Other Expenses</b>	
55419 · Other Expenses - NT	34.47
<b>Total Other Expenses</b>	<u>34.47</u>
<b>Grant Expenses</b>	
<b>Harbor Grant Expenses</b>	
54408.1 · Harbor Grant Exp	210.00
<b>Total Harbor Grant Expenses</b>	<u>210.00</u>
<b>Conservation Grant Expenses</b>	
54408.3 · Conservation Grant Exp	9,271.25
<b>Total Conservation Grant Expenses</b>	<u>9,271.25</u>
<b>Total Grant Expenses</b>	<u>9,481.25</u>
<b>Total Expense</b>	<u>2,328,464.64</u>
<b>Net Ordinary Income</b>	<u>37,078.27</u>
<b>Net Income</b>	<u><u>37,078.27</u></u>

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**Humboldt Bay Harbor, Recreation & Conservation District  
Account QuickReport**

01/28/20

Accrual Basis

As of December 31, 2019

Type	Date	Num	Name	Memo	Amount
<b>10200.1 - Cash in BBVA, Checking</b>					
Liability Check	12/12/2019		QuickBooks Payroll Service	Created by Payroll Service on 12/11/...	-19,613.27
Liability Check	12/23/2019		QuickBooks Payroll Service	Created by Payroll Service on 12/20/...	-1,116.32
Liability Check	12/26/2019		QuickBooks Payroll Service	Created by Payroll Service on 12/24/...	-20,807.63
Check	12/16/2019			Service Charge	-141.21
Liability Check	12/02/2019	EFT	State Disbursement Unit	0230000067964	-233.53
Liability Check	12/10/2019	EFT	PERS Unfunded Accrued Liab	2233447024 Payday 11/29/19	-3,992.74
Liability Check	12/10/2019	EFT	PERS Unfunded Accrued Liab	2233447024 Out of Class Adj for Ric...	-4.69
Bill Pmt -Check	12/13/2019	EFT	CalPERS 457 Program	457Match 12/13/2019	-300.00
Liability Check	12/13/2019	EFT	CalPERS 457 Program	450348	-950.00
Liability Check	12/13/2019	EFT	PERS Unfunded Accrued Liab	2233447024	-4,024.82
Liability Check	12/13/2019	EFT	PERS Unfunded Accrued Liab	2233447024 Rick Juchtzer Out of Cl...	-9.39
Bill Pmt -Check	12/19/2019	EFT	Pacific Gas & Electric (8259-4) address	0074698259-4 Conf# 3539909462231	-6,808.40
Bill Pmt -Check	12/19/2019	EFT	AT&T Phone	707 443-0801 071 7	-545.89
Bill Pmt -Check	12/27/2019	EFT	CalPERS 457 Program	457Match 12/27/2019	-300.00
Liability Check	12/27/2019	EFT	CalPERS 457 Program	450348	-950.00
Liability Check	12/27/2019	EFT	PERS Unfunded Accrued Liab	2233447024	-4,024.82
Bill Pmt -Check	12/27/2019	EFT	PERS Unfunded Accrued Liab	2233447024	-5,033.55
Liability Check	12/27/2019	EFT	State Disbursement Unit	0230000067964	-233.53
Liability Check	12/11/2019	E-pay	Employment Development Department	499-0307-3 Pay Period 11/24 - 12/7/...	-1,286.98
Liability Check	12/11/2019	E-pay	Tri Counties Bank	94-2262845 Pay Period 11/24 - 12/0/...	-3,420.68
Liability Check	12/20/2019	E-pay	Employment Development Department	499-0307-3 QB Tracking # 1414217...	-39.30
Liability Check	12/20/2019	E-pay	Tri Counties Bank	94-2262845 Vacation Buyout QB Tr...	-117.26
Liability Check	12/24/2019	E-pay	Employment Development Department	499-0307-3 QB Tracking # 1561242...	-1,208.77
Liability Check	12/24/2019	E-pay	Tri Counties Bank	94-2262845 Pay Period 12/8-12/21/...	-3,498.80
Bill Pmt -Check	12/16/2019	Wire Xfer	Humboldt Bay Development Association	RMT2 Lease Pymt Q4 2019	-3,000.00
Liability Check	12/13/2019	RE-EFT 1/14	State Disbursement Unit	0230000067964 S. Fuller	-233.53
Bill Pmt -Check	12/04/2019	59753	ACWA JPIA	December 2019	-32,108.85
Bill Pmt -Check	12/04/2019	59754	AT&T Internet	831-000-8571 571	-933.88
Bill Pmt -Check	12/04/2019	59755	Commercial Laundry Repair	Dryer motor and fan repair - WIM	-125.00
Bill Pmt -Check	12/04/2019	59756	David L. Moonie & Company	October 2019	-1,340.00
Bill Pmt -Check	12/04/2019	59757	Englund Marine Supply		-1,031.22
Bill Pmt -Check	12/04/2019	59758	Hensell Materials, Inc.	RMT 2 Sewer Pipe base rock	-81.38
Bill Pmt -Check	12/04/2019	59759	Interstate Battery	RMT 2 Redtank Battery	-27.07
Bill Pmt -Check	12/04/2019	59760	Mendes Supply Company		-452.65
Bill Pmt -Check	12/04/2019	59761	Mr. Rooter Plumbing	Hydro Scrub, PO #1510	-587.06
Bill Pmt -Check	12/04/2019	59762	Nylex.net	Hard Drive for Server	-167.54
Bill Pmt -Check	12/04/2019	59763	Picky Picky Picky Inc.	Scott Fuller PPE	-65.09
Bill Pmt -Check	12/04/2019	59764	Pintermedia LLC		-90.00
Bill Pmt -Check	12/04/2019	59765	Recology Eel River	061097997	-402.17
Bill Pmt -Check	12/04/2019	59766	Recology Humboldt County	A0000265	-651.06
Bill Pmt -Check	12/04/2019	59767	Rogers Machinery Co.	WIM Air Compressor Parts	-122.61
Bill Pmt -Check	12/04/2019	59768	Security Lock & Alarm	RMT 2 Keys	-11.83
Bill Pmt -Check	12/04/2019	59769	Shafer's Ace Hardware	1586	-375.70
Bill Pmt -Check	12/04/2019	59770	Shelter Cove Fishing Preservation Inc	SC Janitorial	-2,083.33
Bill Pmt -Check	12/04/2019	59771	Shelter Cove Resort Improvement District	SC	-133.64
Bill Pmt -Check	12/04/2019	59772	SHN Consulting Engineers & Geologists		-2,770.00
Bill Pmt -Check	12/04/2019	59773	Southwest Answering Service		-157.70
Bill Pmt -Check	12/04/2019	59774	Specialty Traffic Systems		-81.31
Bill Pmt -Check	12/04/2019	59775	Staples Credit Plan	6035 5178 1247 5530	-46.59
Bill Pmt -Check	12/04/2019	59776	Tehama Tire	FLBY Travel Lift Tire Repair - PO # ...	-1,009.70
Bill Pmt -Check	12/04/2019	59777	The Mitchell Law Firm, LLP		-2,677.00
Bill Pmt -Check	12/04/2019	59778	Thrifty Supply	WIM Sewer Meter Rubber Flange	-23.31
Bill Pmt -Check	12/04/2019	59779	Total Compensation Systems, Inc.	GASB75 Valuation Services - 2nd In...	-1,620.00
Bill Pmt -Check	12/04/2019	59780	World Oil Environmental Services	WIM	-65.00
Liability Check	12/11/2019	59782	Employment Development Department	1713957888	-255.00
Check	12/11/2019	59783	Johnson, Greg	Tenant Refund	-101.40
Check	12/11/2019	59784	Nicolini, John	Key Return	-40.00
Check	12/11/2019	59785	Butterworth, Charles	1147 Tenant Refund	-101.32
Check	12/11/2019	59786	Ludwig, Stephen	Tenant Refund	-1,249.60
Check	12/11/2019	59787	Cortopossi, Curt	Tenant Refund	-273.00
Check	12/11/2019	59788	Paschall, Robin	Tenant Refund	-135.00
Bill Pmt -Check	12/12/2019	59789	Recology Humboldt County	A0000265	-1,151.60
Bill Pmt -Check	12/12/2019	59790	Recology Humboldt County	A0000265	-1,046.10
Bill Pmt -Check	12/12/2019	59791	Combined Benefits Administrators	Prefund	-8,000.00
Bill Pmt -Check	12/12/2019	59792	Recology Humboldt County	A0000265	-651.06
Bill Pmt -Check	12/12/2019	59793	City of Eureka	WIM	-14,620.57
Bill Pmt -Check	12/12/2019	59794	Humboldt Community Services District	3165	-428.32
Bill Pmt -Check	12/12/2019	59795	Recology Humboldt County	A0000265	-251.68
Bill Pmt -Check	12/12/2019	59796	Coastal Business Systems, Inc.	WIM Copier Lease 11/20 - 12/20	-268.22
Bill Pmt -Check	12/12/2019	59797	Recology Humboldt County	A0000265	-1,337.87
Bill Pmt -Check	12/12/2019	59798	Recology Humboldt County	A0000265	-1,568.66
Bill Pmt -Check	12/12/2019	59799	Recology Humboldt County	A0000265	-383.57
Bill Pmt -Check	12/12/2019	59800	Recology Humboldt County	A0000265	-33.07
Bill Pmt -Check	12/12/2019	59801	Recology Humboldt County	A0000265	-28.69
Bill Pmt -Check	12/12/2019	59802	Advanced Security Systems		-391.50
Bill Pmt -Check	12/12/2019	59803	B & B Portable Toilets	RWD	-185.74
Bill Pmt -Check	12/12/2019	59804	California Redwood Co.		-1,440.01
Bill Pmt -Check	12/12/2019	59805	Don's Rent-All	7197	-108.50

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## Humboldt Bay Harbor, Recreation & Conservation District Account QuickReport

Accrual Basis

As of December 31, 2019

Type	Date	Num	Name	Memo	Amount
Bill Pmt -Check	12/12/2019	59806	Fortuna Iron	WIM F-Dock Weldments	-385.21
Bill Pmt -Check	12/12/2019	59807	FrancoTyp-Postalia	466106100	-144.78
Bill Pmt -Check	12/12/2019	59808	Hilficker Company	FLBY PO #1508	-476.53
Bill Pmt -Check	12/12/2019	59809	Pierson Building Center		-804.30
Bill Pmt -Check	12/12/2019	59810	Tehama Tire	FLBY Travel Lift Tire Repair - PO # ...	-1,325.25
Bill Pmt -Check	12/12/2019	59811	Times-Standard, Tri-City Weekly	Public Notice: Ordinance No. 15, Am...	-216.75
Bill Pmt -Check	12/12/2019	59812	Tony Gosselin & Sons	Wheel Barrow Tire - RMT II	-26.65
Bill Pmt -Check	12/27/2019	59814	BBVA Compass		-154,070.31
Bill Pmt -Check	12/27/2019	59815	BBVA Compass		-80,355.22
Bill Pmt -Check	12/27/2019	59816	101Netlink	WIM & FL	-380.00
Bill Pmt -Check	12/27/2019	59817	ACWA JPIA	January 2020	-34,058.36
Bill Pmt -Check	12/27/2019	59818	AT&T Internet	831-000-8571 571	-933.88
Bill Pmt -Check	12/27/2019	59819	B & B Portable Toilets	RWD	-182.99
Bill Pmt -Check	12/27/2019	59820	CA Harbor Masters & Port Captains	Association Annual Membership Du...	-300.00
Bill Pmt -Check	12/27/2019	59821	California Special Districts Association	Membership ID: 1253, 2020 CSDA ...	-7,077.00
Bill Pmt -Check	12/27/2019	59822	Coast Seafood Co.	December 2019 Interest and Princip...	-13,000.00
Bill Pmt -Check	12/27/2019	59823	Coldwell Banker Commerical PacificPart...	RMT2 - Rogue Construction	-360.00
Bill Pmt -Check	12/27/2019	59824	David L. Moonie & Company	November 2019	-2,351.00
Bill Pmt -Check	12/27/2019	59825	Eel River Scrap & Salvage	Scrap removal - RMT II	-187.50
Bill Pmt -Check	12/27/2019	59826	Englund Marine Supply	WIM	-30.92
Bill Pmt -Check	12/27/2019	59827	Figas Construction	Piling Removal (Retainer)	-8,800.00
Bill Pmt -Check	12/27/2019	59828	Hensell Materials, Inc.	FC	-1.22
Bill Pmt -Check	12/27/2019	59830	Horvath Plumbing	PO #1512	-372.00
Bill Pmt -Check	12/27/2019	59831	HSU Sponsored Programs Foundation	Ports, Account 000818	-2,307.53
Bill Pmt -Check	12/27/2019	59832	Humboldt Bay Municipal Water Dist.	9002.001 RMT2	-624.90
Bill Pmt -Check	12/27/2019	59833	Humboldt Bay Solar Fund LLC		-17,511.57
Bill Pmt -Check	12/27/2019	59834	Humboldt Community Services District	3165	-377.36
Bill Pmt -Check	12/27/2019	59835	Humboldt County Tax Collector	DEF170001111 401-112-024-000	-11,504.64
Bill Pmt -Check	12/27/2019	59836	ICF Jones & Stokes, Inc.	Professional Services 1/1-2/22/19	-543.75
Bill Pmt -Check	12/27/2019	59837	Mendes Supply Company	2705	-602.97
Bill Pmt -Check	12/27/2019	59838	Mikkelsen, Chris		-108.39
Bill Pmt -Check	12/27/2019	59839	Munnell & Sherrill		-203.67
Bill Pmt -Check	12/27/2019	59840	Napa Auto Parts		-464.47
Bill Pmt -Check	12/27/2019	59841	North Coast Laboratories, LTD		-1,317.00
Bill Pmt -Check	12/27/2019	59842	Nylex.net	Repair Backup	-125.00
Bill Pmt -Check	12/27/2019	59843	Pacific Affiliates		-11,000.00
Bill Pmt -Check	12/27/2019	59844	Pacific Coast Congress	Annual Corporate Membership Dues...	-265.00
Bill Pmt -Check	12/27/2019	59845	Pacific Galvanizing	HUM	-237.20
Bill Pmt -Check	12/27/2019	59846	Pacific Gas & Electric (Non-Energy)	2072047	-372.38
Bill Pmt -Check	12/27/2019	59847	Pintermedia LLC		-60.00
Bill Pmt -Check	12/27/2019	59848	Planwest Partners, Inc.		-9,610.50
Bill Pmt -Check	12/27/2019	59849	Razursharp	HUMBOLBOX	-117.69
Bill Pmt -Check	12/27/2019	59850	Renner Petroleum	14137	-1,189.65
Bill Pmt -Check	12/27/2019	59851	Schmidbauer Building Supply		-94.45
Bill Pmt -Check	12/27/2019	59852	Shafer's Ace Hardware	1586	-87.31
Bill Pmt -Check	12/27/2019	59853	Shelter Cove Resort Improvement District	SC	-253.78
Bill Pmt -Check	12/27/2019	59854	SHN Consulting Engineers & Geologists		-3,463.08
Bill Pmt -Check	12/27/2019	59855	Southwest Answering Service		-187.70
Bill Pmt -Check	12/27/2019	59856	Standard Insurance Company	ST 908447 0001	-189.60
Bill Pmt -Check	12/27/2019	59857	Staples Credit Plan	6035 5178 1247 5530	-95.35
Bill Pmt -Check	12/27/2019	59858	State Water Resource Control Board		-21,679.00
Bill Pmt -Check	12/27/2019	59859	Tehama Tire		-53.12
Bill Pmt -Check	12/27/2019	59860	The Mitchell Law Firm, LLP		-1,944.00
Bill Pmt -Check	12/27/2019	59861	Thrifty Supply	WIM PO #1518	-500.37
Bill Pmt -Check	12/27/2019	59862	Uline	15461937	-223.10
Bill Pmt -Check	12/27/2019	59863	Verizon Wireless		-74.63
Bill Pmt -Check	12/27/2019	59864	Western Chainsaw		-126.36
Bill Pmt -Check	12/27/2019	59865	World Oil Environmental Services		-145.00
Bill Pmt -Check	12/27/2019	59866	Eureka Oxygen Company		-138.02
Bill Pmt -Check	12/27/2019	59867	Pacific Gas & Electric (1906-4)	Acct #0670491906-4	-2,919.27
Bill Pmt -Check	12/27/2019	59868	Specialty Traffic Systems		-2.00
Bill Pmt -Check	12/27/2019	59869	Verizon Wireless		-374.90
Check	12/27/2019	59870	U S Bank Corporate Payment System	4246044555706765	-3,632.11
Total 10200.1 · Cash in BBVA, Checking					-565,752.97
<b>TOTAL</b>					<b>-565,752.97</b>

**DRAFT MINUTES  
MEETING OF THE BOARD OF COMMISSIONERS  
HUMBOLDT BAY HARBOR, RECREATION AND CONSERVATION DISTRICT**

**January 23, 2020**

The Humboldt Bay Harbor, Recreation and Conservation District met in regular session on the above date at 7:00 P.M. Open Session, at the Woodley Island Marina Meeting Room, 601 Startare Drive, Eureka, CA 95501.

**CLOSED SESSION – 6:00 P.M.**

The Commission met in closed session to discuss the following items:

- a) CONFERENCE WITH REAL PROPERTY NEGOTIATORS. Terms of potential acquisition and/or lease of real property on the Samoa Peninsula, Humboldt County, with Assessor's Parcel Numbers, 401-112-021 and 401-112-024 California pursuant to California Government Code § 54956.8. District negotiators: Larry Oetker, Executive Director and Ryan Plotz, District Counsel. Negotiating party: California Marine Investments LLC. Under negotiation: price and payment terms.
- b) CONFERENCE WITH REAL PROPERTY NEGOTIATORS. Terms of potential purchase of real property with Assessor's Parcel Numbers 002-162-001, 002-161-001, 002-162-018, 014-161- 013, 014-161-014, and 014-161-006, and 014-161-007 in the Eureka, Humboldt County, California pursuant to California Government Code § 54956.8. District negotiators: Larry Oetker, Executive Director and Ryan Plotz, District Counsel. Negotiating party: Ted Loring. Under negotiation: price and payment terms.
- c) CONFERENCE WITH LEGAL COUNSEL--ANTICIPATED LITIGATION. Initiation of litigation pursuant to paragraph (4) of subdivision (d) of Section 54956.9: (One case) (Glasshouse Gardens Inc)
- d) CONFERENCE WITH REAL PROPERTY NEGOTIATORS. Terms of potential acquisition and/or lease of real property on the Samoa Peninsula, Humboldt County, with Assessor's Parcel Numbers, 401-031-056 pursuant to California Government Code § 54956.8. District negotiators: Larry Oetker, Executive Director and Ryan Plotz, District Counsel. Negotiating party: Pete Oringer, Timber Heritage Association. Under negotiation: price and payment terms.

**OPEN SESSION – 7:02 P.M.**

**ROLL CALL:**

PRESENT: DOSS  
MARKS  
HIGGINS  
KULLMANN

ABSENT: DALE

QUORUM: YES

**PLEDGE OF ALLEGIANCE**

**ELECTION OF BOARD PRESIDENT, VICE PRESIDENT AND SECRETARY**

- I. Vice Chair Kullmann opened discussion on the item.
- II. The Commission discussed the item.
- III. Vice Chair Kullmann opened the item to public comment. No one commented
- IV. Vice Chair Kullmann moved the discussion back to the Commission.
- V. COMMISSIONER MARKS MOVED TO NOMINATE COMMISSIONER KULLMANN FOR PRESIDENT, COMMISSIONER DOSS FOR VICE PRESIDENT AND COMMISSIONER HIGGINS FOR SECRETARY. COMMISSIONER HIGGINS SECONDED.  
VOICE VOTE WAS CALLED, MOTION CARRIED WITHOUT DISSENT.  
Ayes: DOSS, HIGGINS, KULLMANN, MARKS  
Noes: NONE  
Absent: DALE  
Abstain: NONE

**Draft Minutes for January 23, 2020 Regular Board Meeting**

**REPORT ON EXECUTIVE CLOSED SESSION:** No reportable action.

**PUBLIC COMMENT:** The following individuals addressed the Commission regarding subject matters not on this meeting's agenda: NONE

**CONSENT CALENDAR**

- a) Consideration of Acceptance of Permit Application 2020-01 for Filing
- b) Receive District Financial Reports for September, October and November 2019
- c) Approval of Meeting Minutes for October 24, 2019 Regular Board Meeting
- d) Approval of Meeting Minutes for November 14, 2019 Special Board Meeting
- e) Approval of Meeting Minutes for December 12, 2019 Special Board Meeting
  - I. COMMISSIONER MARKS MOVED TO APPROVE THE CONSENT CALENDAR.
  - II. COMMISSIONER HIGGINS SECONDED.
  - II. Chair Kullmann opened the item to the public comment. No members of the public commented.
  - III. Chair Kullmann moved the discussion back to the Commission.  
VOICE VOTE WAS CALLED, MOTION CARRIED.  
Ayes: DOSS, HIGGINS, KULLMANN, MARKS  
Noes: NONE  
Absent: DALE  
Abstain: NONE

**COMMUNICATIONS AND REPORTS**

- a) Executive Director's Report
  - I. Executive Director presented Executive Director's Report.
- b) Staff Reports
  - I. Staff presented on recent District activities.
- c) District Counsel and District Treasurer Reports
  - I. No report.
- d) Commissioner and Committee Reports
  - I. Commissioners reported on their recent activities.
- e) Others
  - I. No report.

**UNFINISHED BUSINESS - NONE**

**NEW BUSINESS**

- a) **Humboldt Bay Management Plan Billboard Policy Amendment**
  - I. District Staff presented the item.
  - II. The Commission discussed the item.
  - III. Chair Kullmann opened the item to public comment. Geoff Wills, Michele McKeegan, Dave Meserve, Jennifer Kalt and Scott Frazier commented.
  - IV. Chair Kullmann moved the discussion back to the Commission.  
COMMISSIONER MARKS MOVED TO HAVE STAFF PREPARE A BILLBOARD PERMITTING POLICY CLARIFYING THAT THE DISTRICT CANNOT PERMIT THE FOLLOWING ITEMS WITHIN DISTRICT JURISDICTION: CONTRUCT NEW BILLBOARD, EXPAND FOOTPRINT OF EXISTING BILLBOARD, RE-ERECT BILLBOARD THAT HAS COLLAPSED, OR ROUTINE MAINTENANCE OF EXISTING BILLBOARD STRUCTURES.  
COMMISSIONER HIGGINS SECONDED  
VOICE VOTE WAS CALLED, MOTION CARRIED.  
Ayes: HIGGINS, KULLMANN, MARKS  
Noes: DOSS  
Absent: DALE  
Abstain: NONE

**Draft Minutes for January 23, 2020 Regular Board Meeting**

**b) Update on the formation of the Volunteer Boat Captain Program:**

- I. District staff presented the item.
- II. The Commission discussed the item.
- III. Chair Kullmann opened the item to public comment. Alan Bobillot commented.
- IV. Chair Kullmann moved the discussion back to the Commission.
- V. Update item only, no formal action was taken.

**c) Consideration of Resolution 2020-01, A Resolution Declaring that Governing Body and Volunteers Shall Be Deemed Employees of the District for the Purpose of Providing Workers' Compensation Coverage**

- I. District Staff presented the item.
- II. The Commission discussed the item.
- III. Chair Kullmann opened the item to public comment. No one commented.
- IV. Chair Kullmann moved the discussion back to the Commission.  
COMMISSIONER DOSS MOVED TO APPROVE RESOLUTION 2020-01, A RESOLUTION DECLARING THAT GOVERNING BODY AND VOLUNTEERS SHALL BE DEEMED EMPLOYEES OF THE DISTRICT FOR THE PURPOSE OF PROVIDING WORKERS' COMPENSATION COVERAGE.  
COMMISSIONER MARKS SECONDED  
ROLL CALL VOTE WAS CALLED, MOTION CARRIED.  
Ayes: DOSS, HIGGINS, KULLMANN, MARKS  
Noes: NONE  
Absent: DALE  
Abstain: NONE

**ADMINISTRATIVE AND EMERGENCY PERMITS - NONE**

**ADJOURNMENT – 8:20 P.M.**

APPROVED BY:

RECORDED BY:

---

Patrick Higgins  
Secretary of the Board of Commissioners

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Mindy Hiley  
Director of Administrative Services



COMMISSIONERS  
1<sup>st</sup> Division  
Larry Doss  
2<sup>nd</sup> Division  
Greg Dale  
3<sup>rd</sup> Division  
Stephen Kullmann  
4<sup>th</sup> Division  
Richard Marks  
5<sup>th</sup> Division  
Patrick Higgins

Humboldt Bay  
Harbor, Recreation and Conservation District  
(707) 443-0801  
P.O. Box 1030  
Eureka, California 95502-1030

**STAFF REPORT – HARBOR DISTRICT MEETING**  
**February 27, 2020**

**TO:** Honorable Board President and Harbor District Board Members

**FROM:** Larry Oetker, Executive Director

**DATE:** February 21, 2020

**TITLE:** Approval of Invoice from City of Eureka for partial payment of PO #1470, Aerial Photo and LiDAR Acquisition 2019 for the Humboldt Bay Region

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**STAFF RECOMMENDATION:** Staff Recommends that the Board: authorize the expenditure of \$7,000 for LiDAR imagery

**BACKGROUND:** The City of Eureka took the lead in contracting for new LiDAR imagery for the Humboldt Bay region. The Harbor District along with the County of Humboldt, and Humboldt Community Services District cooperating in funding this project which has a total cost of approximately \$143,000.

**DISCUSSION:** The Lidar data will be uploaded onto the Harbor District, City of Eureka and Humboldt County GIS systems. LIDAR, which stands for *Light Detection and Ranging*, is a remote sensing method that uses light in the form of a pulsed laser to measure ranges (variable distances) to the Earth. These light pulses—combined with other data recorded by the airborne system— generate precise, three-dimensional information about the shape of the Earth and its surface characteristics.

**ATTACHMENTS:**

- A. August 29, 2019 letter from City of Eureka requesting payment.



Phone: (707) 441-8855 Email: info@shn-engr.com Web: shn-engr.com  
812 W. Wabash Avenue, Eureka, CA 95501-2138

Reference: 016008.700

August 29, 2019

Larry Oetkar  
Humboldt Bay Harbor, Recreation and Conservation District  
601 Startare Drive  
Eureka, CA 95501

**RECEIVED**

SEP 28 2019

**H.B.H.R. & C.D.**

**Subject: Aerial Photo and LiDAR Acquisition 2019, Request for Payment**

Dear Larry Oetkar:

Thank you for being a partner in the City of Eureka's Aerial Photo and LiDAR Acquisition project. This is an important project and will be valuable to all of us.

Riley Topolewski, Senior Planner for the City of Eureka's Community Development Department has indicated that your portion of this effort amounts to **\$7,000**.

SHN has agreed to help facilitate this project. Please send payment payable to SHN, at 812 West Wabash Avenue, Eureka, California 95501-2138 as soon as possible so that we can keep this project on track. For ease in processing, please reference SHN job #016008.700.

Thank you for your prompt attention to this request. Please call me at (707) 441-8855 if you have any questions.

Sincerely,

SHN

Greg Williston  
Regional Principal

GSW:ims

PAYMENT APPROVED  
By: [Signature]  
Account # 52400-A \$3500  
52408-A \$3500  
Board of Commissioners  
Approval Date: \_\_\_\_\_  
(If required)



\\Eureka\Projects\2016\016008-EurekaOnCall\700-AerialLidar\PUBS\Inv\20190829-PaymentRequestOetkar.docx





COMMISSIONERS

- 1<sup>st</sup> Division  
Larry Doss
- 2<sup>nd</sup> Division  
Greg Dale
- 3<sup>rd</sup> Division  
Stephen Kullmann
- 4<sup>th</sup> Division  
Richard Marks
- 5<sup>th</sup> Division  
Patrick Higgins

**Humboldt Bay**  
**Harbor, Recreation and Conservation District**  
 (707)443-0801  
 P.O. Box 1030  
 Eureka, California 95502-1030



**STAFF REPORT – HARBOR DISTRICT MEETING**  
**February 27, 2020**

**TO:** Honorable Board President and Harbor District Board Members

**FROM:** Chris Mikkelsen, Director of Facilities Maintenance

**DATE:** February 18, 2020

**TITLE:** Approval to proceed with a Proposal from Redwood Electrical Services in the amount of \$4,080.18 for replacement of the electric service panel on Dock “I”.

**STAFF RECOMMENDATION:** Staff recommends the Board accept the proposal from Redwood Electrical for the intended repairs.

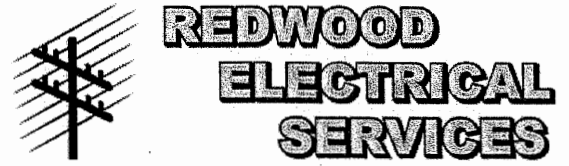
**BACKGROUND:** Electric supply issues at Dock “I” have been occurring at various times; however, no specific cause to date had been determined. Redwood Electrical Services was called and found a burnt distribution wire, a failed breaker, and some permanent damage to the buss. Due in part to the failure and the age of the panel, replacement is now necessary. As Redwood Electrical is both familiar with and has been providing services to the District for many years, their professional credentials and working knowledge of our facility qualifies them for such an assignment.

**ATTACHMENTS:**

- A. Redwood Electrical Services Proposal

**REDWOOD ELECTRICAL SERVICES**

4566 Excelsior Road  
Eureka, CA 95503 US  
707-444-1374  
office@redwoodelectrical.services



**Estimate**

**ADDRESS**

Humboldt Bay Harbor District  
Humboldt Bay Harbor District  
P.O. Box 1030  
Eureka, CA 95502-130  
United States

ESTIMATE

1016

DATE

01/29/2020

**PROJECT:**

Woodley Island Marina

**SUB-PROJECT ID**

Dock I Panel

DATE	ACTIVITY	DESCRIPTION	QTY	RATE	AMOUNT
01/29/2020	Services and Labor	Dock I panel replacement	1	4,080.18	4,080.18
Dock I panel replacement as discussed					
TOTAL					<b>\$4,080.18</b>

Accepted By

Accepted Date

COMMISSIONERS

1<sup>st</sup> Division

Larry Doss

2<sup>nd</sup> Division

Greg Dale

3<sup>rd</sup> Division

Stephen Kullmann

4<sup>th</sup> Division

Richard Marks

5<sup>th</sup> Division

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**STAFF REPORT – HARBOR DISTRICT MEETING**  
**February 27, 2020**

**TO:** Honorable Board President and Harbor District Board Members

**FROM:** Larry Oetker, Executive Director

**DATE:** February 18, 2020

**TITLE:** Report from Humboldt Bay Harbor District’s Dredging Sub-Committee.

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**STAFF RECOMMENDATION:** Receive a report from the Humboldt Bay Harbor District Dredging Sub-Committee.

**BACKGROUND:** The dredging sub-committee continues to work towards finding solutions to dredging Woodley Island Marina, Fields Landing Boat Yard, Fisherman’s Channel and the other District facilities. Recently a letter was sent to the North Coast Regional Water Quality Control Board which provided specific recommended amendments to the Water Quality Control Plan for the North Coast Region to encourage dredge sediment material to be reused for climate change adaptation, habitat restoration projects, and other beneficial uses. The Committee would like to discuss the proposed amendments and other items with the Board.

**ATTACHMENTS:**

- A. January 31, 2020 letter from the Humboldt Bay Harbor District to the North Coast Regional Water Quality Control Board.



COMMISSIONERS

1<sup>st</sup> Division

Larry Doss

2<sup>nd</sup> Division

Greg Dale

3<sup>rd</sup> Division

Stephen Kullmann

4<sup>th</sup> Division

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P.O. Box 1030  
Eureka, California 95502-1030

Mr. Matt St. John, Executive Director  
North Coast Regional Water Quality Control Board  
5550 Skylane Blvd, Suite A  
Santa Rosa, CA 95403

January 31, 2020

**SUBJECT: Recommended Amendments to Water Quality Control Plan for the North Coast Region to Encourage Dredge Sediment Material to be Reused for Climate Change Adaptation and Habitat Restoration Projects.**

Dear Mr. St. John,

As you know, the Humboldt Bay Harbor, Recreation and Conservation District (Harbor District) helps maintain commerce and marine trade, but also holds “Public Trust” responsibility granted by the State of California over certain waters of Humboldt Bay and proactively works with our partners in protecting and restoring the Humboldt Bay ecosystem. We need help from the North Coast Regional Water Quality Control Board (NCRWQCB) so we can dramatically reduce, if not eliminate, the wasteful practice of taking 100,000s of cubic yards tested/clean fine-grain dredged sediment material and millions of cubic yards of sandy material from Humboldt Bay each decade several miles offshore to the Humboldt Open Ocean Disposal Site (HOODS) for disposal. This source of tested/clean sediment is needed around the perimeter of the Humboldt Bay for adaptation to sea level rise, to restore salt marsh systems and ecosystem function, and for beach and dune replenishment.

NCRWQCB and staff have long recognized this problem which was articulated well in the Executive Officer’s Report to the Board in February 2017 titled: Beneficial Reuse of Dredged Material in North Coast Region authored by Gil Falcone. In your report, the NCRWQCB committed to work with partner agencies to find pathways for beneficial reuse projects that would alleviate the accumulation of dredged material and also be protective of water quality. These efforts are greatly appreciated, but have not been as successful as needed in order to timely adapt to climate change.

The Harbor District has identified the following recommended amendments to the Water Quality Control Plan for the North Coast Region that we believe will encourage clean dredge sediment material to be beneficially reused and meet water quality objectives.

1. Amend Section 4.1.8 Action Plan For Low Threat Discharges to include groundwater:

“Low-threat point source discharges may be permitted to surface **and ground** waters and may be exempted from the Basin Plan seasonal and year-round point source discharge prohibition and discharge flow limitation, provided that the following conditions are met:”

2. Amend Section 4.1.8 Action Plan For Low Threat Discharges to clarify:
  - “Dredge ~~spoils~~ **material** dewatering” Change name from “Dredge Spoils” to “Dredge Material” and specifically allow bay/ocean dewatering to occur without lining the dewatering site in areas that have a tidally influenced brackish groundwater layer over a subsurface freshwater layer
3. Amend Table 2-1 Beneficial Uses of Waters of the North Coast Region by designating the beneficial use of the groundwater below the Industrial properties on the Samoa Peninsula Industrial (IND), Industrial Process Supply (PRO), and Aquaculture (AQUA).

Historically, some dredge material was beneficially reused around Humboldt Bay and the material was dewatered in the Harbor District’s 21 acre Samoa Lagoons upland disposal site that has an active Coastal Development Permit that allows up to 65,000 cubic yards of dredge material to be placed onsite. The site was originally permitted and was used since the 1980s. However, in 2010 NCRWQCB halted the continued use of the site due to NCRWQCB staff concerns that some saline groundwater infiltration will occur during the saltwater dewatering back to Humboldt Bay. This occurred even though dredge spoils dewatering is specifically classified as a “Low Threat Discharge”; there are no drinking water wells on the Samoa Peninsula; there is a tidally influenced brackish layer overlying the freshwater; and dredging is required in order to maintain the Navigation (NAV) Beneficial Uses of Humboldt Bay. This action effectively prevented any beneficial reuse of dredge material in Humboldt Bay and all dredge material has been shipped three miles offshore to HOODS.

Over the last two years, the Harbor District has been working cooperatively with NCRWQCB, Coastal Commission, USACOE staff, and our Sediment Reuse Advisory Committee to come up with alternative strategies and in 2019 “small scale” dredge spoils dewatering was approved by all the permitting agencies at the Harbor District’s Fields Landing and Redwood Marine Terminal II properties. This was a huge step forward and we greatly appreciate all the agencies cooperation. However, in order to dewater the 100s of thousands of cubic yards of material that are available and needed to combat sea level rise; restore salt marsh systems and ecosystem function, and for beach and dune replenishment around Humboldt Bay we must approve large scale dewatering projects that do not impact drinking water supplies and already have tidally influenced brackish water overlaying freshwater without requiring acres of plastic lining to be installed every year we use the site.

The Harbor District is implementing a sustainable dredging and sediment management plan, where we remove modest amounts of sediment at regular intervals instead of dredging massive amounts of sediment every ten years. Our plan is to transport tested/clean sediment from the Woodley Island, Eureka Small Boat Basin and other docks and boat ramps around the bay to our centrally located regional sediment management facility on the Samoa Peninsula. We have permitted areas on the peninsula where we could store sediment, but currently we would have to install plastic liners that would cost hundreds of thousands of dollars and create a huge amount of plastic trash. Lining would also create major challenges with regards to rain water management. Also, the Town of Samoa has been ordered by the Coastal Commission to increase the elevation of some of the developable areas

due to climate change and tsunami impact considerations that would give us a place to deposit 100s of thousands of cubic yards of sediment directly to the site if no liner were necessary.

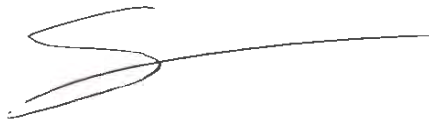
The loss of the pulp mills on the Samoa Peninsula has left the Humboldt Bay Municipal Water District with a surplus of millions of gallons of excess freshwater supply capacity, so all municipal or domestic water needs can be met from this source. There is currently no domestic water use of Samoa Peninsula groundwater, so no one's MUN beneficial uses would be denied. The narrow Samoa Peninsula is comprised of sandy material and is bordered by saltwater on both the Humboldt Bay and Pacific Ocean side and the groundwater underlying it is subject to saltwater intrusion based on tidal fluctuations. With sea level rise, the brackish salt water layer will likely only become more pronounced.

Between sea level rise and crustal deformation, Humboldt Bay is extremely vulnerable to climate change and we need to be able to re-use sediment to rebuild and shore up levees around the bay shore. We also need fill to restore keystone salt marsh ecosystems. While eel grass is thriving in nearly the same foot-print as in 1870, salt marsh has decreased by 95%. Therefore, the Harbor District understands the need for using clean sediment to rebuild areas that have subsided, such as White's Slough in southern Humboldt Bay so that salt marsh can be re-established and to create new living shorelines adjacent to critical shoreline public infrastructure such as the Arcata Wastewater Treatment Plant and Highway 101. Our inability to store sediment on the Samoa Peninsula constrains sediment re-use, which in turn ties our hands in starting climate change response and ecosystem recovery projects.

It is time that we looked at Humboldt Bay sediment not as "dredge spoils" that are undesirable, but as a resource to help us cope with sea level rise and improve ecosystem function. Our objectives and those of the NCRWQCB clearly over-lap as indicated by your Executive Officer's Report to the Board of February 2017. By supporting our work, you will become an essential partner in our quest to improve the health of Humboldt Bay, while maintaining economic vitality and the quality of life for local residents.

We view this as a matter of some urgency at this time, and hope that we can get necessary changes in designations well in advance of the next triennial update of the *Basin Plan* in 2021. If it pleases the Board, our staff could make a presentation at your April 6, 2020 meeting in Eureka. Please call me or Executive Director, Larry Oetker, if you have questions or would like to meet to discuss this further.

Respectfully,

A handwritten signature in black ink, appearing to read 'Stephen Kullmann', with a long horizontal line extending to the right.

Stephen Kullmann  
President, HBHRCD Commission

## COMMISSIONERS

1<sup>st</sup> Division

Larry Doss

2<sup>nd</sup> Division

Greg Dale

3<sup>rd</sup> Division

Stephen Kullmann

4<sup>th</sup> Division

Richard Marks

5<sup>th</sup> Division

Patrick Higgins

**Humboldt Bay**  
**Harbor, Recreation and Conservation District**  
 (707)443-0801  
 P.O. Box 1030  
 Eureka, California 95502-1030



**STAFF REPORT – HARBOR DISTRICT MEETING**  
**February 27, 2020**

**TO:** Honorable Board President and Harbor District Board Members

**FROM:** Larry Oetker, Executive Director

**DATE:** February 18, 2020

**TITLE:** Consider Adopting Resolution 2020-04 Amending the Woodley Island Marina Fee Schedule to Increase the Dredge Surcharge Fee

**STAFF RECOMMENDATION:** Staff recommends that the Board: Adopt Resolution 2020-04 which would adopt a \$0.75 cent per linear foot increase along with an automatic annual CPI increase on all slip fees beginning July 1, 2020.

**BACKGROUND:** On November 14, 2019, after three meetings, the Board established the formation of a subcommittee comprised of Commissioner's Dale and Doss to work with Woodley Island Marina Tenants to review the proposed dredge surcharge and liveaboard fees. At the October 24<sup>th</sup> Board meeting, Staff had recommended a three-year phase in fee increase of 50 cents per linear foot per year for the next three years.

The 75-cent increase would raise the fee from the current 76 cents to \$1.51 starting July 1, 2020. As an example, a 50 foot slip in FY 2020/21 would see their entire slip fee increased by a total of \$37.50 per month over current levels. The proposed fee increase is projected to raise an additional \$100,000 for a total of \$200,000 annual deposit into the segregated and audited Dredge fund.

**DISCUSSION:** Staff would like to thank the participants for their dedication to the community and willingness to dig down into the complicated issues surrounding dredging. Three meetings of the subcommittee were held with tenants and some basic assumptions agreed to which are required to analyze how we are going to pay for consistent dredging.

- We have all permits to dredge WIM using the clamshell method with disposal at HOODS for through 2029.
- Approximately 15,000 CY of material accumulates each year.
- Approximately 100,000 CY of material needs to be removed (backlog).
- Clamshell dredging/disposal costs \$25.50 Cubic Yard + Mobilization costs.
- Removing 20,000 CY costs \$620,000.

- Removing 100,000 CY would cost approximately \$2.5 million plus mobilization costs
- It is extremely unlikely that the District will have \$3 +- million anytime in the near future.
- District currently collects approximately \$800,000 per year in total slip and dredge fees:
  - Slip \$640,000
  - Transient Slips \$ 65,000
  - Current Dredge Surcharge Fee \$100,000
- Goal to raise approximately \$400,000 per year
  - 50% from dredge surcharge fees and
  - 50% from other District revenues.

To meet these objectives a \$0.75 cent per linear foot increase along with an automatic annual CPI increase on all flip fees beginning July 1, 2020 was recommended. The committee also recommended the following:

- Realistic strategy is to allocate funding that allows us to dredge more than accumulates and over time gradually remove “backlog”.
  - Dredge smart and manage marina slips more effectively.
    - Establish goal to increase occupancy rates by 10% thus increasing revenue without raising fees.
    - Promptly remove abandoned and delinquent vessels to make room for paying customers.
  - Have USACOE dredge the Eureka federal channel. Lack of federal maintenance of the channel is significantly impacting sediment accumulation in WIM.
  - Continue to get permits to utilize suction dredge and Samoa Peninsula disposal.
  - Sell existing dredge if we either can’t get permits or determine that it is not the best dredge to meet our dredging needs.
    - Put revenues back in dredge fund

A consensus of those present was to not increase the liveaboard fees at this time.

**ATTACHMENTS:**

- A. Resolution 2020-4 will be available as a supplemental agenda by Monday, February 24th



***HUMBOLDT BAY HARBOR, RECREATION  
AND CONSERVATION DISTRICT***

---

***Resolution 2020-04***

**A RESOLUTION  
AMENDING WOODLEY ISLAND MARINA FEE SCHEDULE  
DREDGE SURCHARGE FEE**

**WHEREAS**, the Humboldt Bay Harbor, Recreation and Conservation District provides a number of services; and

**WHEREAS**, by the authority provided in Appendix II of the California Harbors and Navigation Code, Section 35 and codified in Harbor District Ordinance 4, 9, 14 and 16, the Board of Commissioners may set fees for various Harbor District services; and

**WHEREAS**, the District adopted Standardized fees for Woodley Island Marina through the adoption of Resolution 2019-15 which went into effect on January 1, 2020; and

**WHEREAS**, during the hearing process for the adoption of the standardized fee schedule the Board deferred action on the proposed increases to the Dredge Surcharge fee until after the fee is reviewed by the Dredge Surcharge Fee Subcommittee; and

**WHEREAS**, the Dredge Surcharge Fee Subcommittee met twice with tenants of Woodley Island Marina and a consensus was reached among those present.

**NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COMMISSIONERS OF THE HUMBOLDT BAY HARBOR, RECREATION AND CONSERVATION DISTRICT**, that the Woodley Island Marina fees for services that were adopted through Resolution NO. 2019-15 are hereby amended as follows:

1. The Dredge Surcharge fee shall be increased from \$0.76 to \$1.51 per linear foot effective July 1, 2020.
2. The Slip Rates for Transient and Permanent Tenants and Float Replacement fees shall be increased annually beginning July 1, 2020 by a percentage equal to the percentage change in the Consumer Price Index published by the United States Bureau of Labor Statistics of the United States Department of Labor for the most recent twelve months available thirty (30) days prior to the beginning of the fiscal year using the index entitled U.S. City Average—All Items and Major Group Figures for All Urban Consumers (1982-84=100), or the nearest comparable data on changes in the cost of living if such index is no longer published. Maintenance Dredge Surcharge shall increase annually by the Consumer Price Index listed above beginning July 1, 2021.

**PASSED AND ADOPTED THIS 27<sup>TH</sup> DAY OF February 2020, BY THE FOLLOWING POLLED VOTE:**

**AYES:**

**NOES:**

**ABSENT:**

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**Stephen Kullmann, President  
Board of Commissioners**

**ATTEST:**

---

**Patrick Higgins, Secretary  
Board of Commissioners**

**CERTIFICATE OF SECRETARY**

The undersigned, duly qualified and acting Secretary of the HUMBOLDT BAY HARBOR, RECREATION AND CONSERVATION DISTRICT, does hereby certify that the attached Resolution is a true and correct copy of RESOLUTION NO. 2020-04 entitled,

**A RESOLUTION  
AMENDING WOODLEY ISLAND MARINA FEE SCHEDULE DREDGE  
SURCHARGE FEE**

as regularly adopted at a legally convened meeting of the Board of Commissioners of the HUMBOLDT BAY HARBOR, RECREATION AND CONSERVATION DISTRICT, duly held on the day of 27th day of February 2020; and further, that such Resolution has been fully recorded in the Journal of Proceedings in my office, and is in full force and effect.

IN WITNESS WHEREOF, I have hereunto set my hand this 27th day of February 2020.

\_\_\_\_\_  
Patrick Higgins, Secretary  
Board of Commissioners

## COMMISSIONERS

1<sup>st</sup> Division  
 Larry Doss  
 2<sup>nd</sup> Division  
 Greg Dale  
 3<sup>rd</sup> Division  
 Stephen Kullmann  
 4<sup>th</sup> Division  
 Richard Marks  
 5<sup>th</sup> Division  
 Patrick Higgins

**Humboldt Bay**  
**Harbor, Recreation and Conservation District**  
 (707)443-0801  
 P.O. Box 1030  
 Eureka, California 95502-1030



**STAFF REPORT – HARBOR DISTRICT MEETING**  
**February 27, 2020**

**TO:** Honorable Board President and Harbor District Board Members

**FROM:** Larry Oetker, Executive Director

**DATE:** February 14, 2020

**TITLE:**

1. Consideration of Adoption of Resolution 2020-03 Which Establishes Findings Relative to the Application by the County of Humboldt for the Pine Hill Road over Swain Slough Bridge Replacement Project.
2. Consideration of Granting Permit 2020-01 to the County of Humboldt for the Pine Hill Road over Swain Slough Bridge Replacement Project.

**STAFF RECOMMENDATION:** Staff recommends the Board:

1. Adopt Resolution 2020-03 which establishes findings relative to the application by the County of Humboldt for the Pine Hill Road over Swain Slough Bridge Replacement Project.
2. Grant Permit 2020-01 to the County of Humboldt for the Pine Hill Road over Swain Slough Bridge Replacement Project.

**BACKGROUND:** The County of Humboldt applied for a District permit to replace the bridge where Pine Hill Road crosses Swain Slough. The existing bridge is a 63 ft long, 20 ft wide, three span structure with a concrete deck on timber stringers and concreted abutments that was constructed in 1955. A Caltrans inspection in 2011 determined that the bridge is structurally deficient and functionally obsolete.

The proposed project would replace the existing bridge with a single span, precast concrete I-girder 80 ft long, 30 ft wide bridge. The project also involves (1) widening of the road shoulders at the bridge approaches, and (2) relocation of a water line that is currently attached to the bridge. Directional drilling will be used to place the water line under the slough channel. The project is further described in Harbor District Permit Application 2020-01 (Attachment A).

**DISCUSSION:** The proposed project is required to improve safety at the slough crossing. The new bridge will have a reduced amount of structure in contact with the slough bottom and bay waters thus reducing flood risk and biological impacts at the site. The project minimizes use of structural shoreline protection consistent with Humboldt Bay Management Policy HSM-6. Additionally, the project will avoid, minimize and mitigate impacts to special status plants and wetlands consistent with Humboldt Bay Management Plan Policy CEP-7. Project impacts, avoidance, minimization and mitigation

measures are further described in the project's Natural Environment Study (available at [www.humboldtby.org](http://www.humboldtby.org) or upon request from the District).

The proposed project meets the definition of a California Environmental Quality Act Class 2 Exemption and the County of Humboldt has prepared a Notice of Exemption that has been filed with the County Clerk (Attachment B).

**ATTACHMENTS:**

- A.** District Permit Application 2020-01 for the Pine Hill Road Bridge Replacement Project.
- B.** California Environmental Quality Act Notice of Exemption for the Pine Hill Road Bridge Replacement Project.

**HUMBOLDT BAY HARBOR, RECREATION  
AND CONSERVATION DISTRICT**

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**RESOLUTION NO. 2020-03**

**A RESOLUTION ESTABLISHING FINDINGS RELATIVE TO THE PERMIT  
APPLICATION BY THE COUNTY OF HUMBOLDT FOR THE PINE HILL  
ROAD BRIDGE REPLACEMENT PROJECT, HUMBOLDT BAY,  
CALIFORNIA**

**WHEREAS**, the Board of Commissioners of the Humboldt Bay Harbor, Recreation and Conservation District is empowered by Appendix II of the Harbors and Navigation Code, and its own ordinances and resolutions, to grant permits, leases, rights, and privileges; and

**WHEREAS**, no permits, rights, leases, and privileges may be granted without first having considered certain potential impacts and without first having made findings relative to said impacts; and

**WHEREAS**, the Board of Commissioners of the Humboldt Bay Harbor, Recreation and Conservation District has been presented with certain evidence relating to the Pine Hill Road Bridge Replacement Project proposed by the County of Humboldt upon the air, land, environment, and ecology of the land under the jurisdiction of the Humboldt Bay Harbor, Recreation, and Conservation District.

**NOW, THEREFORE, BE IT RESOLVED** by the Board of Commissioners of the Humboldt Bay Harbor, Recreation and Conservation District as follows:

The Board of Commissioners of the Humboldt Bay Harbor, Recreation and Conservation District has found the following to be true and adopts the following findings with respect to the proposed use contemplated by the County of Humboldt in Application 2020-01 and supplements and amendments thereto:

1. The use proposed by the County of Humboldt is necessary to promote the safety, health, comfort, and convenience of the public; and
2. The project complies with the California Environmental Quality Act (CEQA) in that it fits the definition of a CEQA Class 2 Categorical Exemption; and
3. The proposed use is consistent with the Humboldt Bay Management Plan; with special relevance to policies CAE-2, CAE-3, CAS-4 and CEP-1, CEP-7; and
4. The proposed use is required by the public convenience and necessity; and
5. The proposed use is reasonably required to promote growth, and to meet area demands, and does not adversely affect the environment or ecology of the area to any substantial degree; and

6. The proposed use will not produce an unreasonable burden on the natural resources and aesthetics of the area, on the public health and safety, and air and water quality in the vicinity of Humboldt Bay, or on the parks, recreation and scenic area, historic sites and buildings, or archeological sites in the area.

**PASSED AND ADOPTED** by the Board of Commissioners of the Humboldt Bay Harbor, Recreation and Conservation District at a duly called meeting held on the 27th day of February 2020, by the following polled vote:

**AYES:**

**NOES:**

**ABSENT:**

**RECUSED:**

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**Stephen Kullmann, President  
Board of Commissioners**

**ATTEST:**

---

**Patrick Higgins, Secretary  
Board of Commissioners**

**CERTIFICATE OF SECRETARY**

The undersigned, duly qualified and acting Secretary of the HUMBOLDT BAY HARBOR, RECREATION AND CONSERVATION DISTRICT, does hereby certify that the attached Resolution is a true and correct copy of RESOLUTION NO. 2015-08 entitled,

**A RESOLUTION ESTABLISHING FINDINGS RELATIVE TO THE PERMIT APPLICATION BY THE HUMBOLDT BAY NATIONAL WILDLIFE REFUGE FOR THE WHITE SLOUGH TIDAL RESTORATION PROJECT, HUMBOLDT BAY, CALIFORNIA**

as regularly adopted at a legally convened meeting of the Board of Commissioners of the HUMBOLDT BAY HARBOR, RECREATION AND CONSERVATION DISTRICT, duly held on the 27th day of February 2020; and further, that such Resolution has been fully recorded in the Journal of Proceedings in my office, and is in full force and effect.

IN WITNESS WHEREOF, I have hereunto set my hand this 27<sup>th</sup> day of February 2020.

---

**PATRICK HIGGINS**, Secretary  
Board of Commissioners



**HUMBOLDT BAY HARBOR, RECREATION  
AND CONSERVATION DISTRICT**

**PERMIT**

**Permit No. 2020-01**

**601 Startare Drive  
Woodley Island Marina  
P O Box 1030  
Eureka, CA 95502-1030**

**Permittee:**

**Humboldt County Public Works  
Attn: Andrew Bundschuh  
1106 2<sup>nd</sup> Street  
Eureka, CA 95501  
(707) 733-5406**

The Board of Commissioners of the **Humboldt Bay Harbor, Recreation and Conservation District** hereinafter referred to as “**District**”, having considered the Application herein, number 2020-01, received by the **District** on January 3, 2020, and the **County of Humboldt**, hereinafter referred to as “**Permittee**”, and the **Permittee** as the lead agency, pursuant to the California Environmental Quality Act of 1970, as amended, establishing findings relative to the Application by **Permittee** for replacement of the Pine Hill Road Bridge provided for in this Permit, the **Permittee** is hereby authorized to perform the work of improvement, as more particularly described in the Application filed with the **District**.

You are hereby authorized to conduct that activity described in the Permit Application of **Permittee** consisting of:

Replacement of Pine Hill Road Bridge.

That the location of the proposed activity shall be Pine Hill Road where it crosses Swain Slough at APN # 302-181-008, Humboldt County, California,

**SUBJECT TO THE FOLLOWING TERMS AND CONDITIONS:**

1. If the **Permittee** materially changes the plan and scope of the activity, it will be necessary to submit a new application and request a revision of the permit.

2. That there shall be no unreasonable interference with navigation by the work herein authorized.
3. That no attempt shall be made by the **Permittee** to interfere or forbid the full and free use by the public of all navigable waters at or adjacent to the work.
4. That the Board of Commissioners of the **District** may revoke this Permit at any time upon a finding by the **District** of a violation by the **Permittee** of any condition of this Permit.
5. That the minimization, mitigation and conservation measures described in the Project's Natural Environment Study dated October 2019 will be followed. The conservation measures include:
  - A. Prevention of fish barotrauma.
  - B. Fish rescue and exclusion / in-water avoidance.
  - C. Erosion and sedimentation control.
  - D. Prevention of accidental spills.
  - E. Replacement of lost riparian habitat.
  - F. Prevention of spread of invasive species.
  - G. Air quality / dust control.
  - H. Protection for nesting migratory birds.
6. That all work authorized by this Permit shall further be subject to the approval of the following public agencies:
  - A. U.S. Army Corps of Engineers
  - B. California Department of Fish and Wildlife
  - C. North Coast Regional Water Quality Control Board
  - D. California Coastal Commissionand **Permittee** shall fully comply with all regulations and conditions affecting such work as imposed by the above agencies.
7. That the **Permittee** shall comply with any regulations, condition, or instructions affecting the work hereby authorized if and when issued by the Federal Water Pollution Control Administration and/or the State of California Water Resources Control Agency having jurisdiction to abate or prevent water pollution. Such regulations, conditions, or instruction in effect or prescribed by Federal or State Agencies are hereby made a condition of this Permit.
8. That neither the **District**, nor its Board of Commissioners, nor any officer of the **District** shall be liable to any extent for the injury or damage to any person or property or for the work authorized by this Permit, and the **Permittee** shall indemnify and hold harmless the **District**, its Commissioners and officers free and harmless from any liability for any such injury, death or damage.

9. That the **District**, its Commissioners, or any officer or employee of the **District** shall in no case be liable for any damages or injury of the work herein authorized which may be caused by or result from future operations undertaken by the **District** for the conservation or improvement of navigation, or for other purposes, and no claim or right to compensation shall accrue from any such damage.
10. That as a condition to the issuance of this Permit, **Permittee** agrees to indemnify and hold harmless **District** from and against any and all liability, loss, or damage **District** may suffer from claims and demands for attorneys' 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 Permit, including, but not limited to attorneys' fees, costs of suit, and costs of administrative records pursuant to the California Code of Civil Procedure §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, costs of suit, and costs of administrative records in connection with the subject matter of this Permit.
11. That this Permit is valid as of the 28<sup>th</sup> day of February 2020 and is made subject to the **Permittee** approving and agreeing to the conditions above set forth and executing said approval as hereinafter provided.

EXECUTED on this 27<sup>th</sup> day of February 2020, by authority of the Board of Commissioners of the **Humboldt Bay Harbor, Recreation and Conservation District**.

---

**Stephen Kullmann, President  
Board of Commissioners  
Humboldt Bay Harbor, Recreation and  
Conservation District**

**County of Humboldt, Permittee**, in the above Permit, hereby accepts and agrees to all of the conditions hereinabove set forth. **Permittee** shall indemnify and hold harmless the **District**, its Board of Commissioners, officers and employees from any and all claims of any nature arising from the performance of and work of

improvement contained in the Application for injury, death or damage to any person or property.

**County of Humboldt, Permittee**, in the above Permit, agrees to indemnify and hold harmless **District**, its Board of Commissioners, officers and employees from and against any and all liability, loss or damage **District** may suffer from claims and demands from attorneys' 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 Permit including, but not limited to, attorneys' fees, costs of suit and costs of administrative records pursuant to the California Code of Civil Procedure §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, costs of suit and costs of administrative records in connection with the subject matter of this Permit.

Dated: \_\_\_\_\_

\_\_\_\_\_  
Andrew Bundschuh  
Environmental Permitting  
and Compliance Manager  
County of Humboldt



# HUMBOLDT BAY HARBOR, RECREATION AND CONSERVATION DISTRICT



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

## PERMIT APPLICATION

Date Filed \_\_\_\_\_

General Information	For District Use
1.) Name, Address, phone # and email of Developer, Project Sponsor and Legal Owner	A. Application No. _____  Application Type: Franchise <input type="checkbox"/> Permit <input type="checkbox"/> Lease <input type="checkbox"/>
2.) Address of Project and Assessor's block, lot and Parcel Number	B. Date Received by Harbor District
3.) Contact person Name, Address, phone #	C. Date Accepted for filing by Commission
	D. Date of Public Notice
	E. Date of Environmental Compliance
	F. Date of Public Notice
4.) Attach list of names and addresses of all adjoining property owners	G. Date of Public Hearings
5.) List and describe any other related Project Permits & Other Public Approvals required, including those required by City, Regional, State & Federal Agencies.	H. Date of Commission Action  Approval: _____ Conditional _____ Disapproval _____
6.) Existing City/County Zoning	I. Expiration Date
7.) Proposed Site Use (Project Title)	Comments

Describe proposed project

**PRE-PROJECT EELGRASS CHECKLIST**

Please complete the Eelgrass Pre-project Checklist below. Note that the checklist questions relate to the Area of Potential Effect (APE) associated with your project, which incorporates a surrounding buffer inclusive of the limits of potential construction and/or maintenance-related activities that could affect eelgrass habitat. Provide a copy of the completed questionnaire along with your permit application and a map depicting the proposed project location, potential eelgrass depth range -10 to +4 feet, and benchmark eelgrass distribution in the vicinity of the proposed project. Maps should be of an appropriate scale to clearly depict the preliminary/proposed APE boundary in relation to both existing and potential eelgrass resources as provided in the Humboldt Bay Eelgrass Comprehensive Management Plan and associated webpage ([humboltdbay.org/eelgrass-management-plan](http://humboltdbay.org/eelgrass-management-plan)). Here you'll find information and links including [eelgrass information for permit applicants](#), [a baseline eelgrass distribution map](#), and the [Humboldt Bay Eelgrass Comprehensive Management Plan](#). Contact the Harbor District office with questions (443-0801).

***For New Projects:***

		YES	NO
a)	Is the project located within 100 feet of previously mapped (known) eelgrass habitat?		
b)	Will any construction or new operational traffic occur within the vicinity of existing eelgrass?		
c)	Is any portion of the project located in an area with depths ranging from -10 to +4 feet?		
d)	Does the project result in new cover, shading or other form of light reduction of open water areas ranging in depth from -10 to +4 feet?		
e)	Is the project anticipated to affect wind or tidal circulation patterns within the bay?		
f)	Could the project affect ambient water temperature or clarity or result in new effluent (including stormwater) discharge point?		
g)	Does the project result in any placement of fill, including shoreline armor?		
h)	Is the project anticipated to lead to an increase in boat traffic that could affect nearby eelgrass habitat through grounding, prop scarring, wake, or shading impacts?		

***For Maintenance/Repair Projects and Construction Activities:***

		YES	NO
i)	Is project construction likely to increase turbidity? To what extent and for what duration?		
j)	Will construction require the use of a barge or other vessel that may temporarily impact the bay floor (e.g. spud poles, anchoring, prop scarring, etc.) within known eelgrass habitat or within depths ranging from -10 to +4 feet?		
k)	Will construction require the use of turbidity curtains in proximity to eelgrass habitat?		
l)	Will project construction result in temporary shading from moored/anchored working vessel(s)?		

If you responded yes to any of the questions above, your project may have the potential to affect eelgrass habitat and you'll need to conduct a preliminary eelgrass survey. Please refer to the District's [Eelgrass Management Plan webpage](#) for further guidance and a list of local agency contacts should you have additional questions.

Answer all questions completely on a separate page. If the question does not apply to your project, so indicate by marking N.A. Contact Harbor District Office with questions.

### PROJECT DESCRIPTION

8. Site Size
9. Square Footage
10. Number of floors of construction
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.
17. If commercial, indicate the type, whether neighborhood, city or regionally oriented, square footage of sales area, and loading facilities
18. If industrial, indicate type, estimated per shift employment & loading facilities.
19. If institutional, indicate the major function, estimated per shift employment, occupancy, loading facilities, and community benefits derived from the project.
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.

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.
25. Change in dust, ash, smoke, fumes or odors in vicinity.
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.



- 29. Use of disposal or potentially hazardous materials, such as toxic substances, flammable or explosives.
- 30. Substantial change in municipal services demand (police, fire, water, sewage, etc.)
- 31. Substantially increase fossil fuel consumption (electricity, oil, natural gas, etc.).
- 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. 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. Photos accepted.

----- Questions 35; and 36 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 project cost.
  - B. How will the project be financed?
- 38. Describe fully directions necessary to arrive at project site.
- 39. The Applicant agrees to as a condition of the permit being issued, 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

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**NOTE**

The District hereby advises the Applicant that, under California Public Resources Code (PRC) Section 21089, the District when a lead agency under the California Environmental Quality Act (CEQA) of 1970, as amended, pertaining to an Environmental Impact Report (EIR) or a Negative Declaration (MND/ND) may charge and collect from the Applicant a reasonable fee in order to recover the estimated costs incurred by the District in preparing an EIR or MND/ND for the project and the procedures necessary for PRC compliance on the Applicants project.

In the event your project contains an analysis of issues pertaining to CEQA, for which District staff is not competent to independently review, or District requires the same in preparation of an EIR or MND/ND for the project, the District may retain a reviewing consultant to evaluate the content of the Administrative-Draft EIR and Final EIR or MND/ND with respect to these issues. The cost of such reviewing consultant services shall be borne by the Applicant.

**CERTIFICATION:** I hereby certify that the statements furnished above and in the attached exhibits present the 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. And I agree to indemnify the District as described in part 39 of this application.

Dated: \_\_\_\_\_

\_\_\_\_\_

For \_\_\_\_\_



# COUNTY OF HUMBOLDT

DEPARTMENT OF PUBLIC WORKS  
ENVIRONMENTAL SERVICES DIVISION

1106 SECOND STREET  
EUREKA, CA 95501-0579  
707.445.7741 / FAX 445.7409

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## Answers to Questions for Harbor District Permit

**Project Name:** Pine Hill Road at Swain Slough Bridge Replacement Project  
**Applicant:** Humboldt County Department of Public Works  
**Date:** January 2, 2020

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### Question No.

1. Humboldt County Public Works  
1106 2nd Street  
Eureka, CA 95501  
(707) 445-7741
2. The bridge project on Pine Hill Road runs through APN # 302-181-008
3. Andrew Bundschuh  
Environmental Permitting and Compliance Manager  
1106 2nd Street  
Eureka, CA 95501  
707-445-7741  
[abundschuh@co.humboldt.ca.us](mailto:abundschuh@co.humboldt.ca.us)
4. List of names and addresses of all adjoining property owners:  
APN 302-181-008; Robert Prior (TR), PO Box 23, Eureka, CA 95502  
APN 302-151-019; Andrew Chamberlain, 1701 Obispo Ave, Long Beach, CA 90804  
APN 302-151-020; Lou and Elizabeth Jacobson, 979 Pine Hill Road, Eureka, CA 95503  
APN 302-161-003; Northcoast Regional Land Trust, PO Box 398, Bayside, CA 95524
5. Other Permits:  
NMFS/USFWS - Biological Opinions  
CDFW - 1602 Permit  
RWQCB - 401 Certification  
Army Corps - 404 Nationwide Permit
6. Bridge project is on existing county/public roadway. County right-of-way.

7. Pine Hill Road Bridge over Swain Slough - Bridge Replacement Project
8. Site Size: The area of impact includes the roadway, the bridge and a small portion of the adjoining property for wetland/seasonal ditch re/creation. The county plans to improve 400 feet of roadway on each side of the bridge as well as replace the bridge. Dimensions would be roughly 1000 feet long by 50 feet wide. Please see attached maps depicting the total area of the project including right-of-way and temporary construction easement needs. Estimated area of project is 50,000 sq. ft.
9. As explained above, the estimated size is roughly 1000 feet long by 50 feet wide for a total area of ~50,000 sf. However, much of the work will occur in the roadway and not extend out into Swain Slough or Martin Slough. Therefore, the above area is over-exaggerated.
10. N/A
11. N/A
12. Attached
13. A construction schedule will not be known until the contract is awarded. However, the plan is to have HCSD replace the water line in April/May of 2020 and then construction activities related to the bridge replacement will occur in May/June and be completed by November 2020.
14. Replacement of the bridge will require HCSD to relocate a water line that is currently attached to the bridge. HCSD is planning on directional drilling the new water line underneath the slough channel with the entrance and exit points along the roadway. See attached plans.
15. N/A
16. N/A
17. N/A
18. N/A
19. N/A
20. N/A

**Yes/No Questions**

21. No
22. No; the bridge replacement project will not have a change in scenic views from existing properties, lands or roads. The bridge will be slightly wider and longer than the existing bridge, but this is being done to bring it to standards.
23. No
24. No; There will be wastes/debris disposal from the project, but all wastes will be disposed of in an approved upland facility.
25. No
26. Yes; the longer bridge will have a benefit to Swain Slough by widening the channel and thus reducing tidal flooding. The project will also remove existing concrete bridge columns and debris from the channel. The project will also replace two storm drain culverts that will help in existing drainage of stormwater runoff.
27.
  - a. During construction there will a period of time with changes in noise levels. During the demolition of the old bridge, use of heavy equipment, and pile driving activities associated with the new piles for the abutments.

- b. Once the new bridge is in place, there will be no increases in use or noise.
- 28. No
- 29. No
- 30. No; as stated earlier, HCSD will be replacing the existing water line with a larger water line using directional drilling. There will be a short period of lapse of service, but the end result will be a larger water line with better service.
- 31. No
- 32. No

**Environmental Setting**

- 33. This bridge replacement project is being funded through FHWA Highway Bridge Program and administered through Caltrans Local Assistance. Complete compliance with NEPA and CEQA were done, including studies and reports relating to cultural resources, sensitive plants and animals, etc. The project was determined to have no significant impact on resources and/or the environment. There will be no significant change in the project site from pre- to post-construction. Pine Hill Road bisects agricultural lands and Due to the need to widen the approaches and new bridge, the county has acquired a small strip of property on each side (north/south) of the project in order to recreate roadside ditches. The new ditches will be wider and will help with the overall drainage of the area.
- 34. As mentioned above, the surrounding land is mostly agricultural/grazing lands. There are a few residential properties on the east side of the bridge. The best way to get an idea of this rural area is via Google Earth and/or County WebGIS. Lat: 40.752553°, -124.182592°.
- 35. The existing bridge is structurally deficient and does not meet current standards. Replacing the bridge with one that is wider and to current standards will promote public safety as well as provide pedestrians a safe route across the bridge.
- 36. The requested permit is required as State Lands has deferred jurisdiction to the Harbor District.
- 37.
  - a. The estimated construction costs of the bridge replacement project is 2.4 million dollars.
  - b. The bridge is 100% funded through federal highway's (FHWA) Highway Bridge Program (HBP). This bridge has been programmed for replacement since 2012.
- 38. The bridge site is located on Pine Hill Road at Post Mile 0.20. It is accessed off of Elk River Road just south of Herrick Ave.
- 39. Agreed.
  - a. The County of Humboldt is the lead agency for CEQA and a Notice of Exemption was posted with the county clerk's office in 2016.



BAR IS ONE INCH ON ORIGINAL DRAWING  
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

ROAD NAME: PINE HILL ROAD	MILE POST: 0.19
ROAD NO.: 3J430	EA NO.:
PROJECT NO.: BRLO-5904(112)	PPNO.:
CONTRACT NO.: 594020	DRAWING FILE NAME: S:\Client\Humboldt\007-300 Pine Hill\CAD\Roadway\007300R\Map.dgn
PLOT DATE: 552212005	REVISION DATE: 5-21-2015

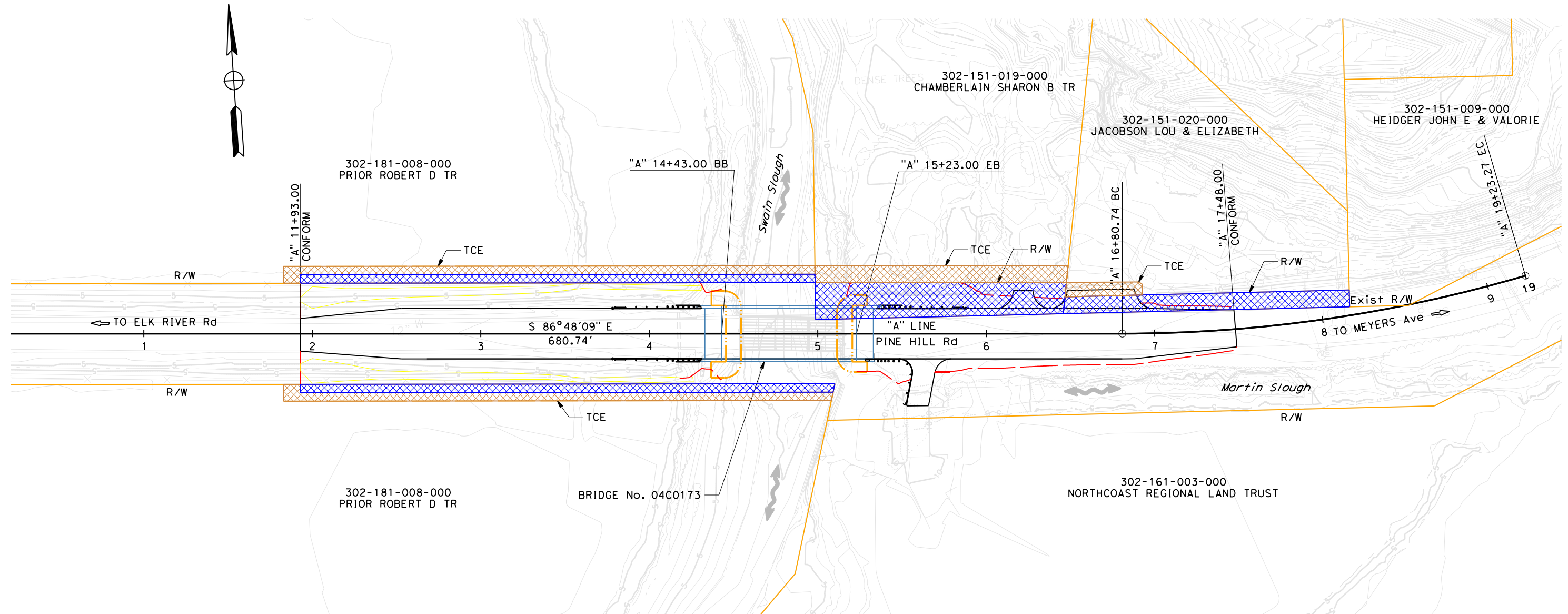
DESIGNED BY: KP
DRAWN BY: KP
REVIEWED BY: JJ
APPROVED BY:

COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS
PINE HILL ROAD BRIDGE OVER SWAIN SLOUGH
RIGHT OF WAY NEEDS

SHEET 1 OF 1

**LEGEND:**

- TEMPORARY CONSTRUCTION EASEMENT
- PERMANENT ROADWAY EASEMENT



APN	OWNER	TOTAL PARCEL SF	PERMANENT ROADWAY EASEMENT SF	TEMPORARY CONSTRUCTION EASEMENT SF	REMAINDER SF
302-181-008-000	PRIOR ROBERT D TR	914,760	3,110	3,310	911,650
302-151-019-000	CHAMBERLAIN SHARON B TR	110,642	2,995	1,500	107,647
302-151-020-000	JACOBSON LOU & ELIZABETH	20,909	1,695	370	19,214

**RIGHT OF WAY NEEDS**  
SCALE: 1"=30'  
**RW-1**

**Project Report**  
Swain Slough Bridge on Pine Hill Road

Federal Project No. BRLO-5904 (112)  
Existing Bridge No. 04C0173  
New Bridge No. 04C0260



Prepared For:  
**County of Humboldt**  
Department of Public Works



Prepared By:



October 2019

developing YOUR vision | delivering YOUR project

Prepared by:



---

Jason P. Jurrens, P.E.  
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Quincy Engineering, Inc.

Submitted by

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James Foster, P.E.  
Project Manager  
Quincy Engineering, Inc.

Date

Telephone

Approved by

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Tony Seghetti, P.E.  
County of Humboldt  
Department of Public Works

Date

Telephone



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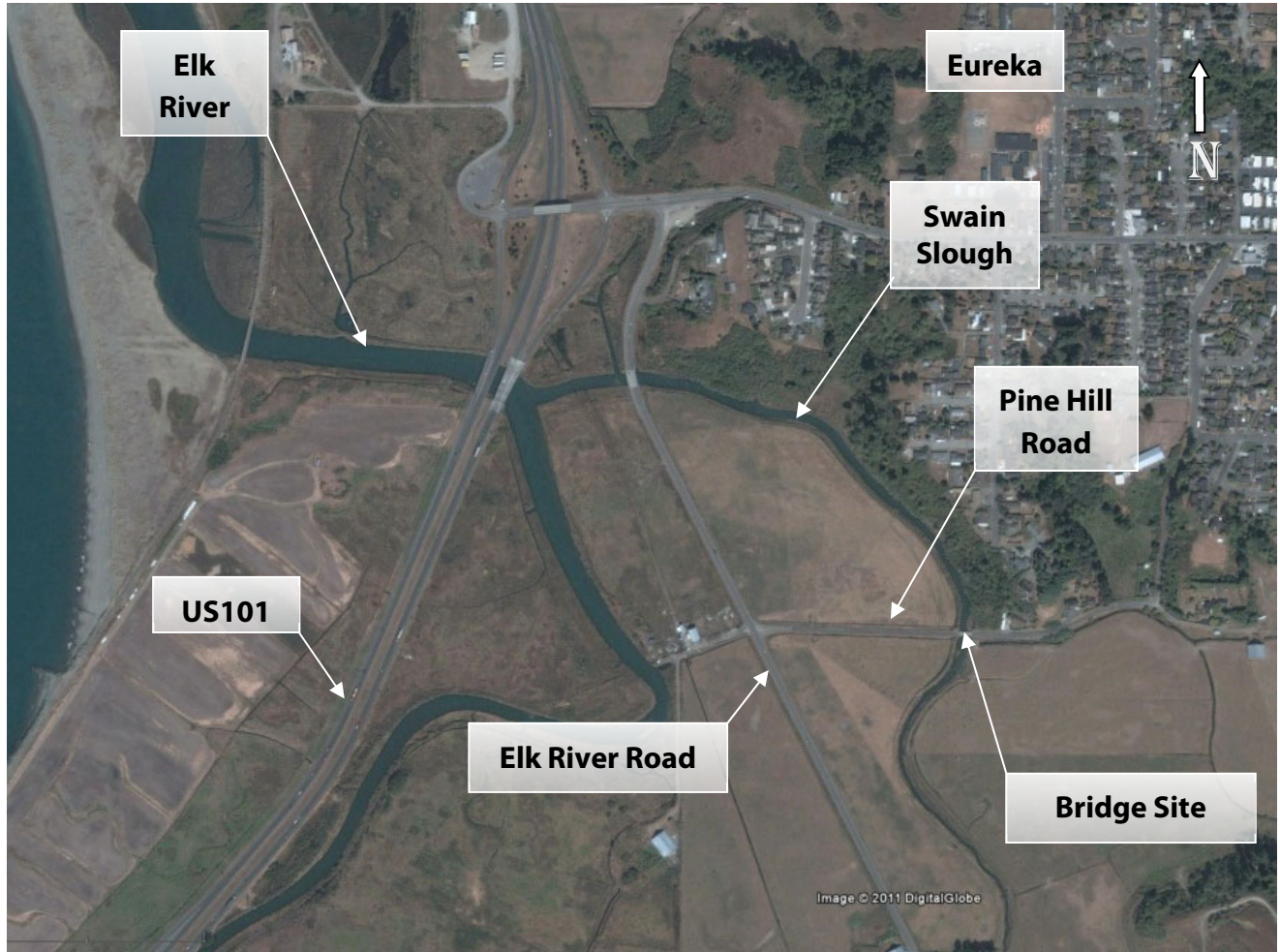
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## VICINITY MAP



*Photo 1 – Aerial View of Project Site (From Google Earth)*



## EXECUTIVE SUMMARY

Humboldt County Department of Public Works is proposing to replace the Swain Slough Bridge (Bridge No. 04C-0173) at Pine Hill Road. The existing bridge is located just south of Eureka on Pine Hill Road (a local rural two-lane road) approximately 0.2 miles east of Elk River Road. Pine Hill Road provides the access across Swain Slough for local residences to Elk River Road.

The purpose of this project is to improve public safety by providing a safe and permanent solution for traffic to cross Swain Slough. This will be accomplished by replacing the existing structurally deficient, three-span timber-stringer bridge with a new single-span concrete structure. The existing bridge has been in service since 1955 and is currently classified as structurally deficient. Due to poor sufficiency rating, the existing bridge qualifies for Federal funding.

Pine Hill Road is classified as a Local Road which qualifies for 100% reimbursement of the bridge replacement cost from federal aid. Other costs of the rehabilitation project such as preliminary engineering, right-of-way, and others are funded by the Federal Highway Bridge Program (HBP) which will provide approximately 100% of the total project cost.

This project is currently scheduled to begin construction of the new bridge in spring of 2020. Traffic will be detoured 1.6 miles during construction while the new bridge is constructed on the existing roadway alignment. Full closure of Pine Hill Road at the location of the bridge is anticipated for construction, which allows the use of the paved approach roadways to be used as construction staging area. This allows minimal construction footprints reducing environmental impacts to Swain Slough. Traffic will then be permanently shifted onto the new structure once construction is completed.

The existing facility consists of a three-span simply supported timber-stringer structure, with concrete deck and curbs. According to the latest Bridge Inspection Report (BIR), the bridge length is approximately 63' long with three equal length spans of approximately 21' and the bridge width is approximately 20'. The substructure consists of reinforced concrete abutments and reinforced concrete bent cap on pile extensions. The BIR also notes the deteriorating condition of the bridge; with 11 out of the 20 timber bridge railing posts as well as the top 1" of the north exterior girder showing signs of rot and moderate to severe vertical cracking on concrete piles extensions. The existing facility has been designated as structurally deficient with a 2017 sufficiency rating of 42.6 and a superstructure rating of 4.

This project will improve public safety by replacing this structurally deficient bridge. It will also improve traffic operations by widening the bridge to provide 10' lanes and 5' shoulders in each direction and replace all traffic safety features to meet current standards. Rehabilitation and widening of the existing bridge is cost prohibitive and not considered feasible.

Replacing the bridge on the existing alignment was chosen due to the lowest construction cost, least environmental impacts, speed of construction, and least new right-of-way needs. With the detour only being approximately 1.6 miles, the most practical and cost-effective roadway alignment was to close Pine Hill Road for one construction season and replace the bridge on its existing alignment.



There were two bridge types considered for this project location:

- The Single-Span Precast Wide-Flange Concrete Girder bridge is recommended as it will not require falsework to construct and will eliminate the need for any piers within the limits of the Slough. This alternative will reduce construction time due to wide flange girders precast off project location and available for erection immediately. Precast manufacturer has confirmed the viability of shipping this length of girders to project site. In addition, this alternative lends to a structure depth that will conform to the proposed roadway profile and will not encroach on the channel hydraulic highwater surface elevation. Furthermore, this alternative will decrease the environmental impacts on an environmentally sensitive area. Based on constructability, functionality, economic considerations and local boundary conditions, a single span precast- prestressed concrete girder is a viable structure alternative for this project.
- A Single-Span Cast in Place Post-Tensioned Box Girder bridge was also considered for this project because it can provide the same minimum structure depth to adhere to the hydraulic requirements without raising the proposed profile. Similar to the preferred precast alternative, this option is also single span and would preclude the need for piers within the slough. However, the cast in place construction would require falsework which will most likely require driven piles during construction which will further disturb the environmentally sensitive slough. A bridge General Plan for this option is included in Appendix G for further reference.

Based on the information contained in this project report, the project development team recommends replacing the bridge on existing alignment utilizing a Single-Span Precast Prestressed Reinforced Concrete Wide Flange Girder bridge. This alternative meets the project goals, reduces construction schedule duration, is cost competitive, and minimizes temporary and permanent environmental and right-of-way impacts from the project.

The project costs for constructing the recommended structure type/alignment is summarized as follows:

Project Construction Cost	
Structure Construction	\$1,206,000
Bridge Removal	\$50,4000
Slope Protection	\$25,000
Channel Work	\$40,000
Detour	\$10,000
Approach Roadway	\$499,000
Mobilization	\$183,000
<b>Total</b>	<b>\$2,013,000</b>



Project Costs	
PE	\$500,000
CON	\$2,000,000
CE	\$300,000
CONT	\$500,000
RW	\$50,000
<b>TOTAL</b>	<b>\$3,350,000</b>

The project development schedule is summarized as follows:

Project Milestone	Proposed Delivery Date
Environmental Document Approval	July 2016
Plans, Specifications & Estimate	January 2020
Project Permits Secured	December 2019
Utility Coordination and Right-of-Way	December 2019
Advertise Project	March 2020
Award Contract	May 2020
Project Construction	June 2020 – October 2020

The project team recommends approval of the project report and continuing the project to develop the final PS&E package leading to construction of a replacement bridge.

## INTRODUCTION

Humboldt County Department of Public Works is proposing to replace the Swain Slough Bridge (Bridge No. 04C-0173) at Pine Hill Road. The existing bridge is located just south of Eureka on Pine Hill Road (a local rural two-lane road) approximately 0.2 miles east of Elk River Road. Pine Hill Road provides the access across Swain Slough for local residences to Elk River Road.

The purpose of this project is to improve public safety by providing a safe and permanent solution for traffic to cross Swain Slough. This will be accomplished by replacing the existing structurally deficient, three-span timber-stringer bridge with a new single span concrete structure. The existing bridge has been in service since 1955 and is currently classified as structurally deficient. Due to poor sufficiency rating, the existing bridge qualifies for Federal funding.

Pine Hill Road is classified as a Local Road which qualifies for 100% reimbursement of the bridge replacement cost from federal aid. Other cost of the rehabilitation project such as preliminary engineering, right-of-way, and others are funded by the Federal Highway Bridge Program (HBP) which will provide approximately 100% of the total project cost.

This project is currently scheduled to begin construction of the new bridge in spring of 2020. Traffic will be detoured 1.6 miles during construction while the new bridge is constructed on



the existing roadway alignment. Full closure of Pine Hill Road at the location of the bridge is anticipated for construction, which allows the use of the paved approach roadways to be used as construction staging area. This allows minimal construction footprints reducing environmental impacts to Swain Slough. Traffic will then be permanently shifted onto the new structure once construction is completed.

## EXISTING FACILITY

The existing facility consists of a three-span simply-supported timber-stringer structure, with concrete deck and curbs. According to the latest Bridge Inspection Report (BIR), the bridge length is approximately 63' long with three equal length spans of approximately 21' and the bridge width is approximately 20'. The substructure consists of reinforced concrete abutments and reinforced concrete bent cap on pile extensions. The BIR also notes the deteriorating condition of the bridge; with 11 out of the 20 timber bridge railing posts as well as the top 1" of the north exterior girder showing signs of rot and moderate to severe vertical cracking on concrete piles extensions, as shown in Figure 1. The existing facility has been designated as structurally deficient with a 2017 sufficiency rating of 42.6 and a superstructure rating of 4.



Figure 1: Vertical Cracking on Piles

## DESIGN CRITERIA

All alternatives must meet the following criteria:

- **Roadway Design**

Roadway design will be based on *"AASHTO Policy on Geometric Design of Highways and Streets 2011, 6<sup>th</sup> Edition Green Book"* along with County standards where appropriate.

- **Bridge Design**

Final bridge design will be performed in accordance with *"AASHTO LRFD Bridge Design Specifications, Sixth Edition, and the Caltrans Amendments preface dated November 2011"*. The latest updated versions of Caltrans bridge design manuals will also be utilized when applicable.

- **Seismic Design**

Seismic design will be performed in accordance with the Caltrans *"Seismic Design Criteria Version 1.6 November 2010"* and the latest information available from Caltrans Earthquake Research.

- **Hydraulic Analysis**

The *Caltrans "Local Assistance Procedures Manual"* requires that the bridge soffit be 2' above the 50-year flood elevation and that the bridge be capable of conveying the 100-year flood or the flood of record.



## ROADWAY ALTERNATIVES

Replacing the bridge on the existing alignment was chosen due to the lowest construction cost, least environmental impacts, speed of construction, and least new right-of-way needs. With the detour only being approximately 1.6 miles, the most practical and cost-effective roadway alignment was to close Pine Hill Road for one construction season and replace the bridge on its



Figure 2: Looking East & West on Pine Hill Road

existing alignment. Building the new bridge either upstream or downstream of the existing bridge, or staging the new bridge construction to keep the existing bridge open during construction would result in significantly more impacts to the channel, wetlands, and farmlands.

The existing roadway has 10' traffic lanes with minimal shoulders. The 2009 traffic counts recorded an Average Daily Traffic (ADT) of 341 vehicles per day, which increases to 582 vehicles per day in 2036 at a 2% per year increase. The proposed road and bridge cross section will consist of 10' lanes, 5' shoulders, 2' choker, and 2' for barrier railing for a total width of 34'. This is 14' wider than the existing 20' wide structure. 1.5:1 side slopes will be utilized to further reduce impacts to the adjacent wetlands and farmlands. This configuration is in conformance with AASHTO's *Guidelines for Geometric Design of Highways and Streets* and the *2012 Humboldt County General Plan*. This 30' clear width meets the minimum design standard when considering functional classification, design speed, and terrain for the project location.

The roadway classification for Pine Hill Road is a local rural road in flat terrain. Given the context of the existing roadway within the project limits and the need to raise the vertical profile for hydraulic concerns, a 35-mph proposed design speed is appropriate. This speed satisfies AASHTO standards Exhibit 5-1 for local roads and satisfies AASHTO's *Policy on Geometric Design of Highways and Streets* guidelines.

The general alignment of Pine Hill Road through the project site is an east-west direction. There are no significant obstacles or small radius curves to reduce the stopping sight distance. This allows for the bridge to be constructed on the existing alignment with no skew.

The existing profile along the bridge deck must be raised approximately 3' vertically to meet the slough hydraulic and tidal change requirements. The minimum soffit elevation is required to be at or above the King Tide elevation of 8.5', per WRECO's hydraulics evaluations. In order to accomplish vertical change and stay within the AASHTO guidance for profile grade and vertical curves that meet the 35-mph design speed, the proposed roadway profile uses a 120' long sag curve leading into a 180' long crest curve and ending with a 160' long sag curve.





Levees are located at the southeast, northwest, and southwest corners of the existing bridge. These levees are maintained by the property owners and the project will not be making improvements to the levees. A minimal amount of conforming at the levees to accommodate the raising of the bridge grade is anticipated.

### **Approach Guardrail**

The existing bridge has no approach guard railings or attached end treatments. This bridge replacement project will significantly improve the roadway approach features by protecting each corner of the new bridge with a conventional end treatment system.

## **STRUCTURE ALTERNATIVES**

### **Single-Span Precast Prestressed Reinforced Concrete Wide-Flange Girder**

The single-span precast wide-flange concrete girder bridge is recommended as it will not require falsework to construct and will eliminate the need for any piers within the limits of the slough. This alternative will reduce construction time due to wide flange girders precast off-project location and available for erection immediately. The precast manufacturer has confirmed the viability of shipping this length of girders to project site. In addition, this alternative lends to a structure depth that will conform to the proposed roadway profile and will not encroach on the channel hydraulic highwater surface elevation. Furthermore, this alternative will decrease the environmental impacts on an environmentally sensitive area. Based on constructability, functionality, economic considerations and local boundary conditions, a single-span precast prestressed concrete girder is a viable structure alternative for this project.

### **Rejected Structure Alternative**

A single-span cast in place post-tensioned concrete box girder bridge was also considered for this project because it can provide the same minimum structure depth to adhere to the hydraulic requirements without raising the proposed profile. Similar to the preferred precast alternative, this option is also single-span and would preclude the need for piers within the slough. However, the cast in place construction would require falsework which will most likely require driven piles during construction which will further disturb the environmentally sensitive slough. A bridge General Plan for this option is included in Appendix G for further reference.

Based on the information contained in this project report, the project development team recommends replacing the bridge on existing alignment utilizing a single-span precast prestressed reinforced concrete wide flange girder bridge. This alternative meets the project goals, reduces construction schedule duration, is cost competitive, and minimizes temporary and permanent environmental, and right-of-way impacts from the project.

A permanent sheet piling system will be constructed around the new bridge footing which will eliminate the need for Rock Slope Protection (RSP) to protect the abutment. The width between the abutments of the existing bridge is approximately 58.5'. The width between the sheet piling is 65.5' for an overall channel widening of 7.0'. The channel will be widened 1.7' on the easterly bank and 5.3' on the westerly bank. All existing RSP will be removed from the channel.



## Bridge Railing

With the proposed 35 mph design speed along Pine Hill Road, metal bridge railing is proposed instead of conventional concrete barriers which are more commonly associated with higher speed conditions. Concrete Bridge Railing (Type 85 Modification) will be mounted on top of the bridge edge of deck. To accommodate the thickness of the metal rail elements and still maintain a 30' clear width, the overall proposed structure width will be 34' – 0".

## DESIGN EXCEPTIONS

A single design exception for hydraulic freeboard will be required. The basic rule for hydraulic design of bridges is that they should be designed to pass the two percent (2%) probability flood or tide (Q50) or the flood-of-record, whichever is greater without causing objectionable backwater, excessive flow velocities, or encroaching on through traffic lanes. Sufficient freeboard, the vertical clearance between the lowest structural member, and the water surface elevation of the design flood should be provided. A minimum freeboard of 2' is often assumed for preliminary bridge design. An evaluation should be performed to determine, if horizontal and vertical driftway requirements warrant a modified freeboard. The freeboard for controlled flow waterways, such as irrigation canals, shall be required by the regulatory agency having jurisdiction.

- The final design should be able to convey the base flood, Q100.
- The base flood (Q100) or overtopping flood, whichever is greater shall be used to evaluate the costs, risks and impacts associated with encroachments on the 100-year base flood plain.
- Construction projects in areas vulnerable to Sea Level Rise to begin planning for potential impacts by considering a range of SLR scenarios for the years 2050 and 2100

The non-standard design element is hydraulic clearance. The bridge deck has been designed to remain dry during the 100-year flow. Swain Slough, Martin Slough, and Elk River all become one large backwater during high flow events. This backwater is made worse during a high flow coupled with a Humboldt Bay high tide. Conveyance under the bridge is not a factor as each of these waterways go out of bank during the high flows. The bridge as designed does not cause objectionable backwater and does not provide freeboard due to drift.

The approach roadways leading to the bridge become inundated during the high flows. The bridge is not accessible from the adjacent County roads during flood events and the County has no plans to improve the approach roadways to meet standard flood elevation.

The bridge has been designed to accommodate a future raise if Sea Level Rise becomes an issue in the future. The footing has been sized for a taller bridge and jacking points have been detailed to facilitate raising this single span bridge.

## DRAINAGE

Existing drainage patterns will generally be preserved. Drainage along the northeastern side of Pine Hill Road generally flows to the northeast corner of the bridge and into Swain Slough. An existing ditch will be re-graded with a new pipe and energy dissipating device added to enhance this system. The drainage patterns at the southeast corner of the bridge will not change as it



currently sheet flows off the roadway and into Martin Slough. The existing pipe beneath the westerly approach will be replaced with a new 18" pipe which will maintain the existing drainage patterns. Water flows into the southwest field through a breach in the levee and flows towards the bridge. A portion of the flow crosses into the northwest field via the existing pipe, and a portion overtops the road at the midpoint between the Swain Slough Bridge and Elk River Road. The water then flows to a depressed area along the northwest levee before re-entering Swain Slough midway between the Swain Slough Bridge and the Elk River Road Bridge. The construction of the Swain Slough Bridge will not alter these preexisting drainage patterns.

### **TRAFFIC CONTROL/DETOUR**

The County has indicated that it will be acceptable to close the existing roadway and detour traffic during construction of the replacement bridge and the approach roadway. Detour to Meyers Avenue, just northeast of the facility, may be used by local residence living near the existing facility during construction.

### **CONSTRUCTION METHODS AND CONTRACTOR ACCESS**

It is anticipated that excavators, dozers, cranes, dump trucks, concrete trucks, concrete pumps, pile driving hammers, and pile drilling equipment may be required to remove the existing bridge and construct the new bridge. Construction is anticipated to be completely within one construction season. With a full road closure in place, contractor will have access to the project site from both embankments. The Contractor will use the approach roadways as the staging area which will reduce the environmental impacts to the project area. No staging of equipment will occur in the wetland or agricultural areas.

Some dewatering of the sheetpile cofferdam will be required. The contractor will utilize temporary tanks that will be staged on the existing asphalt roadway approaches. The water that is collected will be disposed of offsite.

Settlement due to embankment construction is anticipated. The contractor will add approximately 1' of additional fill to the each of the approaches along with a settlement monitoring system to determine the quantity and duration of settlement. Once the settlement has occurred, the additional fill will be removed.

Removal of the concrete bridge piers will be accomplished at a very low tide by excavating around each pier, pulling each pier over with an excavator, breaking it off below the mud line, and removing them from the slough channel. No concussive hammering of the existing concrete piers during demolition is required. The excavated pier pits will be backfilled with the sediment removed or with clean gravel after demolition. Installing sheet piling around the piers to contain sediment was investigated but was discarded as this will cause more disturbance to the channel than the described method.

In-channel work is limited and will consist of removal of the existing columns, removal of trash and debris from the channel, and the removal of sediment from in front of the sheet piling. All in-channel work will be performed at low tide with minimal flow in Swain Slough. There is no work and/or impacts to Martin Slough.

Work is anticipated to occur during daylight hours.



## RIGHT-OF-WAY

The project site is located adjacent to four parcels that have several owners. Right-of-way will be required from three of the four parcels and will include Temporary Construction Easements (TCEs) and Permanent Roadway Easements (PREs). The following table details the APN, Owners, and needed R/W types:

APN	OWNER	R/W Type
302-181-008-000	PRIOR ROBERT D TR	PRE, TCE
302-151-019-000	CHAMBERLAIN ANDREW SUCTR	PRE, TCE
302-151-020-000	JACOBSON LOU & ELIZABETH	TCE

## UTILITIES

The Humboldt Community Services District (HCSD) owns and operates a 12" water line that is connected to the north side of the existing Swain Slough Bridge. This water line serves the Humboldt Hill area. HCSD requires this water line remain in service due to the lack of a redundant loop facility within their system.

HCSD will be relocating this waterline using Horizontal Directional Drilling (HDD) that will occur before the construction of the new bridge. The alignment of the new water line has been coordinated with the design of the new bridge and will not be in conflict once it has been relocated. HCSD will include BMPs in the project and will provide details of the process to address the Coastal Commission concerns including "frac-out".



**Figure 3: Existing Water Line**

## ENVIRONMENTAL/PERMITS

The replacement of the Swain Slough Bridge will require both CEQA and NEPA clearances. As the delegated Federal Highway Administration lead agency due to the use of federal funds, Caltrans has determined that the project is a NEPA Categorical Exclusion under 23 CFR 771.117(d): activity (d)(13). Humboldt County as the CEQA lead agency has determined that this project fits the definition of a Class 2 Categorical Exemption (CEQA Guidelines, Section 15302) as it involves the replacement of an existing public facility on the same site with the same purpose and capacity as the structure being replaced. Furthermore, this project has been analyzed under both CEQA and NEPA and it has been determined that the project, as designed, will not adversely impact air quality, water quality, historical or cultural resource, or any other environmental area. The project will improve vehicular/pedestrian/bicyclist safety and reduce the potential of accidents and injuries. This project fits within the definition of the Class 2 Categorical Exemption as set forth in CEQA Guidelines, Section 15302. Additionally, Humboldt County has determined that none of the exceptions to the Categorical Exemptions set forth in CEQA Guidelines, Section 15300.2, apply. As such, Humboldt County has concluded that this Categorical Exemption applies to this project.



The technical studies to support these determinations include:

### **Cultural Resources**

An Archaeological Study Report (ASR) and Historic Property Study Report (HPSR) were prepared in January of 2013 and it was determined that there are no cultural or historical resources within the project area, therefore there will be No Historic Properties Affected by the project.

### **Biological Resources**

A Biological Assessment/Essential Fish Habitat Assessment (BA/EFHA) was submitted to the National Marine Fisheries Service (NMFS) to address potential impacts to federally listed fish species. NMFS completed the Section 7 consultation and issued a Biological Opinion on September 25, 2015 which concluded that the project is likely to adversely affect Northern California DPS steelhead, SON CC ESU coho salmon, and California Coastal ESU Chinook salmon, but is not likely to jeopardize the species. NMFS also concluded the project is likely to result in an adverse effect to critical habitat for the Coastal SON CC ESU coho salmon, California ESU Chinook salmon ESU, and the Northern California DPS steelhead. The project is not likely to destroy or adversely modify critical habitat. In the Biological Opinion (BO), the National Marine Fisheries Service determined that incidental take would occur to all three salmonid species in the form of capture during fish relocation and by exposure to lethal noise levels resulting from pile driving. NMFS expects no more than one juvenile of each species to be injured and no more than two juveniles of each species will be killed as a result of constructing the project. NMFS also concluded that the project would adversely affect Essential Fish Habitat for Pacific salmon species. While the proposed action contains measures to minimize adverse effects to EFH, NMFS provided additional conservation measures to further offset the adverse effects.

The BA/EFHA was also submitted to the U.S. Fish and Wildlife Service (USFWS) to address potential impacts to the federally listed tidewater goby. The USFWS completed the Section 7 consultation and issued a Biological Opinion on September 24, 2015 which concluded that the project is likely to adversely affect the species but is not likely to jeopardize the species. They also concluded the project action area is not located within designated critical habitat for the species. In the BO, USFWS determined that incidental take would occur to tidewater goby in the form of capture during fish relocation and/or during dewatering activities. The USFWS expects no more than five adult gobies to be injured or killed as a result of constructing the Project. Conservation measures to reduce impacts to salmonids and gobies will be followed and are included in the attached Environmental Commitment Record (ECR).

A Natural Environment Study was prepared in October 2014 and included a wetland delineation. The delineation found that U.S. jurisdictional waters and three-parameter wetlands occupy 0.989 acres of the BSA. State jurisdictional waters and two- and one-parameter coastal wetlands occupy 1.165 acres of the BSA. The project design minimized impacts on wetlands to the extent practicable. All other design considerations would have a greater impact on wetlands. Since the project design with the least impact on wetlands was selected, the project is in compliance with the Wetlands Only Practicable Finding Alternative. Minimization measures to reduce impacts on wetlands and waters are included in the ECR. A Wetlands Mitigation and Monitoring Plan shall be prepared and provided to the U.S. Army Corps of Engineers, North Coast RWQCB, California Coastal Commission, and the CDFW for review and approval.



### **Farmlands**

The project will have no permanent impact on prime or unique farmland. Temporary impacts on non-prime agricultural land will be less than significant.

### **Floodplain**

The project will not result in any longitudinal or significant encroachment on the 100-year flood plain.

### **Other Environmental Considerations**

Review of the project site and project plans indicate that the project would not result in substantial adverse impacts to the visual environment. Other than a temporary increase in ambient noise from heavy equipment working during construction hours there are no long-term sound impacts associated with the project. Upon project completion, noise levels will return to pre-construction ambient levels. There are no known hazardous waste issues in the project area.

### **Permits**

- 404 Permit from the U.S. Army Corps of Engineers
- 401 from the Regional Water Quality Control Board
- 1602 from the Department of Fish and Wildlife
- Coastal Development Permit from the California Coastal Commission

### **GEOTECHNICAL/FOUNDATIONS**

SHN Consulting Engineers & Geologist submitted a preliminary foundation memorandum for the proposed bridge on September of 2012 shown in Appendix I. Foundations for the abutments will most likely consist of Caltrans Class-45 standard driven pile foundations. A Preliminary Foundation Report will be provided prior to the design phase of the project.

### **SEISMIC**

The project site is located within one of the most seismically active areas of the State. Caltrans Seismic Design Criteria version 1.6 (November 2010) will be utilized for the bridge design. Quincy will perform an equivalent static seismic analysis of the proposed bridge. The recommended ARS curve for seismic design will be provided by the geotechnical engineer and included in the foundation report.

### **FALSEWORK**

Falsework will not be required within the limits of the slough for the preferred precast concrete girder alternative. This will be a great advantage to minimize impact to the project site compared to other cast in place alternatives. This will also benefit the construction schedule by reducing the overall time needed to construct the bridge.



## DECK PROTECTION

This project is located within a marine environment, therefore additional corrosion mitigation techniques is required. Special protection measures such as thicker concrete cover and epoxy coated reinforcement are required to provide proper protection.

## HYDRAULICS

The clear span of the proposed bridge is longer than the current structure and will improve the existing hydraulic condition. Furthermore, the vertical profile of the proposed bridge is being raised such that the entire superstructure will clear the anticipated King Tide elevation. A draft design hydraulic and location hydraulic study report has been prepared and is included in Appendix J.

The Pine Hill Road over Swain Slough Bridge Replacement Project (Project) site crosses over Swain Slough immediately downstream of its confluence with Martin Slough. The mouth of Martin Slough is separated from Swain Slough by a levee and tide gates. The confluence of Swain Slough with Elk River is 0.5 mi downstream of the Project site. Elk River eventually drains into Humboldt Bay approximately 1.5 mi further downstream. Because of its close proximity to Humboldt Bay, the project is tidally influenced.



*Figure 4: Profile view looking north*

The peak discharges for Swain/Martin sloughs were estimated using a rainfall/runoff model. The 100-year and 50-year peak discharge values for Swain/Martin sloughs were estimated to be 2,490 cubic feet per second (cfs) and 2,200 cfs, respectively. The hydraulic characteristics at the Project site were evaluated using the Hydrologic Engineering Centers River Analysis System (HEC-RAS) modeling software, Version 4.1.0 developed by the U.S. Army Corps of Engineers (USACE).

### 100-Year Water Surface Elevations and Freeboard at Upstream Face of Bridges

Alternative	Lowest Bridge Soffit Elevation (ft*)	Water Surface Elevation (ft*)	Available Freeboard (ft)
Existing	9.3	12.1	-2.8
Proposed	8.9	12.1	-3.2

Note: \* The elevations reference the North American Vertical Datum of 1988 (NAVD 88)



### 50-Year Water Surface Elevations and Freeboard at Upstream Face of Bridges

Alternative	Lowest Bridge Soffit Elevation (ft*)	Water Surface Elevation (ft*)	Available Freeboard (ft)
Existing	9.3	11.5	-2.2
Proposed	8.9	11.5	-2.6

Note: \* The elevations reference the North American Vertical Datum of 1988 (NAVD 88)

The proposed bridge is designed based on the tidal elevations at Humboldt Bay and there are provisions to raise the bridge in the future to address sea level rise, but the currently proposed bridge is not designed to account for sea level rise. The bridge foundations are designed for the superstructure to be able to be raised in the future to accommodate sea level rise. Sea level rise estimates for the Project site were estimated using information from the following three studies:

- The Probability of Sea Level Rise (Environmental Protection Agency [EPA]1995)
- Climate Change Scenarios and Sea Level Rise Estimates for the California 2009
- Climate Change Scenarios Assessment (Cayan 2009), and
- The Proceedings of National Academy of Science (PNAS) (Vermeer and Rahmstorf 2009)

### Sea Level Rise Estimates for the Year 2100 near Humboldt Bay, California

Method/Source	Sea Level Rise (ft)	
	High	Low
EPA	3.0	-0.8
CAYAN	4.6	3.3
PNAS	4.9	1.3

### CHANNEL SCOUR/SLOPE PROTECTION

Based on field reviews and the maintenance report history, scour is a concern that needs to be addressed at this site. Appropriate protective countermeasures include placement of rock slope protection along each embankment slope in order to provide a more stable slough and reduce erosion along the abutment slopes. Vibrated permanent sheet piling will be installed to a depth that is below the anticipated scour which will protect the abutments in the future. The new abutments will be placed further apart to improve flow characteristics in the stream channel.

### CONSTRUCTION COSTS

The bridge construction cost for the preferred alternative is based on the 30% level design which is estimated to be \$1,206,000. A 10% mobilization and 25% contingency was assumed when computing the total cost from the current level of design. Construction cost estimates for the preferred alternative is detailed and shown on Table 1. The construction costs analysis estimates have been presented based on Caltrans Comparative Bridge Cost and preliminary roadway quantities with unit prices from similar projects. Table 2 includes cost estimates





associated with utility coordination/relocation, right-of-way, environmental mitigation, or construction engineering that are eligible for federal aid.

**Table 1: Structure Construction Cost**

Alternative	Bridge Square Footage	Total Construction Cost
Preferred Alt. – PC/PS W-Flange Girder	2,720 sq. ft.	\$1,206,000

**Table 2: Construction Cost Analysis**

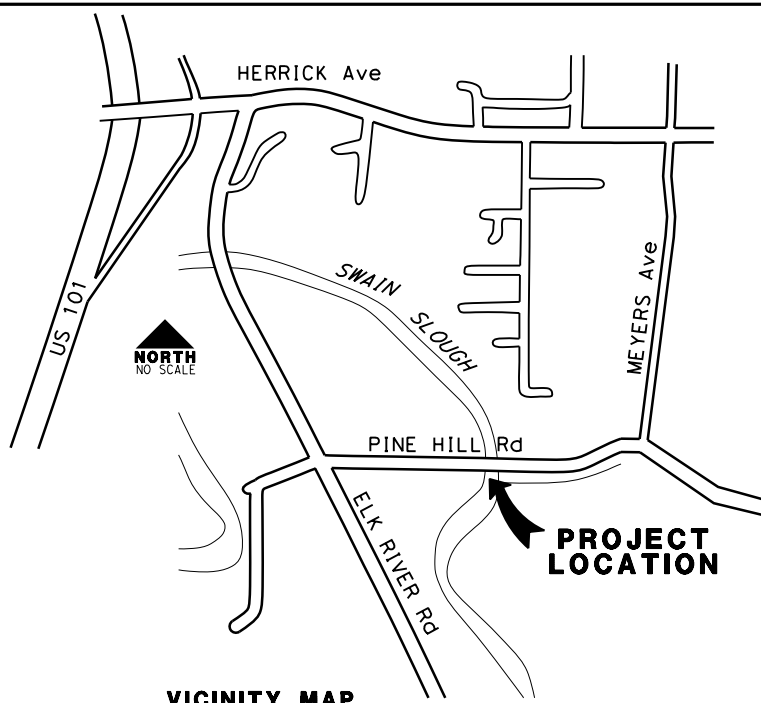
Construct Bridge	Bridge Removal	Slope Protection	Channel Work	Detour	Approach Roadway	Utility Relocation	Mobilization	Total Construction
\$1,206,000	\$50,400	\$25,000	\$40,000	\$10,000	\$499,000	\$0	\$183,000	\$2,013,000

## CONCLUSIONS

An 80' single-span precast-prestressed concrete wide flange girder built on the existing horizontal alignment is the preferred structure type. With many bridge type comparison issues such as cost, foundations, and constructability being considered, precast-prestressed concrete wide flange girder is the most ideal replacement type at this site.

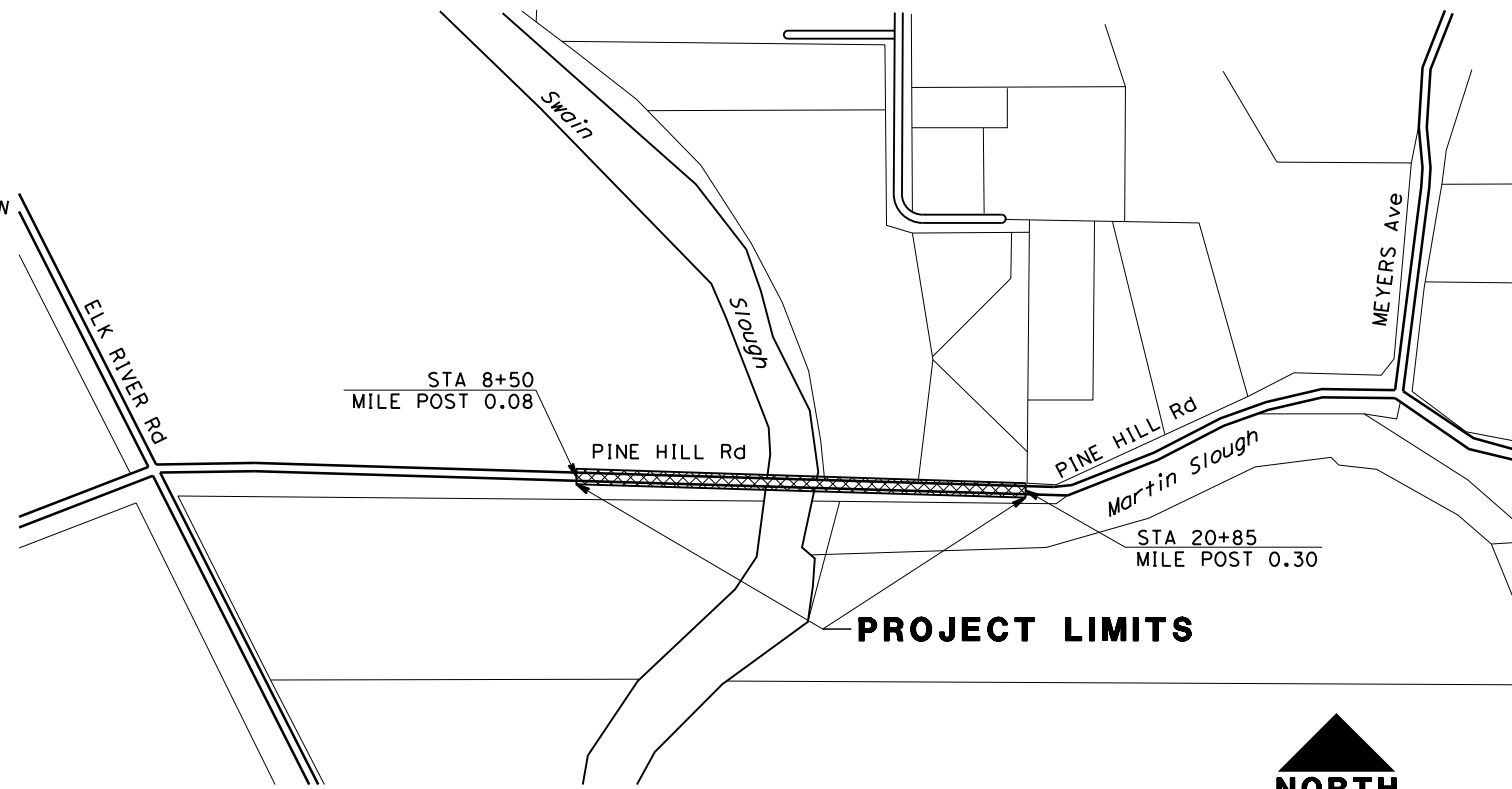
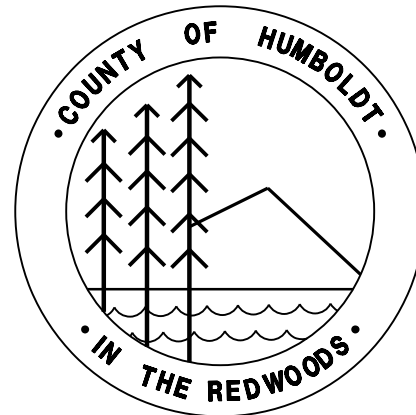
## ATTACHMENTS

- A. Preliminary Environmental Study
- B. Type Selection Memo
- C. NEPA Determination
- D. CEQA Determination
- E. Natural Environment Study
- F. Archaeological Study Report (ASR)
- G. Historic Property Study Report (HPSR)
- H. Preferred Alternative
- I. Preliminary Project Cost Estimates
- J. Preliminary Foundation Report
- K. Hydraulics Information
- L. Bridge Inspection Records Information System Report

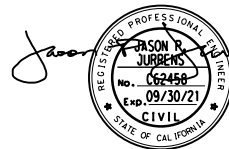


VICINITY MAP  
NOT TO SCALE

COUNTY OF HUMBOLDT  
DEPARTMENT OF PUBLIC WORKS  
PROJECT PLANS FOR CONSTRUCTION OF  
**PINE HILL ROAD  
OVER SWAIN SLOUGH BRIDGE No. 04C0260**  
FEDERAL PROJECT NO. BRLO-5904[112]



VICINITY MAP



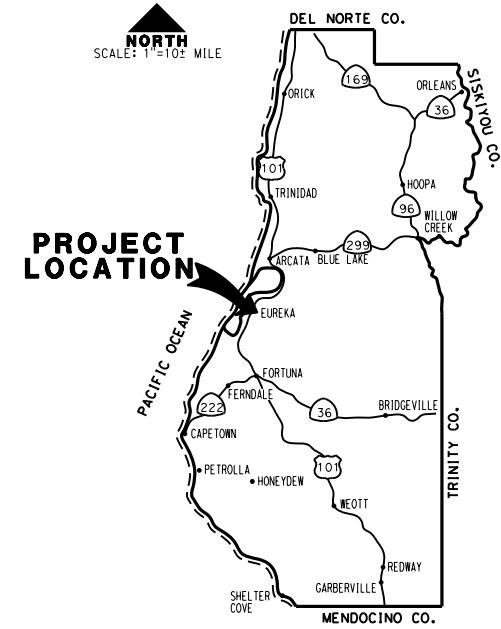
BAR IS ONE INCH ON ORIGINAL DRAWING  
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

ROAD NAME: PINE HILL ROAD	MILE POST: 0.19
ROAD NO.: 3J430	EA NO.:
PROJECT NO.: BRLO-5904(112)	PPNO.:
CONTRACT NO.: 594020	DRAWING FILE NAME: S:\Client\Humboldt\07-300 Pine Hill\CAD\Roadway\07300rdb001.dgn
PLOT DATE: 12-3-2019	REVISION DATE: 11-19-2019

QUINCY ENGINEERING
DESIGNED BY: KP
DRAWN BY: KP
REVIEWED BY: JJ
APPROVED BY:

COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS
<b>PINE HILL ROAD BRIDGE OVER SWAIN SLOUGH</b>
COVER SHEET, SHEET INDEX AND DETAILS

SHEET 1 OF 28



LOCATION MAP  
SCALE: 1"=10± MILE

APPLICABLE STANDARD PLANS

CALTRANS STANDARD PLANS DATED 2018.  
(SEE SPECIAL PROVISIONS STANDARD PLAN LIST)

NOTES

THE CONTRACTOR SHALL HAVE A CLASS "A" LICENSE FOR THIS PROJECT.

INDEX OF SHEETS

- ROADWAY PLANS
- 1 COVER SHEET
- 2 TYPICAL CROSS SECTIONS
- 3 LAYOUT
- 4 PROFILE
- 5 CONSTRUCTION DETAILS
- 6 EROSION CONTROL PLAN
- 7 CONTOUR GRADING AND ROCK SLOPE PROTECTION
- 8 DRAINAGE PLAN
- 9 DRAINAGE PROFILES
- 10 DRAINAGE DETAILS
- 11 UTILITY PLAN
- 12 DETOUR PLAN
- 13 SUMMARY OF QUANTITIES
- STRUCTURE PLANS
- 14 GENERAL PLAN
- 15 DECK CONTOURS
- 16 FOUNDATION PLAN
- 17 ABUTMENT LAYOUT
- 18 ABUTMENT DETAILS No.1
- 19 ABUTMENT DETAILS No.2
- 20 TYPICAL SECTION
- 21 GIRDER LAYOUT
- 22 WIDE FLANGE GIRDER DETAILS No.1
- 23 WIDE FLANGE GIRDER DETAILS No.2
- 24 CONSTRUCTION SEQUENCE
- 25 MISCELLANEOUS DETAILS

26-28 LOG OF TEST BORINGS

BASIS OF BEARINGS

CC83 EPOCH 2007.00 BASED ON CONTROL BY BRIAN SOUSA. PLS FOR LIDAR SURVEY (PT NOS. 1510 & 1512)

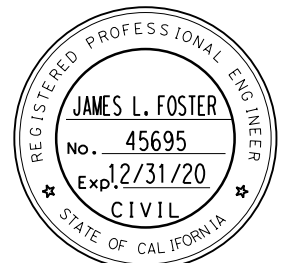
CONVERGENCE ANGLE 01°25'43"  
COMBINATION FACTOR 0.999900144

BASIS OF ELEVATION

NAVD88 BASED ON SAME SOUSA SURVEY (WHICH WAS VIA STATIC GPS TIES TO NGS CONTROL AT MURRAY FIELD)

RECOMMENDED

*James L. Foster* 12/3/2019  
DATE



APPROVED

HUMBOLDT COUNTY DATE



ORIGINAL LOW BID PRICE	CONSTRUCTED BY	RESIDENT ENGINEER
	PROJECT COMPLETED / /	CONSTRUCTION COST \$

**NOTES:**

1. DIMENSIONS OF THE PAVEMENT STRUCTURES (STRUCTURAL SECTIONS) ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
2. CLASS 2 AGGREGATE BASE EXTENDED AT SAME DEPTH UNDER APPROACH SLAB.
3. FOR DITCH FLOW ELEVATIONS, SEE DRAINAGE DETAILS



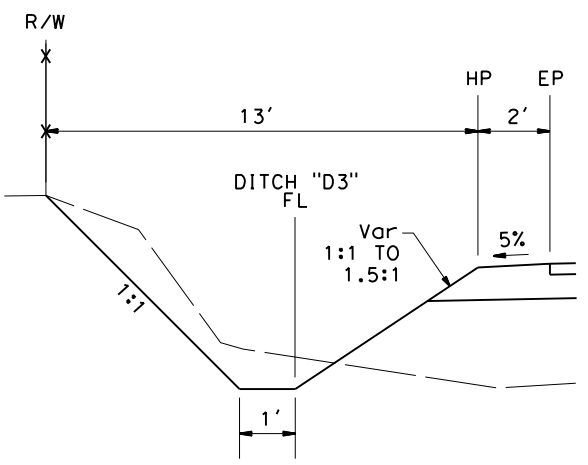
BAR IS ONE INCH ON ORIGINAL DRAWING  
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

ROAD NAME: PINE HILL ROAD	MILE POST: 0.19	DESIGNED BY: KP
ROAD NO.: 3J430	EA NO.:	DRAWN BY: KP
PROJECT NO.: BRLO-5904(112)	PPNO.:	REVIEWED BY: JJ
CONTRACT NO.: 594020		APPROVED BY:
DRAWING FILE NAME: S:\Client\Humboldt\07-300 Pine Hill\CAD\Roadway\07300rca001.dgn		
PLOT DATE: 12-3-2019	REVISION DATE: 11-19-2019	

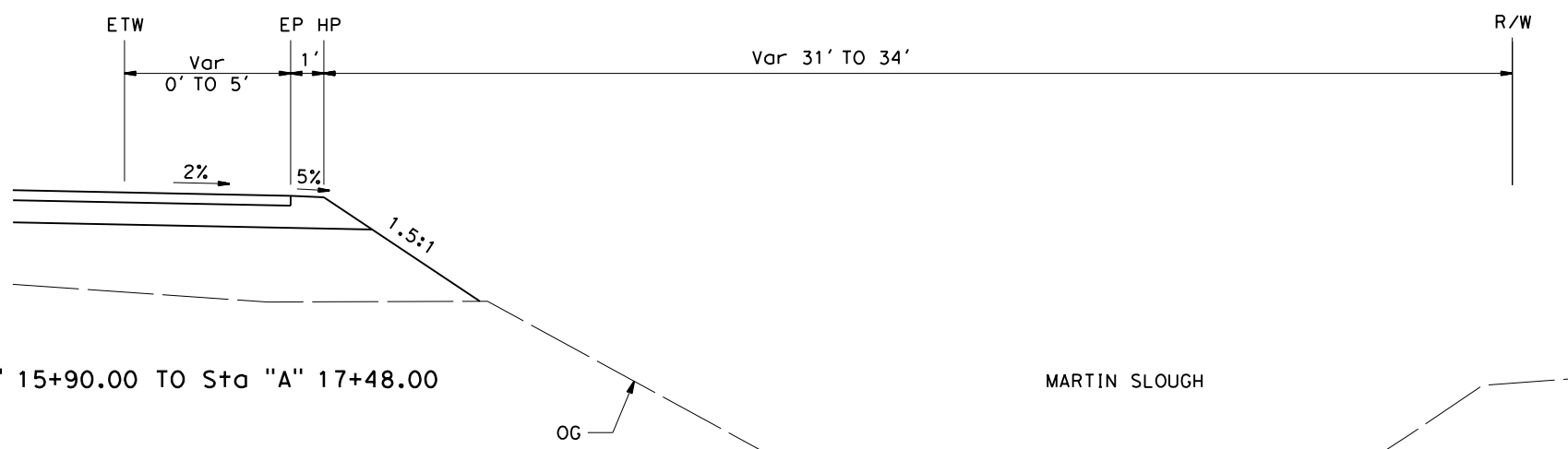
COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS	SHEET <b>2</b> OF <b>28</b>
<b>PINE HILL ROAD BRIDGE OVER SWAIN SLOUGH</b>	
<b>TYPICAL CROSS SECTIONS</b>	

**DESIGN DESIGNATION (COUNTY ROAD)**

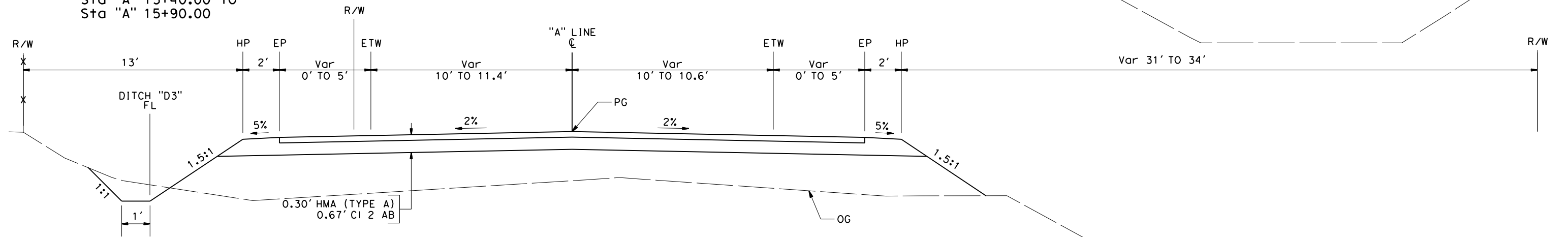
2009 ADT = 341  
2036 ADT = 582  
TRUCKS = 3% V = 35 MPH  
LOCAL RURAL ROAD



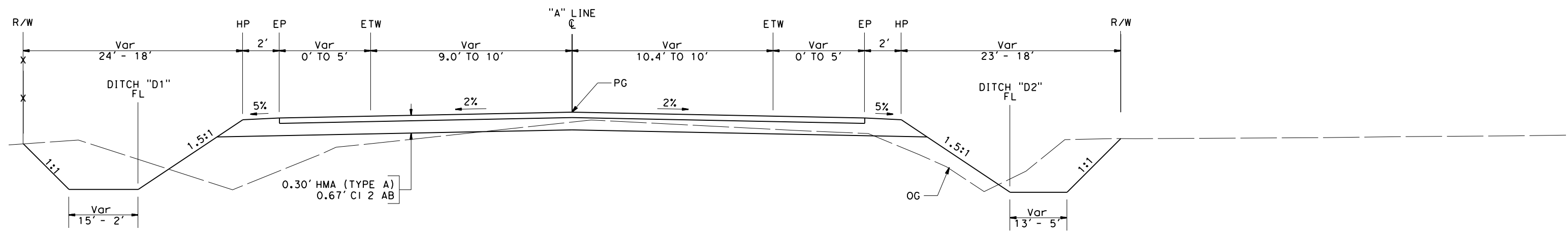
**Sta "A" 15+40.00 TO  
Sta "A" 15+90.00**



**Sta "A" 15+90.00 TO Sta "A" 17+48.00**



**PINE HILL ROAD  
Sta "A" 15+23.00 EB TO Sta "A" 17+48.00**



**PINE HILL ROAD  
Sta "A" 11+93.00 TO Sta "A" 14+43.00 BB**

**NOTES:**

- FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY RECORD MAPS AT THE COUNTY OFFICE.
- PINE HILL ROAD TO MYERS (MEYERS) AVE - 60' WIDE PER 62 DEEDS 372 UNABLE TO LOCATE POINT OF BEGINNING-HELD EXISTING ROAD AS BEST EVIDENCE OF DEEDED R/W. ALSO 60' WIDE PER BOOK 6 OF MAPS PAGE 40 (PT NOS. 417, 418, 421 & 422) NOTE THIS DOES NOT FIT EXISTING ROAD VERY WELL.
- IMPLIED COMMON LAW DEDICATION FOR OTHER AREAS FALLING WITHIN MAINTAINED ROAD VIA LONG TERM PUBLIC USE AND MAINTENANCE BY THE COUNTY.
- TRAFFIC STRIPES SHALL BE 4" WIDE, MODIFIED FROM CALTRANS STANDARD PLANS A20A AND A20B.



ROAD NAME: PINE HILL ROAD	MILE POST: 0.19	DESIGNED BY: KP
ROAD NO.: 3J430	EA NO.:	DRAWN BY: KP
PROJECT NO.: BRLO-5904(112)	PPNO.:	REVIEWED BY: JJ
CONTRACT NO.: 594020	DRAWING FILE NAME: S:\Client\Humboldt\07-300 Pine Hill\CAD\Roadway\07300red001.dgn	APPROVED BY:
PLOT DATE: 12-3-2019	REVISION DATE: 11-19-2019	

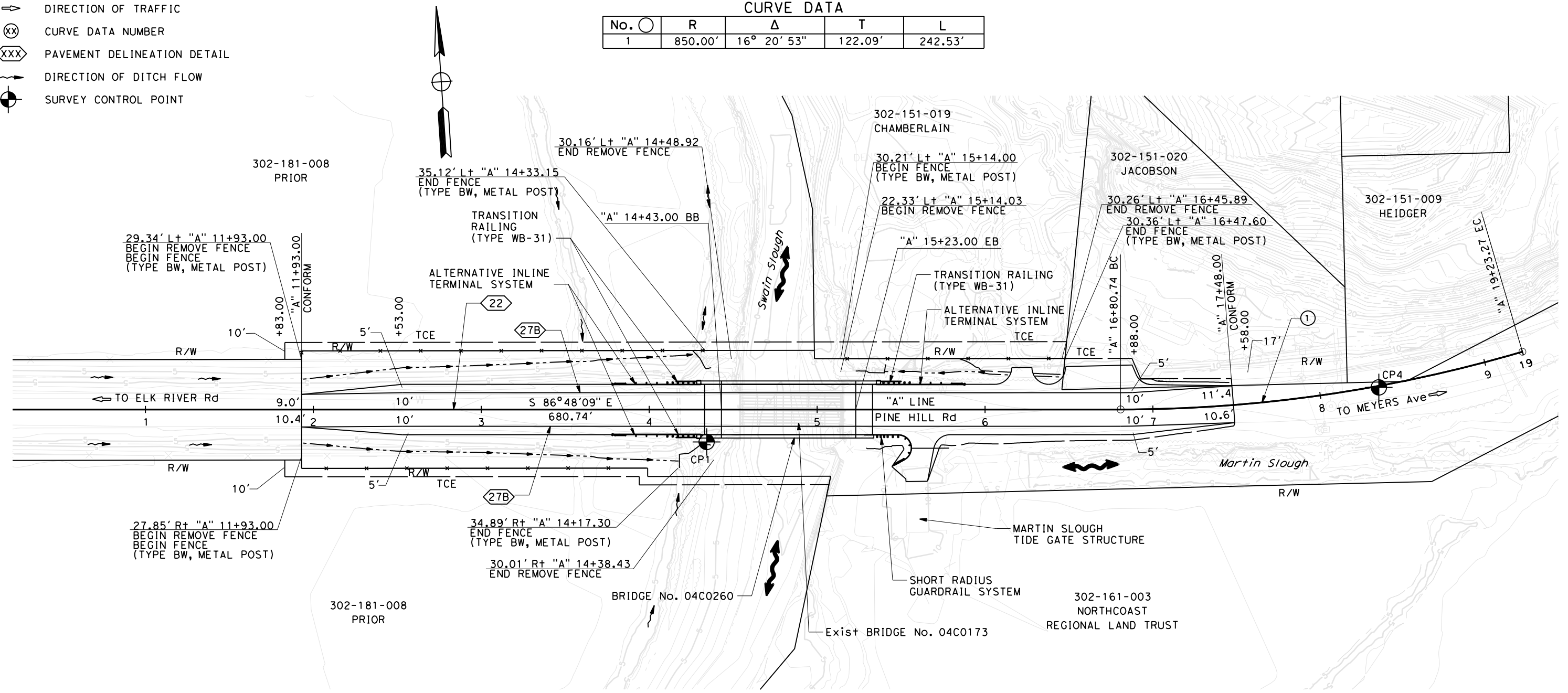
<b>COUNTY OF HUMBOLDT</b> <b>DEPARTMENT OF PUBLIC WORKS</b> <b>PINE HILL ROAD BRIDGE OVER SWAIN SLOUGH</b> <b>LAYOUT</b>	<b>SHEET 3</b> <b>OF 28</b>
---	--------------------------------

**LEGEND:**

- DIRECTION OF TRAFFIC
- CURVE DATA NUMBER
- PAVEMENT DELINEATION DETAIL
- DIRECTION OF DITCH FLOW
- SURVEY CONTROL POINT

**CURVE DATA**

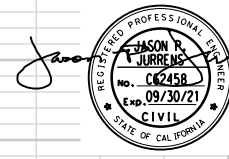
No.	R	Δ	T	L
1	850.00'	16° 20' 53"	122.09'	242.53'



**SURVEY CONTROL DATA**

No.	NORTHING	EASTING	ELEV	LINE	STATION	OFFSET	DESCRIPTION
CP1	2164937.002	5957031.194	10.172	"A"	14+34.23	19.36' Rt	SET80DSPIKE
CP2	2165008.312	5956085.236	9.142	"A"			BRASSCAPHUMCORE19203
CP4	2164947.122	5957432.660	9.366	"A"	18+35.19	0.88' Rt	SETMAGNAIL&DPWTAG
CP5	2165073.438	5957926.179	8.956	"A"			FD1510

NOTE:  
1. HWE IS 0100.



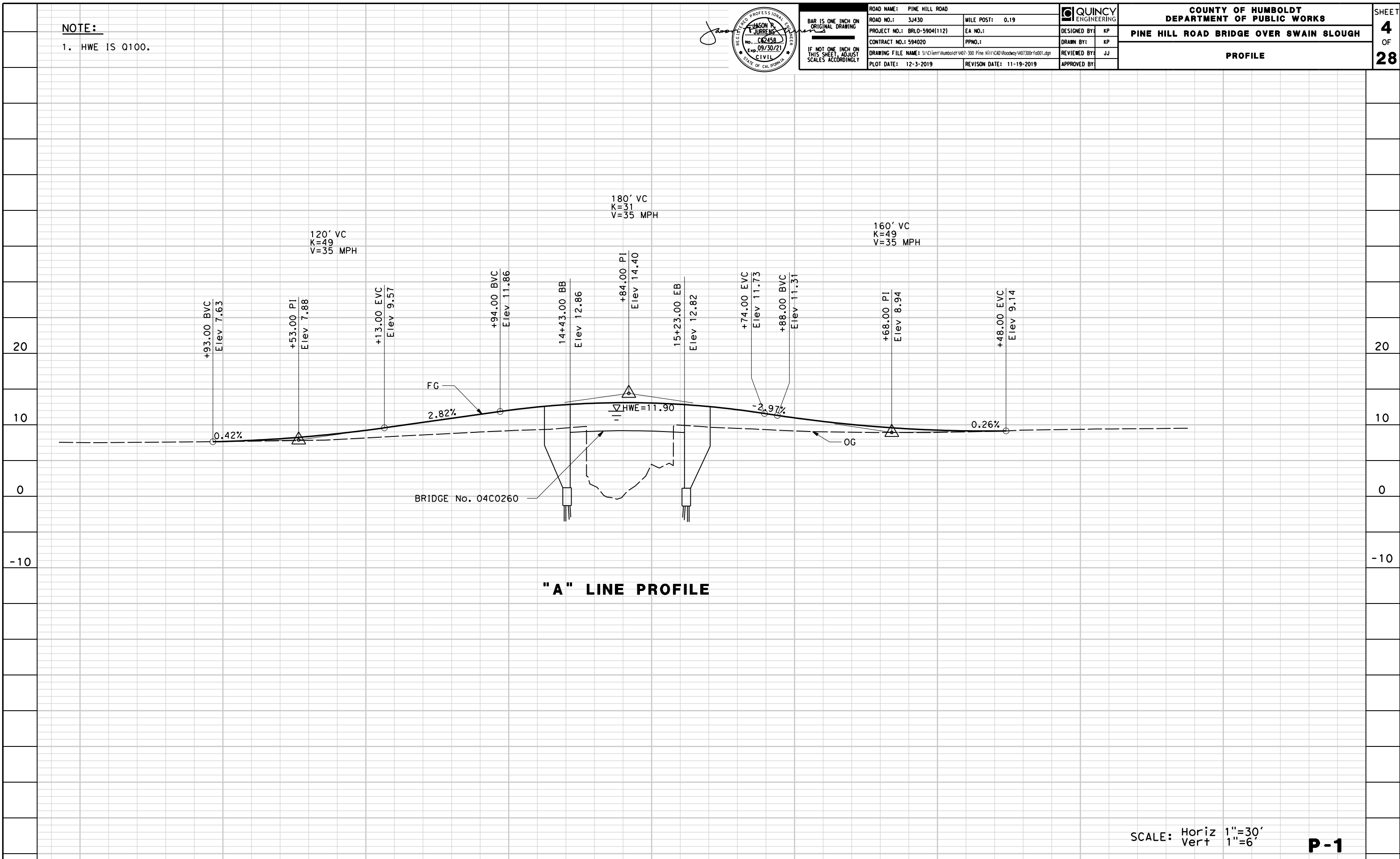
BAR IS ONE INCH ON ORIGINAL DRAWING  
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

ROAD NAME:	PINE HILL ROAD	
ROAD NO.:	3J430	MILE POST: 0.19
PROJECT NO.:	BRLO-5904(112)	EA NO.:
CONTRACT NO.:	594020	PPNO.:
DRAWING FILE NAME:	S:\Client\Humboldt\07-300 Pine Hill\CAD\Roadway\07300r\001.dgn	
PLOT DATE:	12-3-2019	REVISION DATE:

DESIGNED BY:	KP
DRAWN BY:	KP
REVIEWED BY:	JJ
APPROVED BY:	

COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS
PINE HILL ROAD BRIDGE OVER SWAIN SLOUGH
PROFILE

SHEET 4 OF 28



"A" LINE PROFILE

SCALE: Horiz 1"=30'  
Vert 1"=6'

P-1



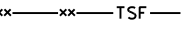
STATION	11+00	12+00	13+00	14+00	15+00	16+00	17+00	18+00	TOTAL
Exc									
Emb									
CY	77 of 113								



**NOTES:**

- FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY RECORD MAPS AT THE COUNTY OFFICE.
- LOCATION OF FIBER ROLLS ARE SCHEMATIC. ACTUAL PLACEMENT LOCATIONS OF FIBER ROLLS SHALL BE IN ACCORDANCE WITH THE SPECIAL PROVISIONS.

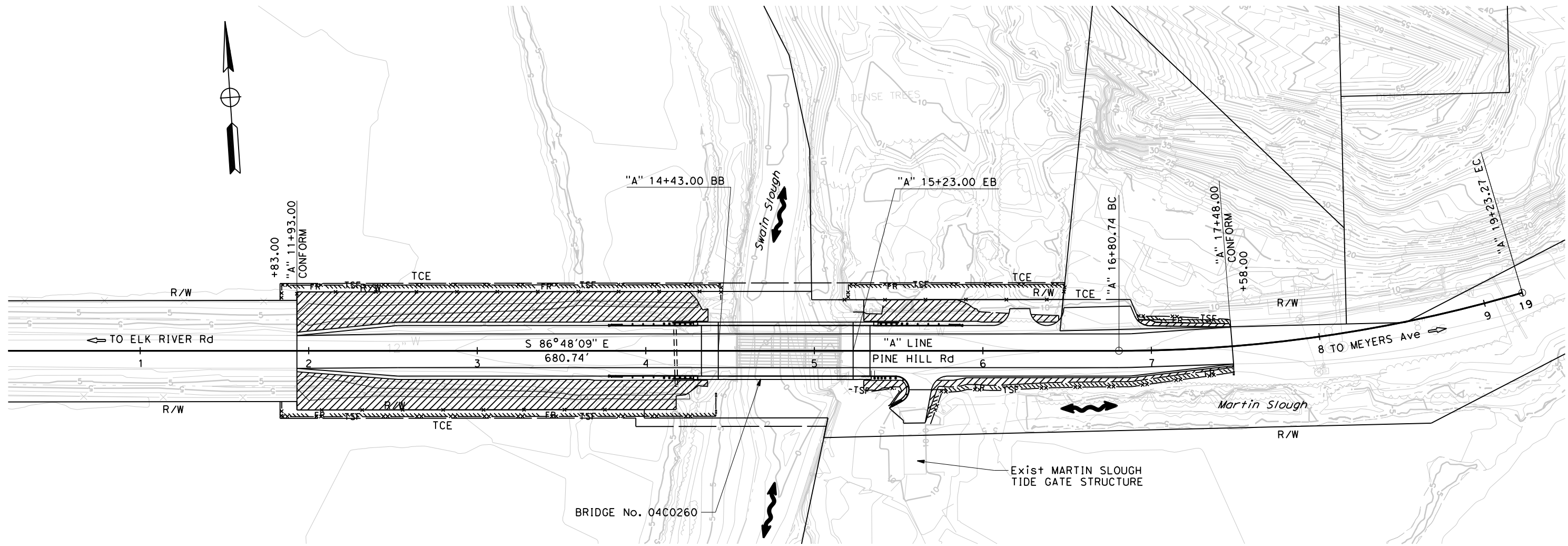
**LEGEND:**

-  EROSION CONTROL
-  FR FIBER ROLL
-  TSF TEMPORARY HIGH-VISIBILITY FENCE



ROAD NAME: PINE HILL ROAD		MILE POST: 0.19		DESIGNED BY: KP	
ROAD NO.: 3J430	PROJECT NO.: BRLO-5904(112)	EA NO.:	DRAWN BY: KP		
CONTRACT NO.: 594020		PPNO.:	REVIEWED BY: JJ		
DRAWING FILE NAME: S:\Client\Humboldt\07-300 Pine Hill\CAD\Roadway\07300rge001.dgn		APPROVED BY:			
PLOT DATE: 12-3-2019		REVISION DATE: 11-19-2019			

COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS		SHEET <b>6</b>
PINE HILL ROAD BRIDGE OVER SWAIN SLOUGH		OF <b>28</b>
EROSION CONTROL PLAN		



**EROSION CONTROL**

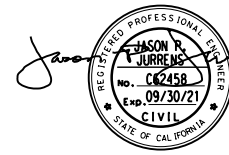
SEQUENCE	ITEM	MATERIAL		APPLICATION RATE	REMARKS
		DESCRIPTION	TYPE		
STEP 1	HYDROSEED	SEED	MIX	28 LB/ACRE	
		FIBER	WOOD	1000 LB/ACRE	
STEP 2	ROLLED EROSION CONTROL PRODUCT (BLANKET)	BLANKET	TYPE A		
STEP 3	FIBER ROLLS	FIBER ROLL	8 TO 10 INCHES IN Dia		TYPE 2 INSTALATION

**SEED MIX**

BOTANICAL NAME (COMMON NAME)	POUNDS PURE LIVE SEED PER ACRE (SLOPE MEASUREMENT)
WESTERN YARROW (ACHILLEA MILLEFOLIUM)	1
SAN DIEGO BENTGRASS (AGROSTIS PALLENS)	1
CLUSTERED FIELD SEDGE (CAREX PRAEGRACILIS)	5
SLENDER HAIRGRASS (DESCHAMPSIA ELONGATA)	1
BARLEY (HORDEUM BRACHYANTHERUM)	20
TOAD RUSH (JUNCUS BUFONIUS)	0

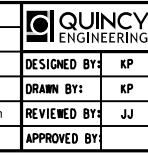
**NOTES:**

1. FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY RECORD MAPS AT THE COUNTY OFFICE.
2. FOR STEEL SHEET PILING, SEE BRIDGE PLANS.



BAR IS ONE INCH ON ORIGINAL DRAWING  
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

ROAD NAME: PINE HILL ROAD	MILE POST: 0.19
ROAD NO.: 3J430	EA NO.:
PROJECT NO.: BRLO-5904(112)	DESIGNED BY: KP
CONTRACT NO.: 594020	PPNO.:
DRAWING FILE NAME: S:\Client\Humboldt\07-300 Pine Hill\CAD\Roadway\07300rhd001.dgn	DRAWN BY: KP
PLOT DATE: 12-3-2019	REVISION DATE: 11-19-2019
	REVIEWED BY: JJ
	APPROVED BY:

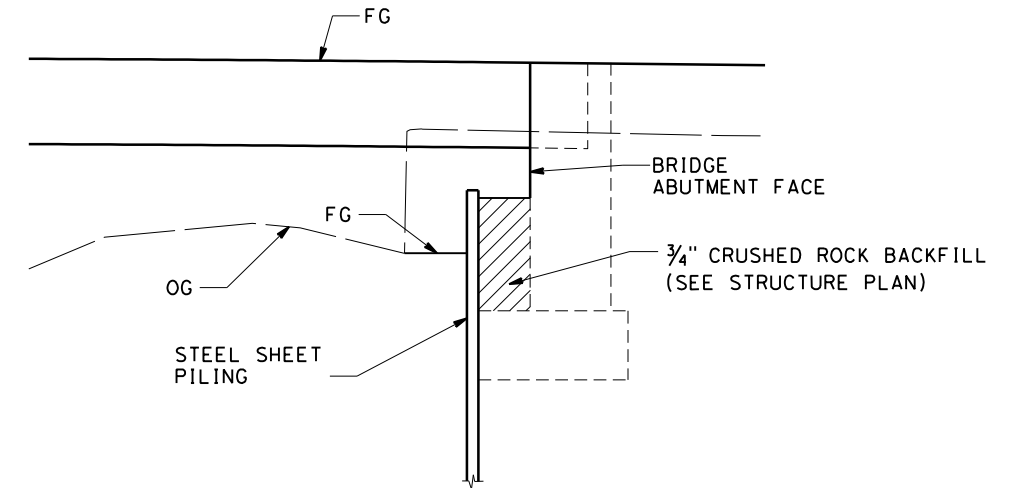
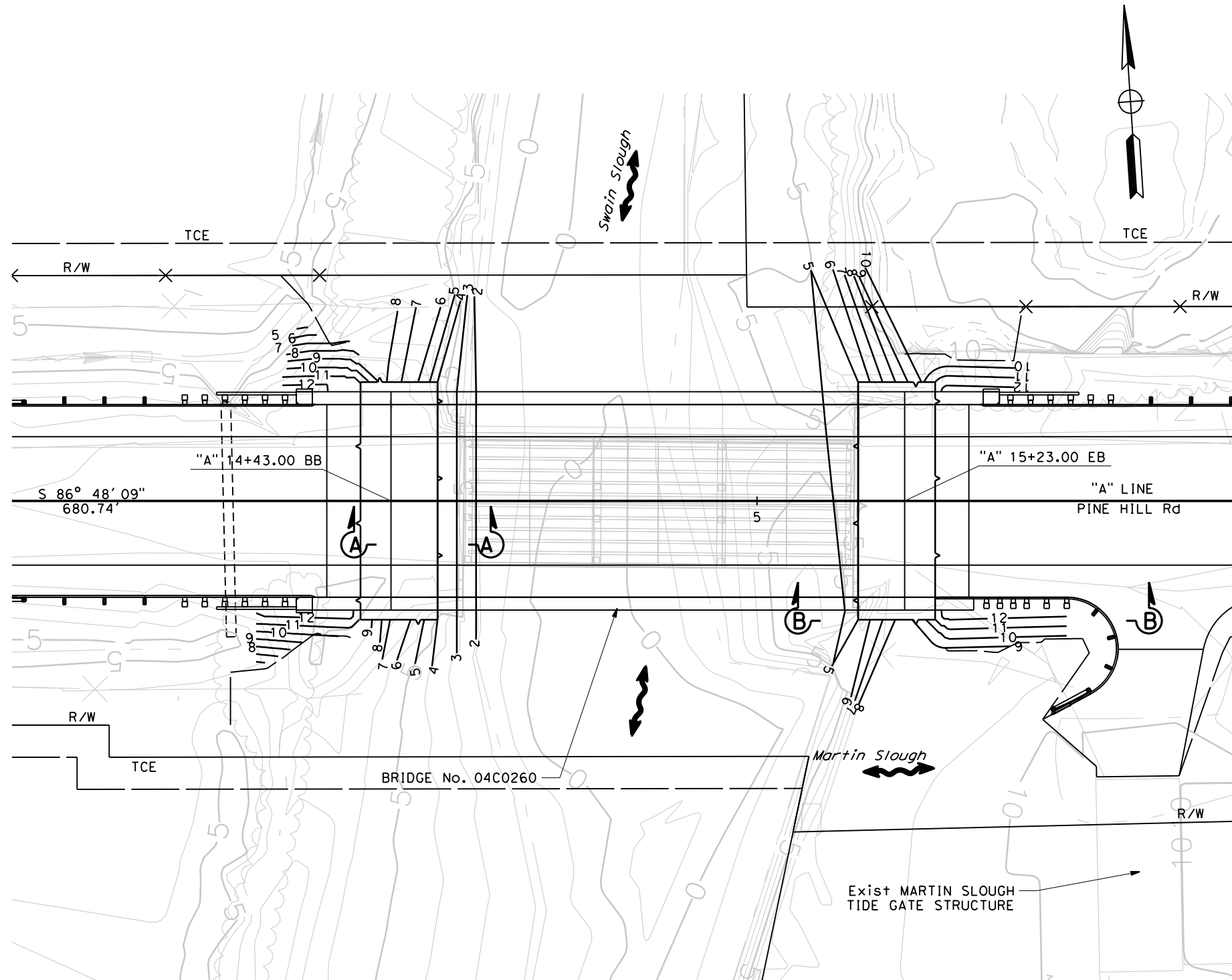


COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS
<b>PINE HILL ROAD BRIDGE OVER SWAIN SLOUGH</b>
<b>CONTOUR GRADING AND ROCK SLOPE PROTECTION</b>

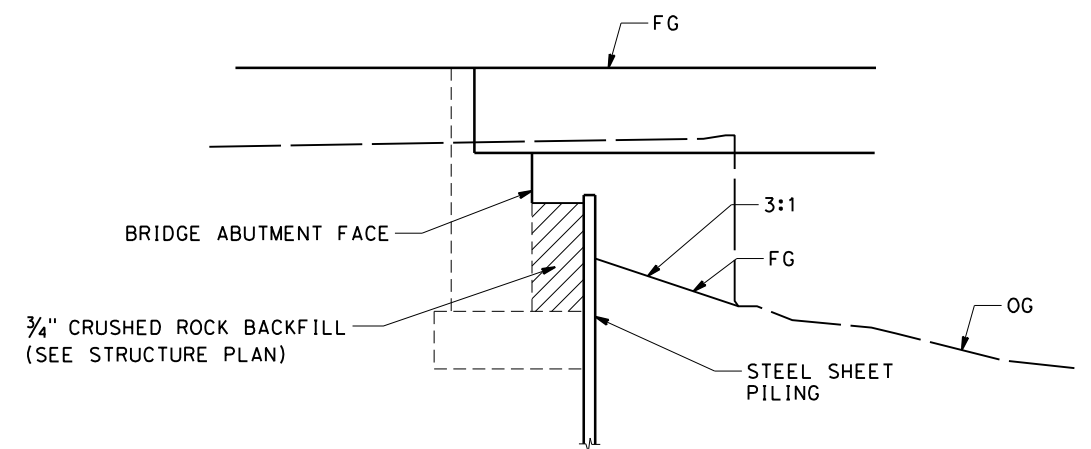
SHEET **7**  
OF  
**28**

**LEGEND:**

— — — — — LIMITS OF STEEL SHEET PILING



**B-B**  
NO SCALE



**A-A**  
NO SCALE

THIS PLAN ACCURATE FOR CONTOUR GRADING WORK ONLY.

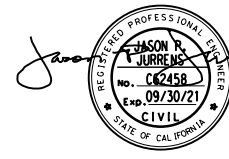


**NOTES:**

1. FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY RECORD MAPS AT THE COUNTY OFFICE.
2. CONTRACTOR SHALL POSITIVELY DETERMINE ALL HORIZONTAL AND VERTICAL LOCATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION OF ANY COMPONENT OF ANY DRAINAGE SYSTEM IN ORDER TO VERIFY CONSTRUCTIBILITY OF THE DRAINAGE SYSTEM AS SHOWN ON PLANS.

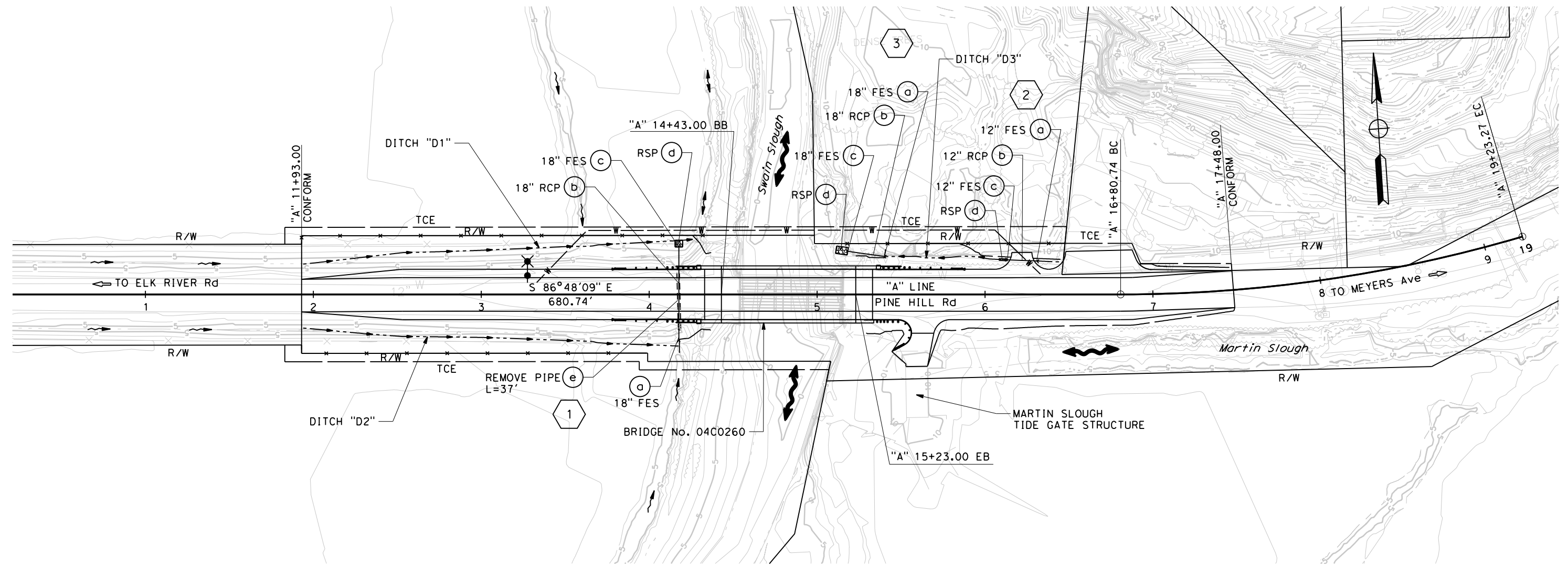
**LEGEND:**

- XXX DRAINAGE SYSTEM NUMBER
- XX DRAINAGE UNIT NUMBER
- DIRECTION OF DITCH FLOW
- W— WATER LINE (BY OTHERS)

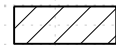


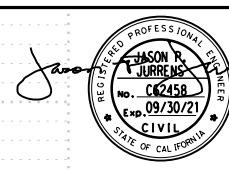
ROAD NAME: PINE HILL ROAD		QUINCY ENGINEERING	
ROAD NO.: 3J430	MILE POST: 0.19	DESIGNED BY: KP	
PROJECT NO.: BRLO-5904(112)	EA NO.:	DRAWN BY: KP	
CONTRACT NO.: 594020	PPNO.:	REVIEWED BY: JJ	
DRAWING FILE NAME: S:\Client\Humboldt\07-300 Pine Hill\CAD\Roadway\07300r\001.dgn		APPROVED BY:	
PLOT DATE: 12-3-2019	REVISION DATE: 11-19-2019		

COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS	SHEET 8 OF 28
PINE HILL ROAD BRIDGE OVER SWAIN SLOUGH	
DRAINAGE PLAN	



**LEGEND:**

 MINOR CONCRETE (PIPE ENCASEMENT)



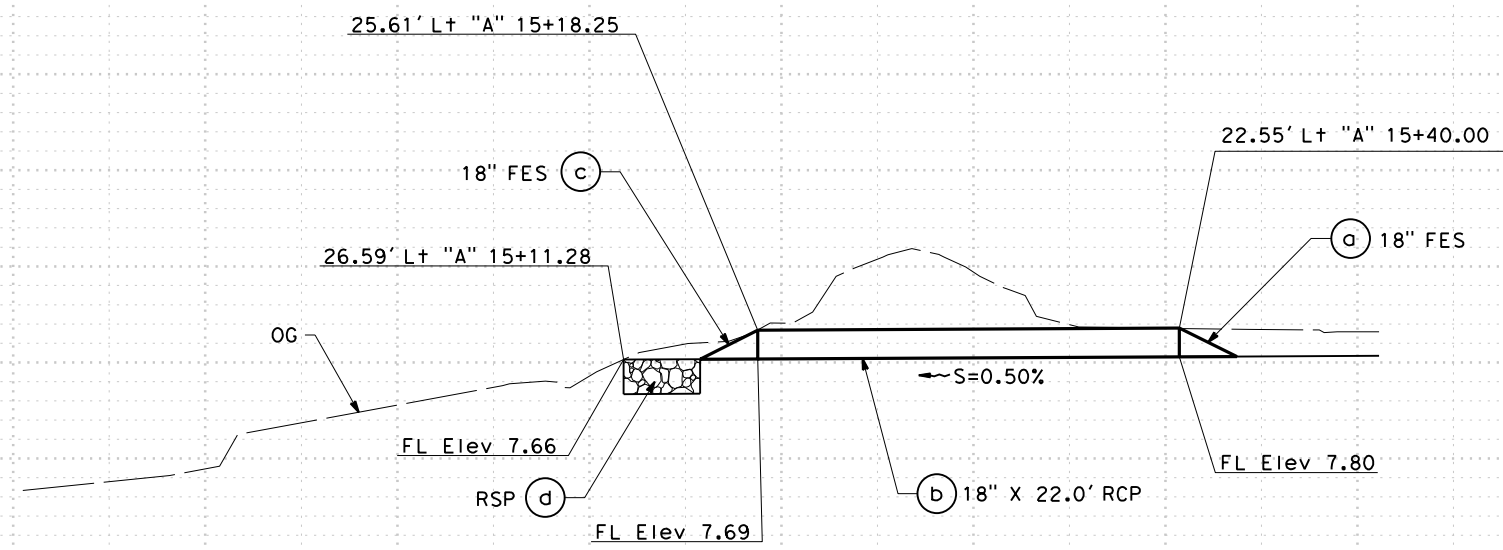
BAR IS ONE INCH ON ORIGINAL DRAWING  
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ROAD NAME:	PINE HILL ROAD	MILE POST:	0.19
ROAD NO.:	3J430	EA NO.:	
PROJECT NO.:	BRLO-5904(112)	CONTRACT NO.:	594020
PPNO.:		DRAWING FILE NAME:	S:\Client\Humboldt\07-300 Pine Hill\CAD\Roadway\07300r\001.dgn
PLOT DATE:	12-3-2019	REVISION DATE:	11-19-2019

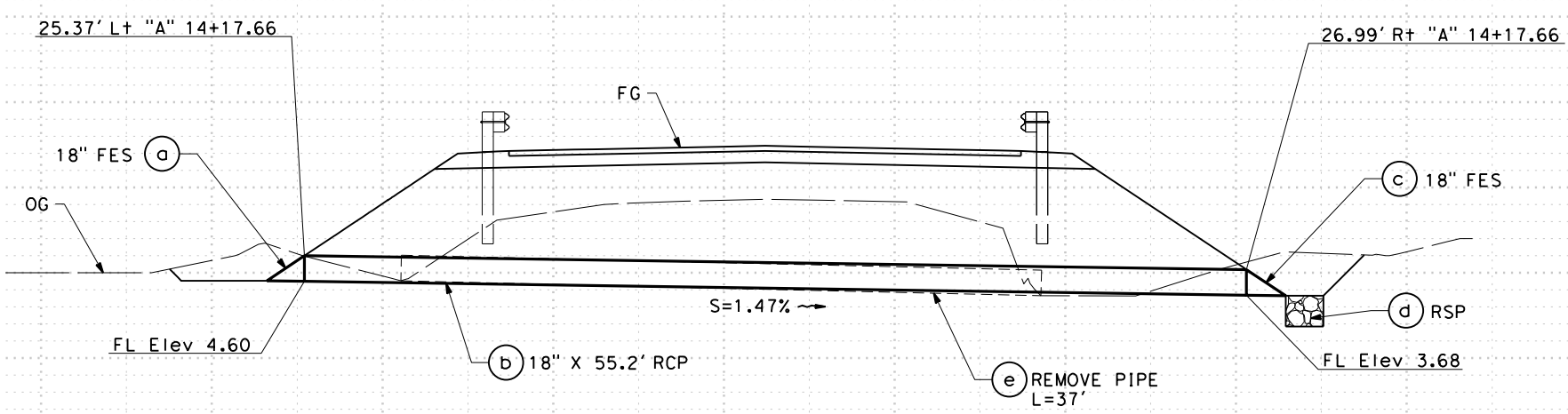
DESIGNED BY:	KP
DRAWN BY:	KP
REVIEWED BY:	JJ
APPROVED BY:	

COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS
<b>PINE HILL ROAD BRIDGE OVER SWAIN SLOUGH</b>
<b>DRAINAGE PROFILES</b>

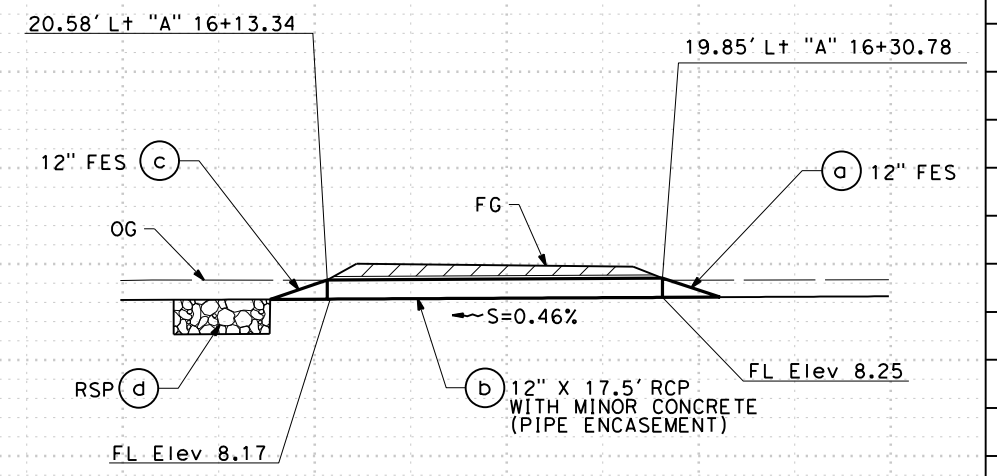
SHEET **9**  
OF  
**28**



**DRAINAGE SYSTEM No. 3**  
"A" 15+18.25 TO "A" 15+40.00



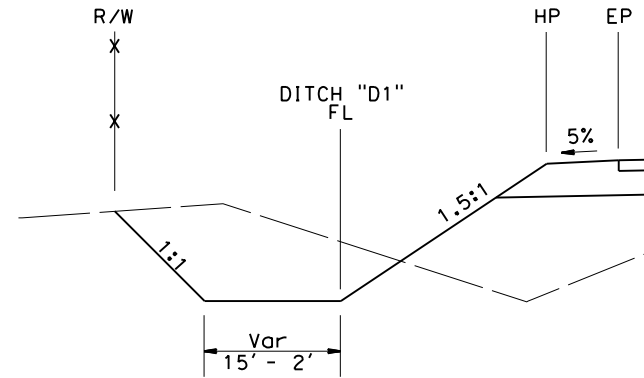
**DRAINAGE SYSTEM No. 1**  
"A" 14+17.66



**DRAINAGE SYSTEM No. 2**  
"A" 16+13.34 TO "A" 16+30.78

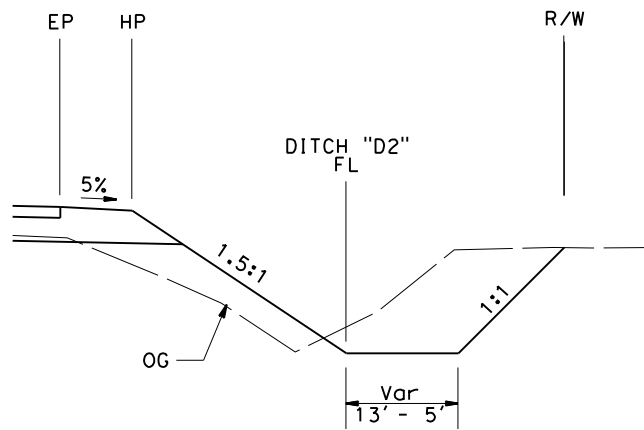
**NOTES:**

1. FOR RSP CLASS AND DIMENSIONS, SEE TABLE 1.
2. FOR FLARED END SECTION DETAILS NOT SHOWN, SEE STANDARD PLAN D94B.
3. CUTOFF WALL ONLY PRESENT WITH CONCRETE FES, SEE STANDARD PLAN D94B.



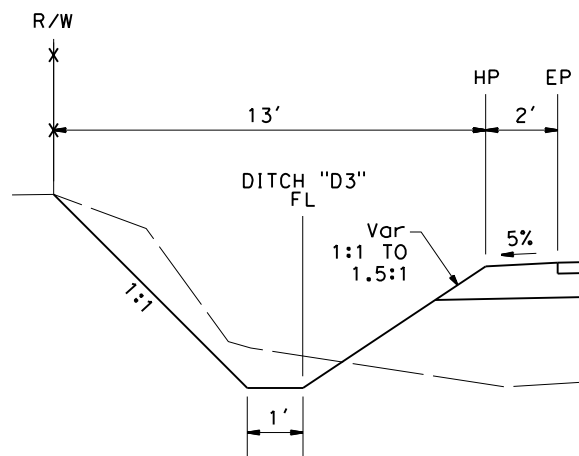
**DITCH "D1"**

Sta "A" 11+93.00 TO Sta "A" 14+29.00



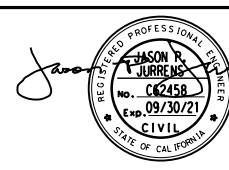
**DITCH "D2"**

Sta "A" 11+93.00 TO Sta "A" 14+18.00



**DITCH "D2"**

Sta "A" 15+40.00 TO Sta "A" 15+90.00



BAR IS ONE INCH ON ORIGINAL DRAWING  
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

ROAD NAME: PINE HILL ROAD	MILE POST: 0.19	DESIGNED BY: KP
ROAD NO.: 3J430	EA NO.:	DRAWN BY: KP
PROJECT NO.: BRLO-5904(112)	PPNO.:	REVIEWED BY: JJ
CONTRACT NO.: 594020	DRAWING FILE NAME: S:\Client\Humboldt\07-300 Pine Hill\CAD\Roadway\07300r1c001.dgn	APPROVED BY:
PLOT DATE: 12-3-2019	REVISION DATE: 11-19-2019	

QUINCY ENGINEERING	COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS	SHEET 10 OF 28
	PINE HILL ROAD BRIDGE OVER SWAIN SLOUGH	
	CONSTRUCTION DETAILS	

**DITCH "D1"**

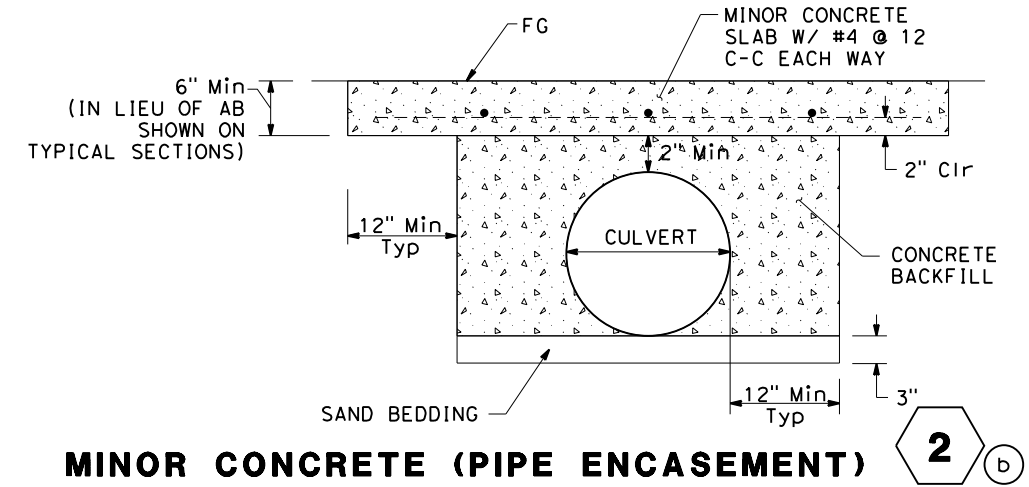
STATION	LINE	OFFSET	L+/R+	WIDTH	FL Elev	SLOPE (%)
11+93.00	"A"	15.91	L+	15.91	4.07	
12+00.00	"A"	16.67	L+	15.25	4.05	-0.29
12+20.00	"A"	18.93	L+	12.95	4.00	-0.25
12+40.00	"A"	21.30	L+	10.47	3.95	-0.25
12+60.00	"A"	23.00	L+	8.78	3.96	0.05
12+80.00	"A"	23.57	L+	7.55	3.97	0.05
13+00.00	"A"	24.27	L+	6.73	3.98	0.05
13+20.00	"A"	25.11	L+	6.25	3.97	-0.05
13+40.00	"A"	25.97	L+	5.62	3.95	-0.10
13+60.00	"A"	26.50	L+	6.71	4.17	1.10
13+80.00	"A"	28.04	L+	5.17	4.01	-0.80
14+00.00	"A"	29.13	L+	2.81	3.85	-0.80
14+20.00	"A"	30.22	L+	2.44	3.58	-1.35
14+29.00	"A"	30.96	L+	2.42	3.26	-3.56

**DITCH "D2"**

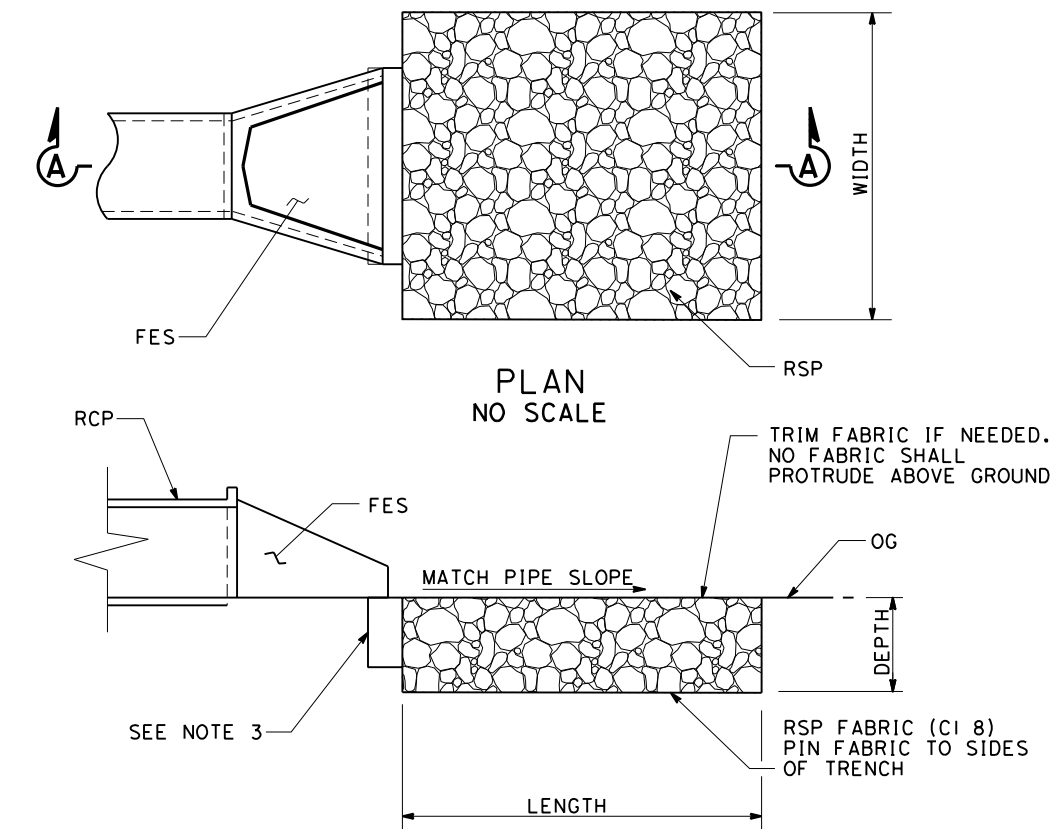
STATION	LINE	OFFSET	L+/R+	WIDTH	FL Elev	SLOPE (%)
11+93.00	"A"	17.97	R+	13.80	3.62	
12+00.00	"A"	18.57	R+	13.16	3.60	-0.29
12+20.00	"A"	20.39	R+	11.25	3.52	-0.40
12+40.00	"A"	22.09	R+	9.62	3.61	0.45
12+60.00	"A"	23.12	R+	8.83	3.88	1.35
12+80.00	"A"	23.31	R+	8.94	4.14	1.30
13+00.00	"A"	23.62	R+	8053	4.41	1.35
13+20.00	"A"	24.30	R+	7.52	4.51	0.50
13+40.00	"A"	25.04	R+	6052	4.58	0.35
13+60.00	"A"	25.75	R+	7.79	4.67	0.45
13+80.00	"A"	27.42	R+	5015	4.43	-1.20
14+00.00	"A"	28.01	R+	4.50	4.59	0.80
14+18.00	"A"	28.74	R+	5.45	4.53	-0.33

**DITCH "D3"**

STATION	LINE	OFFSET	L+/R+	FL Elev	SLOPE (%)
15+40.00	"A"	22.05	L+	7.80	
15+60.00	"A"	21.96	L+	7.90	0.50
15+80.00	"A"	21.63	L+	8.00	0.50
15+90.00	"A"	21.66	L+	8.05	0.50
16+00.00	"A"	20.70	L+	8.10	0.50
16+13.34	"A"	20.08	L+	8.17	0.52
16+30.79	"A"	19.36	L+	8.25	0.46
16+40.00	"A"	19.01	L+	8.30	0.54
16+44.96	"A"	18.83	L+	8.33	0.60



**MINOR CONCRETE (PIPE ENCASEMENT)**



**ROCK SLOPE PROTECTION (RSP)**  
NO SCALE

**TABLE 1**

DRAINAGE UNIT	RSP CLASS	LENGTH	DEPTH	WIDTH
		FT	FT	FT
1d	150 LB, CLASS III, METHOD B	3.0	1.8	4.5
2d	150 LB, CLASS III, METHOD B	5.0	1.8	1.0
3d	150 LB, CLASS III, METHOD B	7.0	1.8	4.5



BAR IS ONE INCH ON ORIGINAL DRAWING  
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ROAD NAME:	PINE HILL ROAD	MILE POST:	0.19
ROAD NO.:	3J430	EA NO.:	
PROJECT NO.:	BRLO-5904(112)	PPNO.:	
CONTRACT NO.:	594020	DRAWING FILE NAME:	S:\Client\Humboldt\07-300 Pine Hill\CAD\Roadway\07300rka001.dgn
PLOT DATE:	12-3-2019	REVISION DATE:	11-19-2019

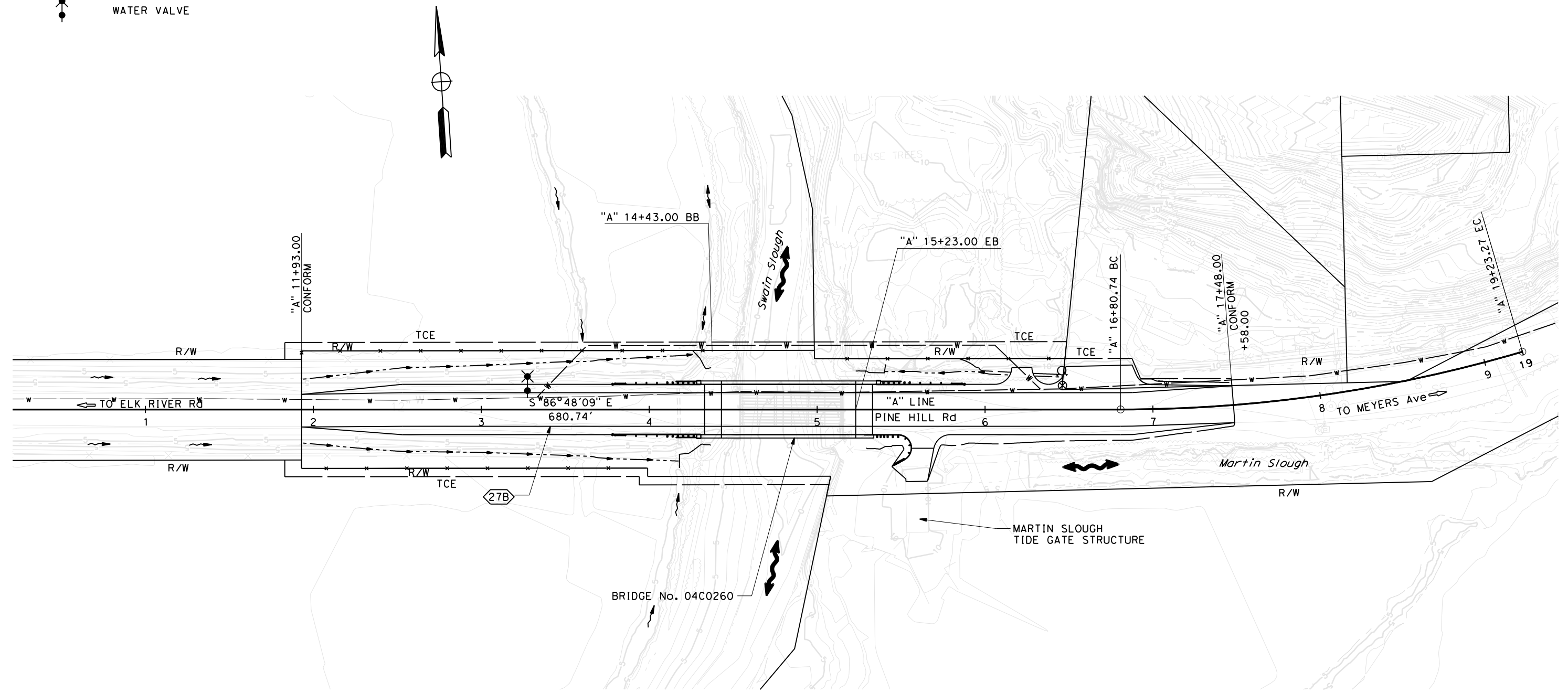
DESIGNED BY:	KP
DRAWN BY:	KP
REVIEWED BY:	JJ
APPROVED BY:	

COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS
<b>PINE HILL ROAD BRIDGE OVER SWAIN SLOUGH</b>
UTILITY PLAN

SHEET **11**  
OF  
**28**

**LEGEND:**

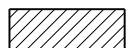



- DIRECTION OF TRAFFIC
- EXISTING WATER LINE
- RELOCATED WATER LINE (BY OTHERS)
- EXISTING WATER VALVE
- WATER VALVE



**NOTES:**

1. THIS PLAN ACCURATE FOR DETOUR WORK ONLY.
2. SIGN LOCATIONS SHOWN ARE APPROXIMATE. EXACT LOCATIONS TO BE DETERMINED BY THE ENGINEER.
3. R11-2 SIGNS MOUNTED ON BARRICADE.

**LEGEND:**

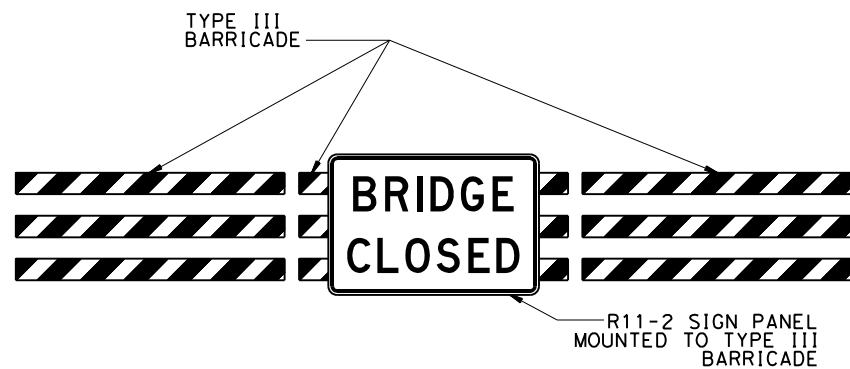
-  CONSTRUCTION AREA
-  CONSTRUCTION AREA SIGN
-  TYPE III BARRICADE
-  USE WITH FLASHERS AT NIGHT



**A-1 SIGN DETAIL**  
NO SCALE

**TYPE III BARRICADE**

LINE	STATION	EA
"A"	8+50	3
"A"	20+85	3
<b>TOTAL</b>		<b>6</b>

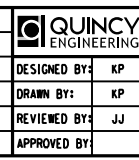


**BRIDGE CLOSURE DETAIL**



BAR IS ONE INCH ON ORIGINAL DRAWING  
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ROAD NAME: PINE HILL ROAD	MILE POST: 0.19
ROAD NO.: 3J430	EA NO.:
PROJECT NO.: BRLO-5904(112)	DESIGNED BY: KP
CONTRACT NO.: 594020	PPNO.:
DRAWING FILE NAME: S:\Client\Humboldt\07-300 Pine Hill\CAD\Roadway\07300rmp001.dgn	REVIEWED BY: JJ
PLOT DATE: 12-3-2019	REVISION DATE: 11-19-2019
	APPROVED BY:

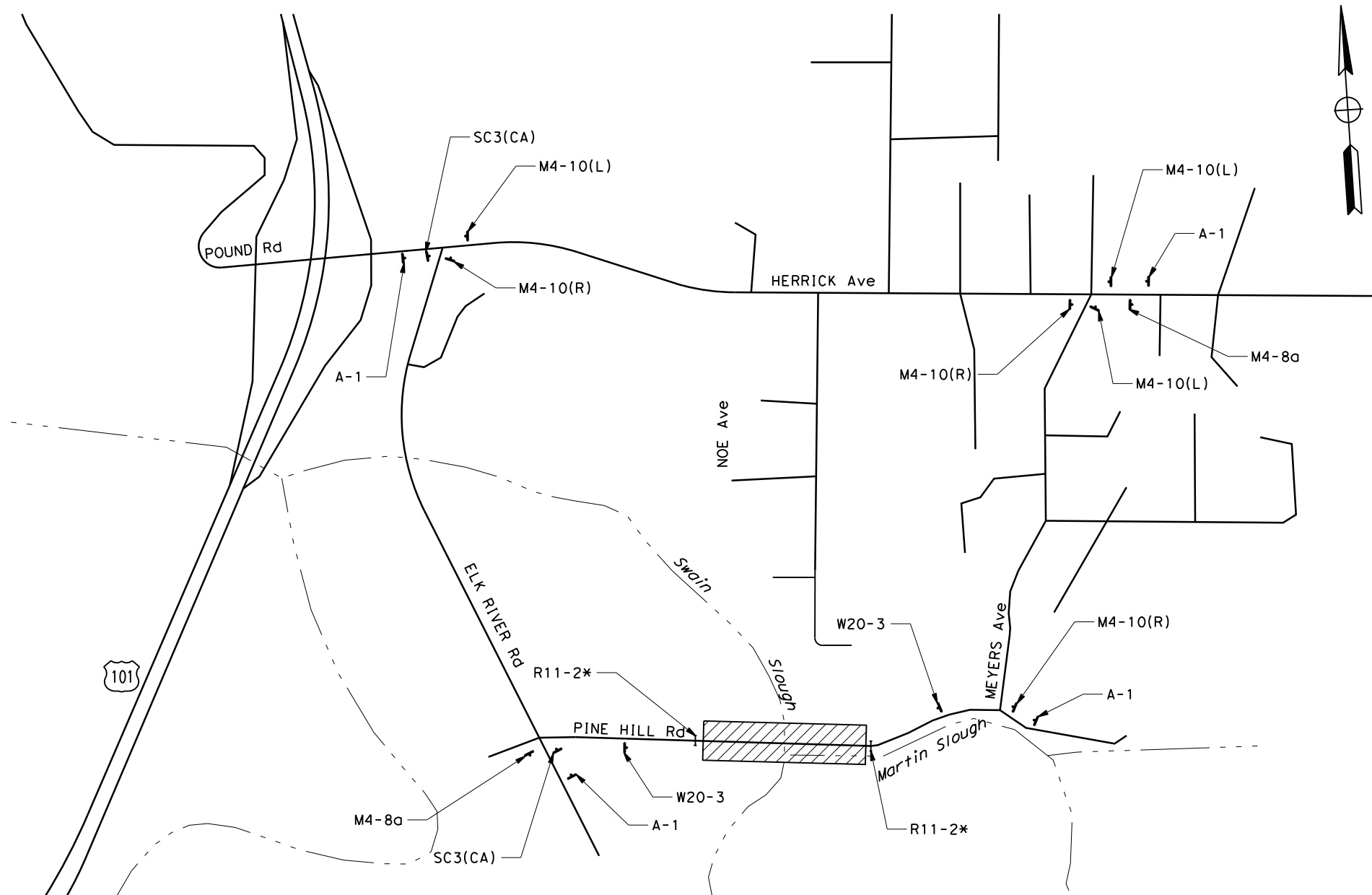


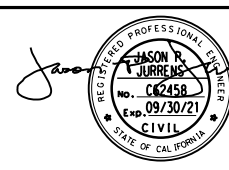
<b>COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS</b>	
<b>PINE HILL ROAD BRIDGE OVER SWAIN SLOUGH</b>	
<b>DETOUR PLAN</b>	

SHEET **12**  
OF  
**28**

**CONSTRUCTION AREA SIGNS**

SIGN CODE	PANEL SIZE	SIGN MESSAGE	NUMBER OF POSTS AND SIZE	NUMBER OF SIGNS
R11-2	48" x 30"	ROAD CLOSED	1 - 4" x 6"	2
W20-3	36" x 36"	ROAD CLOSED AHEAD	1 - 4" x 6"	2
M4-8a	24" x 18"	END DETOUR	1 - 4" x 6"	2
M4-10(R)	48" x 18"	DETOUR ARROW SIGN	1 - 4" x 6"	3
M4-10(L)	48" x 18"	DETOUR ARROW SIGN	1 - 4" x 6"	3
SC3(CA)	36" x 12"	DETOUR WITH ARROW	1 - 4" x 6"	2
A-1	XX" x XX"	PINE HILL ROAD CLOSED AT SWAIN SLOUGH	2 - 4" x 6"	4





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ROAD NAME: PINE HILL ROAD	MILE POST: 0.19	DESIGNED BY: KP
ROAD NO.: 3J430	EA NO.:	DRAWN BY: KP
PROJECT NO.: BRLO-5904(112)	PPNO.:	REVIEWED BY: JJ
CONTRACT NO.: 594020		APPROVED BY:
DRAWING FILE NAME: S:\Client\Humboldt\07-300 Pine Hill\CAD\Roadway\07300rpo001.dgn		
PLOT DATE: 12-3-2019	REVISION DATE: 11-19-2019	

COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS <b>PINE HILL ROAD BRIDGE OVER SWAIN SLOUGH</b>	SHEET <b>13</b> OF <b>28</b>
<b>SUMMARY OF QUANTITIES</b>	

**ROADWAY ITEMS**

FROM	TO	ROADWAY EXCAVATION	EMBANKMENT (N)	IMPORTED BORROW	CLASS 2 AGGREGATE BASE	HOT MIX ASPHALT (TYPE A)	REMOVE FENCE	REMOVE MARKER	FENCE (TYPE BW, METAL POST)	COMMENTS	
LINE	STATION	LINE	STATION	CY	CY	CY	TON	LF	EA	LF	
"A"	11+93.00	"A"	14+43.00 BB	420	686	266	232	156			
"A"	15+23.00 EB	"A"	17+48.00	102	271	169	219	159			
"A"	15+67.59			2	21	19				DWY AT TIDAL GATE STRUCTURE	
"A"	ABUTMENT 1			36	1	-35				CONTOUR GRADING	
"A"	ABUTMENT 2			23	2	-21				CONTOUR GRADING	
"A"	11+93.00 LT	"A"	14+48.92 LT					256			
"A"	19+93.00 RT	"A"	14+38.43 RT					246			
"A"	15+14.03 LT	"A"	16+45.89 LT					136			
"A"	11+93.00 LT	"A"	14+33.15 LT						246		
"A"	11+93.00 RT	"A"	14+17.30 RT						232		
"A"	15+14.00 LT	"A"	16+47.60 LT						134		
	EXIST BRIDGE BB L+								1	EXIST BRIDGE	
	EXIST BRIDGE BB R+								1	EXIST BRIDGE	
	EXIST BRIDGE EB L+								1	EXIST BRIDGE	
	EXIST BRIDGE EB R+								1	EXIST BRIDGE	
				583	981	398	451	315	638	4	612

(N) NOT A SEPARATE PAY ITEM, FOR INFORMATION ONLY.

**DRAINAGE ITEMS**

DRAINAGE SYSTEM	DRAINAGE UNIT No.	STATION	12" CONCRETE FLARED END SECTION	18" CONCRETE FLARED END SECTION	12" REINFORCED CONCRETE PIPE	18" REINFORCED CONCRETE PIPE	ROCK SLOPE PROTECTION (150 LB, CLASS III, METHOD B)	RSP FABRIC (CLASS 8)	REMOVE PIPE	DESCRIPTION
			EA	EA	LF	LF	CY	SQYD	LF	
1	a	"A" 14+17.66		1						18" CONCRETE FLARED END SECTION
	b					55.2				18" X 55.2' RCP
	c	"A" 14+17.66		1						18" CONCRETE FLARED END SECTION
	d						0.9	5.9		RSP (150 LB, CLASS III, METHOD B)
	e								37	REMOVE PIPE 18"
2	a	"A" 16+30.78	1							12" CONCRETE FLARED END SECTION
	b				17.5					12" X 17.5' RCP WITH MINOR CONCRETE (PIPE ENCASEMENT)
	c	"A" 16+13.34	1							12" CONCRETE FLARED END SECTION
	d						0.3	4.4		RSP (150 LB, CLASS III, METHOD B)
3	a	"A" 15+40.00		1						18" CONCRETE FLARED END SECTION
	b					22.0				18" X 22.0' RCP
	c	"A" 15+18.25		1						18" CONCRETE FLARED END SECTION
	d						2.1	9.5		RSP (150 LB, CLASS III, METHOD B)
		TOTAL	2	4	17.5	77.2	3.3	19.8	37	

**GUARD RAILING**

FROM	TO	TRANSITION RAILING (TYPE WB-31)	ALTERNATIVE IN LINE TERMINAL SYSTEM	SHORT RADIUS GUARDRAIL SYSTEM	OBJECT MARKER (TYPE P)				
LINE	FROM	OFFSET	LINE	TO	OFFSET	EA	EA	EA	EA
"A"	13+78.25	15.00' L+	"A"	14+28.25	15.00' L+	1	1		1
"A"	13+78.25	15.00' R+	"A"	14+28.25	15.00' R+	1	1		1
"A"	15+37.75	15.00' L+	"A"	15+87.75	15.00' L+	1	1		1
"A"	15+33.75	15.00' R+	"A"	15+44.51	34.03' R+			1	1
TOTAL						3	3	1	4

**EROSION CONTROL**

LINE	FROM	TO	LT/RT	ROLLED EROSION CONTROL PRODUCT (BLANKET)	HYDROSEED	TEMPORARY HIGH-VISIBILITY FENCE	FIBER ROLLS
				SQFT	SQFT	LF	LF
"A"	11+93.00	14+43.00 BB	LT	4463	4463	271	262
"A"	11+93.00	14+43.00 BB	RT	4282	4282	273	259
"A"	14+43.00 BB	17+48.00	LT	1015	1015	196	184
"A"	14+43.00 BB	17+48.00	RT	681	681	244	221
TOTAL				10441	10441	984	926

**PAVEMENT DELINEATION**

FROM	TO	THERMOPLASTIC TRAFFIC STRIPE	PAVEMENT MARKER (RETRO-REFLECTIVE)						
LINE	STATION	OFFSET	LINE	STATION	OFFSET	DETAIL No.	4" WHITE FT	4" YELLOW FT	TYPE D
"A"	11+93.00		"A"	17+48.00		22		1110	48
"A"	11+93.00	RT	"A"	17+48.00	RT	27B	555		
"A"	11+93.00	LT	"A"	17+48.00	LT	27B	555		
SUBTOTAL							1110	1110	
TOTAL							2220		48

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
01	Hum	CR	0.19	14	28

Scott McCauley 12-3-19  
 REGISTERED CIVIL ENGINEER DATE

SCOTT A. MCCAULEY  
 No. 71495  
 Exp. 12-31-19  
 CIVIL  
 STATE OF CALIFORNIA

PLANS APPROVAL DATE

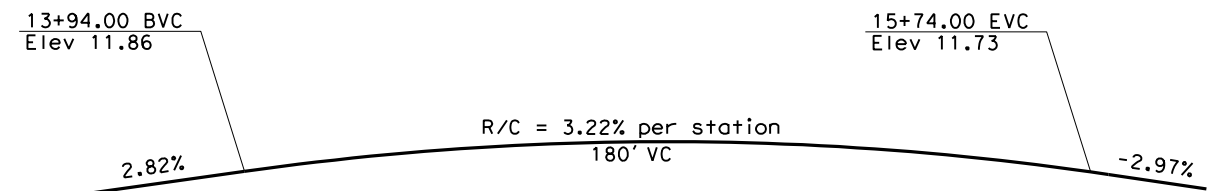
The County or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

QUINCY ENGINEERING, INC  
 11017 Cobblerock Drive, Suite 100  
 Rancho Cordova, CA 95670

COUNTY OF HUMBOLDT  
 DEPARTMENT OF PUBLIC WORKS  
 1106 2nd Street  
 Eureka, CA 95501

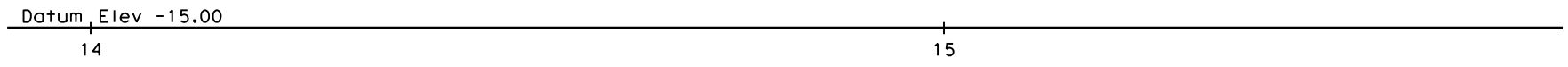
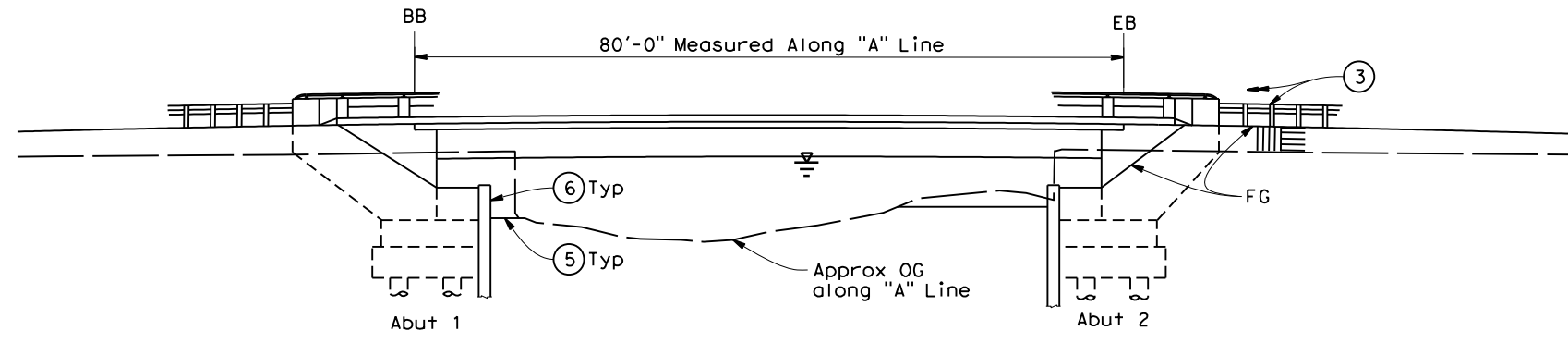
### INDEX TO PLANS

Sheet No.	Title
1	General Plan
2	Deck Contours
3	Foundation Plan
4	Abutment Layout
5	Abutment Details No. 1
6	Abutment Details No. 2
7	Typical Section
8	Girder Layout
9	Wide Flange Girder Details No. 1
10	Wide Flange Girder Details No. 2
11	Construction Sequence
12	Miscellaneous Details
13	Log of Test Borings No. 1
14	Log of Test Borings No. 2
15	Log of Test Borings No. 3



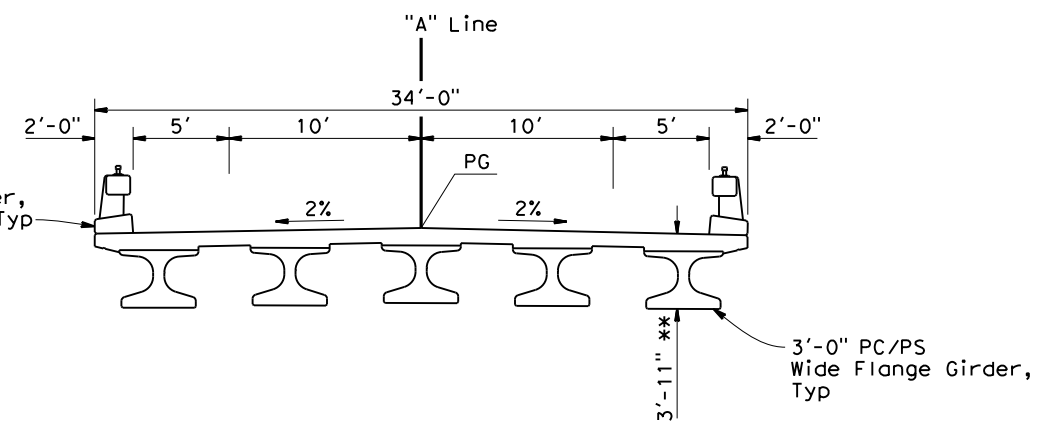
### PROFILE GRADE

No Scale



### ELEVATION

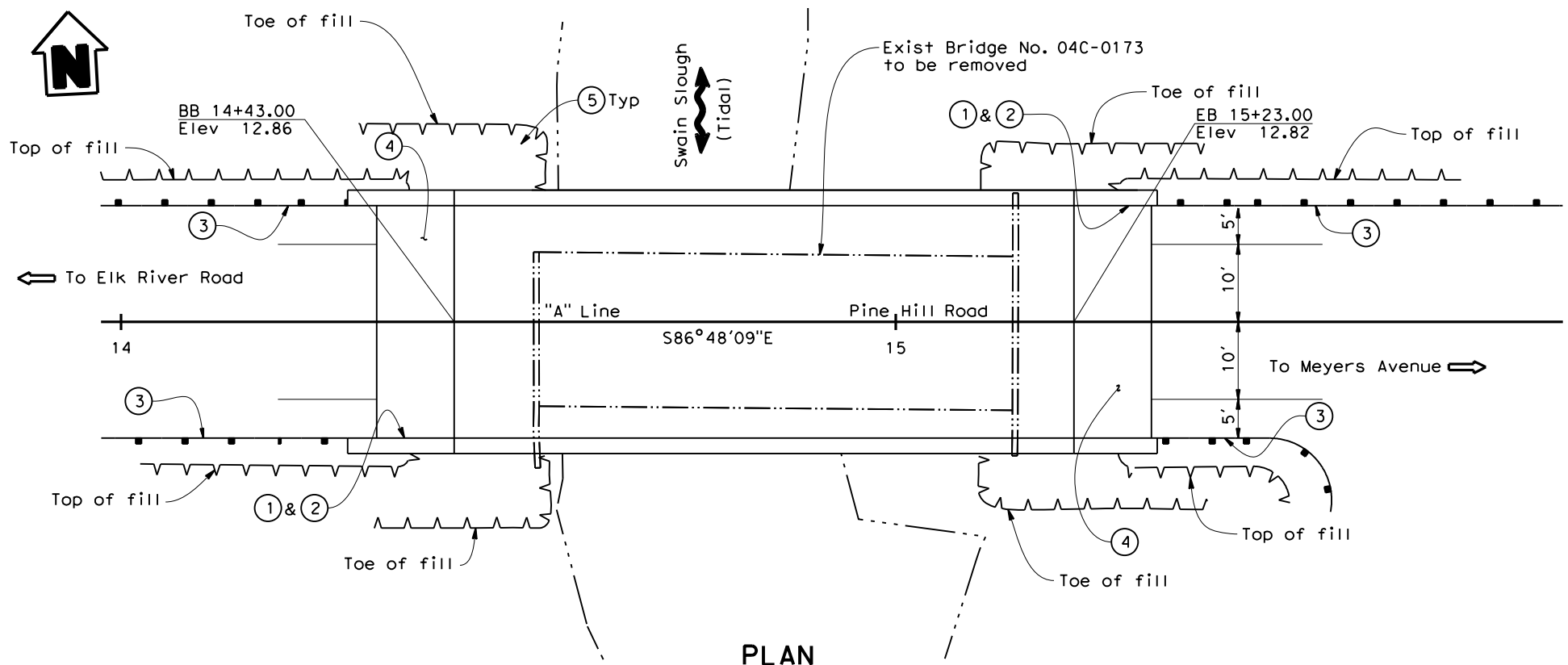
1"=10'



### TYPICAL SECTION

1"=5'

\*\* Structure Depth at centerline girder at midspan



### PLAN

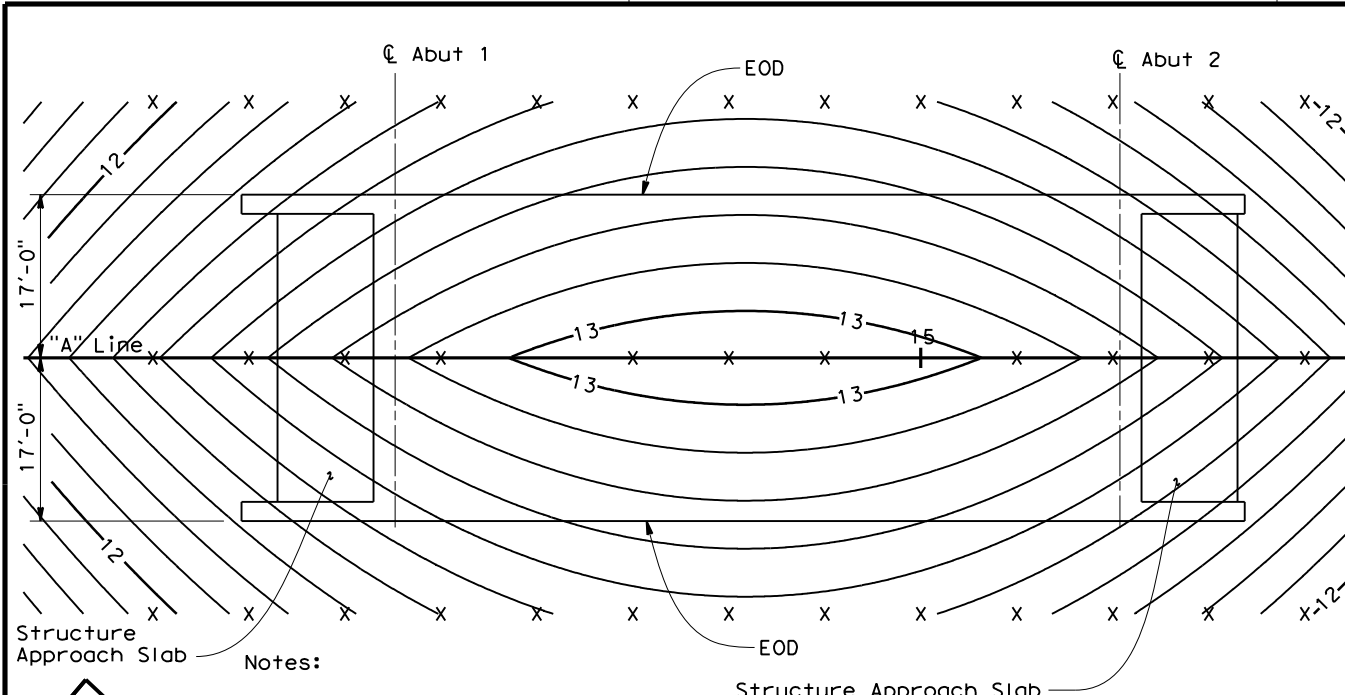
1"=10'

#### Notes:

- ① Paint Bridge Number "Bridge No. 04C0260"
- ② Paint "Swain Slough Bridge"
- ③ MGS, see Road Plans
- ④ Structure Approach Type EQ(10)
- ⑤ Contour Grading, see Road Plans
- ⑥ Steel Sheet Piling, see "Miscellaneous Details" sheet
- ▽ King Tide water surface elevation = 8.5' NAVD
- Existing structure, Br. No. 04C0173, to be removed

DESIGN OVERSIGHT	DESIGN	BY L. Smith	CHECKED J. Chou	LOAD & RESISTANCE FACTOR DESIGN	LIVE LOADING: HL93 AND PERMIT DESIGN VEHICLE	PREPARED FOR THE COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS	BRIDGE NO.	<b>SWAIN SLOUGH BRIDGE</b>	
	DETAILS	BY B. Maechler	CHECKED J. Chou	LAYOUT	BY L. Smith		CHECKED J. Chou		04C0260
	QUANTITIES	BY J. Cruz	CHECKED H. Chou	SPECIFICATIONS	BY S. McCauley		PLANS AND SPECS COMPARED		POST MILES
SIGN OFF DATE							0.19		
DESIGN GENERAL PLAN SHEET (ENGLISH) (REV.7/16/10)	ORIGINAL SCALE IN INCHES FOR REDUCED PLANS						UNIT: PROJECT NUMBER & PHASE:	CONTRACT NO.:	DISREGARD PRINTS BEARING EARLIER REVISION DATES
87 of 113							0 1 2 3	5/22/15	SHEET 1 OF 15

FILE => S:\Client\Humboldt\H07-300 Pine Hill\CAD\Bridges\H07300a-a-gp01.dgn



Notes:  
 X = 10' intervals along station line  
 Contours Intervals = 0.10'  
 Contours do not include camber

**PLAN**  
 1"=10'

**QUANTITIES**

Bridge Removal	.....	LUMP	SUM
Structure Excavation (Type A)	.....	370	CY
Structure Backfill (Bridge)	.....	117	CY
Crushed Rock Backfill	.....	51	CY
Temporary Shoring	.....	LUMP	SUM
Furnish Sheet Pile Shoring	.....	5002	SOFT
Drive Steel Sheet Pile	.....	5002	SOFT
Furnish 24" Cast-In-Steel-Shell Concrete Piling	.....	2446	LF
Drive 24" Cast-In-Steel-Shell Concrete Piling	.....	24	EA
Seal Course Concrete	.....	116	CY
Structural Concrete, Bridge Footing	.....	91	CY
Structural Concrete, Bridge	.....	86	CY
Structural Concrete, Bridge (Polymer Fiber)	.....	99	CY
Structural Concrete, Approach Slab (Type E0)	.....	23	CY
Furnish Precast Prestressed Concrete Girder (70'-80')	.....	5	EA
Erect Precast Prestressed Concrete Girder	.....	5	EA
Joint Seal (MR = 1/2")	.....	68	LF
Bar Reinforcing Steel (Epoxy Coated) (Bridge)	.....	121209	LB
Miscellaneous Metal	.....	1430	LB
Concrete Barrier, Type 80 (Mod)	.....	209	LF



	Structural Concrete, Bridge
	Prestressed Concrete PC/PS Wide Flange Girder
	Structural Concrete, Bridge (Polymer Fiber) (f'c = 4.0 ksi @ 28 days)
	Structural Concrete, Bridge Footing
	Structural Concrete, Approach Slab
	Seal Course Concrete
	Structural Concrete, Bridge (Piles) (f'c = 4.0 ksi @ 28 days)

**CONCRETE STRENGTH AND TYPE LIMITS**  
 No Scale

**GENERAL NOTES**  
**LOAD AND RESISTANCE FACTOR DESIGN**

DESIGN: AASHTO LRFD Bridge Design Specifications, 6th Edition with California Amendments

SEISMIC DESIGN: Caltrans Seismic Design Criteria (SDC) Version 1.7 dated April 2013

DEAD LOAD: Includes 35 psf for future wearing surface. The dead load between girders has been increased by 10% to allow for the use of steel deck forms.

LIVE LOADING: HL93 and Permit Design Vehicle.

SEISMIC LOADING: Peak Ground Acceleration = 0.3 g  
 Soil Profile: Vs30 = 140m/s  
 Movement Magnitude: Mmax = 7.25

TSUNAMI LOADING: Tsunami design based on Caltrans "Tsunami Forces on Selected California Coastal Bridges" (Report No. CAB-1983) dated June 2013  
 Assumed Tsunami WSE = 20.0'  
 Initial impact velocity = 15.0 ft/s  
 Max Mass Movement flux  
 Velocity = 10.6 ft/s

REINFORCED CONCRETE: fy = 60 ksi  
 f'c = 3.6 ksi, unless otherwise specified  
 n = 8

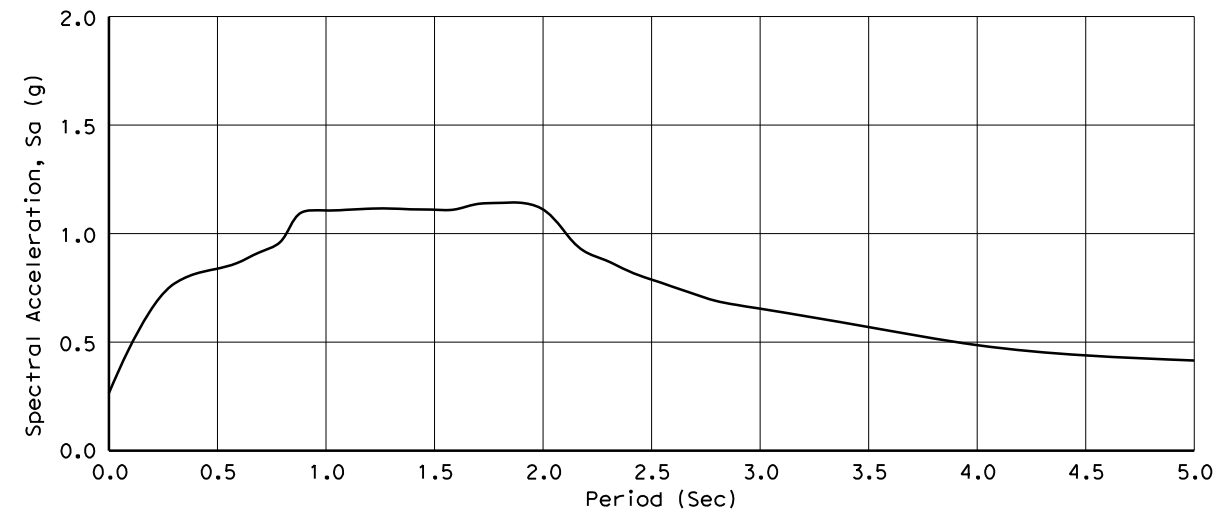
PRECAST PRESTRESSED CONCRETE: See "Prestressing Notes" in "Wide Flange Girder Details No.1" sheet.

PILES: ASTM A252, Grade 3  
 Fy = 45 ksi Fu = 66 ksi

SEA LEVEL RISE: Abutments have been designed to accommodate a future 4'-6" grade raise due to sea level rise. See "Abutment Details No. 1" for limits of wing wall design.

PERMANENT STEEL SHEET PILES: Type: Z-Section  
 ASTM A572 Grade 60  
 Fy = 60 ksi

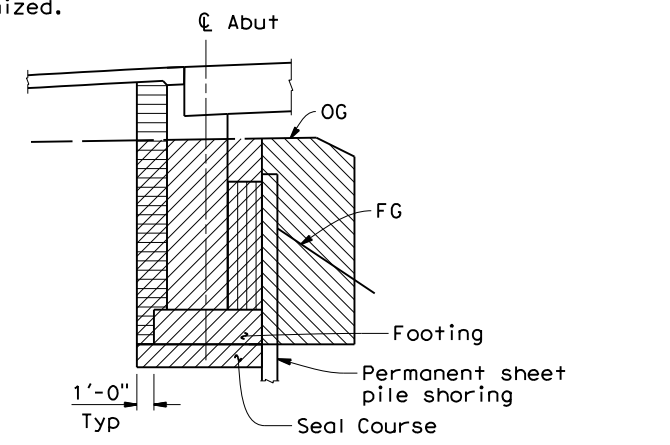
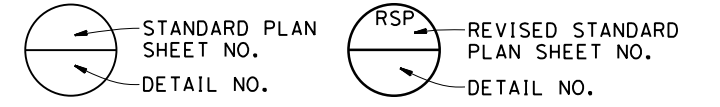
ANCHOR TIE DOWNS: Threaded rods shall conform to ASTM F1554 Grade 105 and shall be hot-dipped galvanized. Nuts shall conform to ASTM A563 Grade DH and shall be hot-dipped galvanized hardened washers shall conform to ASTM F436 and shall be hot-dipped galvanized. Bearing Plates shall conform to ASTM A572 Grade 50 and shall be hot-dipped galvanized.



**ACCELERATION RESPONSE SPECTRA CURVE (SITE SPECIFIC)**  
 No Scale

**STANDARD PLANS DATED 2018**

A3A	Abbreviations (sheet 1 of 3)
A3B	Abbreviations (sheet 2 of 3)
A3C	Abbreviations (sheet 3 of 3)
A10A	Legend - Lines and Symbols (sheet 1 of 5)
A10B	Legend - Lines and Symbols (sheet 2 of 5)
A10C	Legend - Lines and Symbols (sheet 3 of 5)
A10D	Legend - Lines and Symbols (sheet 4 of 5)
A10E	Legend - Lines and Symbols (sheet 5 of 5)
A10F	Legend - Soil (Sheet 1 of 2)
A10G	Legend - Soil (Sheet 2 of 2)
A62B	Limits of Payment for Excavation and Backfill Bridge Surcharge and Wall
RSP B0-1	Bridge Details
B0-3	Bridge Details
B0-5	Bridge Details
B0-13	Bridge Details
B6-21	Joint Seals (Maximum Movement Rating = 2")
B9-4	Structure Approach Type E0 (10)
B9-5	Structure Approach Slab Details
B11-51	Tubular Handrailing
B11-60	Concrete Barrier Type 80 (Sheet 1 of 2)
B11-61	Concrete Barrier Type 80 (Sheet 2 of 2)



	Indicates Structure Excavation (Type A)
	Indicates Structure Backfill
	Indicates Roadway Excavation
	Indicates 3/4" Crushed Rock Backfill

**LIMITS OF PAYMENT FOR EXCAVATION AND BACKFILL**  
 No Scale

X DESIGN OVERSIGHT  
 X SIGN OFF DATE

DESIGN	BY L. Smith	CHECKED J. Chou
DETAILS	BY B. Maechler	CHECKED J. Chou
QUANTITIES	BY J. Cruz	CHECKED H. Chou

PREPARED FOR THE  
**COUNTY OF HUMBOLDT**  
 DEPARTMENT OF PUBLIC WORKS

Scott McCauley  
 PROJECT ENGINEER

BRIDGE NO.	04C0260
POST MILE	0.19

**SWAIN SLOUGH BRIDGE**  
**DECK CONTOURS**

DESIGN DETAIL SHEET (ENGLISH) (REV.03/14/12)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS



UNIT: PROJECT NUMBER & PHASE: X CONTRACT NO.: X

REVISION DATES	SHEET 2 OF 15
----------------	---------------

DATE PLOTTED => 12/23/2019 USERNAME => scottm TIME PLOTTED => 9:40:17 AM



### LOAD AND RESISTANCE FACTOR DESIGN PILE DATA TABLE

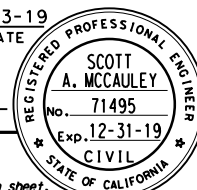
LOCATION	PILE TYPE	NOMINAL RESISTANCE (kips)		DESIGN TIP ELEVATION	SPECIFIED TIP ELEVATION	NOMINAL DRIVING RESISTANCE kips
		COMPRESSION	TENSION			
Abut 1	CISS 24x0.75	360	N/A	-120.0(a); -35.0(b); -55(c)	-120.0	460
Abut 2	CISS 24x0.75	360	N/A	-85.0(a); -35.0(b); -55(c)	-85.0	410

- (1) Design Tip Elevation is controlled by the following demands:  
 (a) Compression, (b) Tension, (c) Lateral Load  
 (2) Do not raise the tip elevation



### SCOUR DATA TABLE

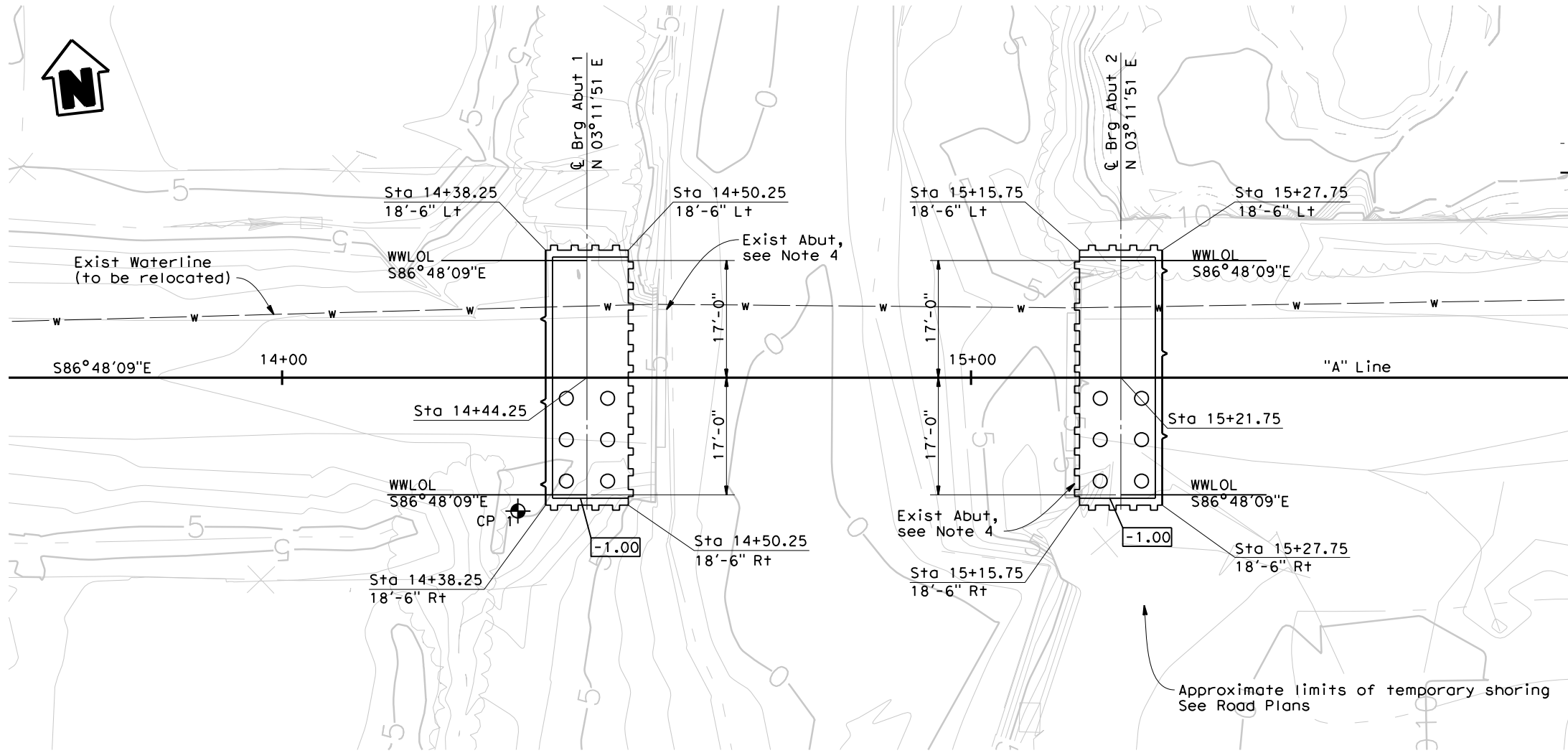
SUPPORT No.	LONG TERM (DEGRADATION AND CONTRACTION) SCOUR ELEVATION (ft)	SHORT TERM (LOCAL) SCOUR DEPTH (ft)
Abut 1	-1.1	8.2
Abut 2	-1.1	8.6

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
01	Hum	CR	0.19	16	28

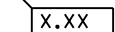

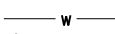
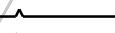
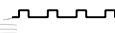


 12-3-19  
 REGISTERED CIVIL ENGINEER DATE  
 PLANS APPROVAL DATE

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**QUINCY ENGINEERING, INC**  
 11017 Cobblestone Drive, Suite 100  
 Rancho Cordova, CA 95670  

**COUNTY OF HUMBOLDT**  
 DEPARTMENT OF PUBLIC WORKS  
 1106 2nd Street  
 Eureka, CA 95501



#### Legend:

-  Indicates bottom of footing elevation
-  Indicates driven vertical pile, not all piles shown
-  Indicates existing 12" Waterline
-  Indicates Temporary Shoring
-  Indicates Steel Sheet Piling, see Note 2
-  Indicates survey control point

#### Notes:

- Seal course not shown.
- For permanent sheet pile shoring specified tip elevation and details, see "Miscellaneous Details" sheet.
- For Utility information, see Road Plans.
- Existing abutment locations shown are approximate. Contractor shall field verify actual abutment locations prior to constructing sheet pile and notify Engineer of potential conflict.

**PLAN**  
1"=10'

### SURVEY CONTROL DATA

No.	NORTHING	EASTING	ELEV	LINE	STATION	OFFSET	DESCRIPTION
CP1	2164937.002	5957031.194	10.172	"A"	14+34.23	19.36' Rt	SET80DSPIKE
CP2	2165008.312	5956085.236	9.142	"A"			BRASSCAPHUMCORE19203
CP4	2164947.122	5957432.660	9.366	"A"	18+35.19	0.88' Rt	SETMAGNAIL&DPWTAG
CP5	2165073.438	5957926.179	8.956	"A"			FD1510

Note:  
The Contractor shall verify all controlling field dimensions before ordering or fabricating any material.

### HYDROLOGIC SUMMARY

Drainage area: 5.5 Square Miles

	Design Flood	Base Flood
Frequency (years)	50	100
Discharge (cubic feet per second)	2200	2490
Water Surface Elev at Bridge (ft)	11.5	12.1

Flood plain data based upon information available when the plans were prepared and are shown to meet Federal requirements. The accuracy of said information is not warranted by the County and interested or affected parties should make their own investigations.

X  
 GEOTECHNICAL PROFESSIONAL APPROVAL DATE  
 X

X  
 DESIGN OVERSIGHT  
 X  
 SIGN OFF DATE

SCALE: As shown	VERT. DATUM NAVD 1988	HORZ. DATUM CCS 83 Zone 1
PHOTOGRAMMETRY AS OF: 08/2012	ALIGNMENT TIES See Survey County Data	
SURVEYED BY County	DRAFTED BY County	
FIELD CHECKED BY County	CHECKED BY County	

DESIGN BY L. Smith	CHECKED J. Chou
DETAILS BY L. Smith	CHECKED J. Chou
QUANTITIES BY J. Cruz	CHECKED H. Chou

**PREPARED FOR THE COUNTY OF HUMBOLDT PUBLIC WORKS DEPARTMENT**

Scott McCauley  
PROJECT ENGINEER

BRIDGE NO.	04C0260
POST MILE	0.19

## SWAIN SLOUGH BRIDGE FOUNDATION PLAN

FOUNDATION 80 OF SHEETS (ENGLISH) (REV.03/14/12)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

0 1 2 3

UNIT: PROJECT NUMBER & PHASE: X

CONTRACT NO.: X

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES	SHEET	OF
5/22/15	3	15

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
01	Hum	CR	0.19	17	28

Scott McCauley 12-3-19  
 REGISTERED CIVIL ENGINEER DATE

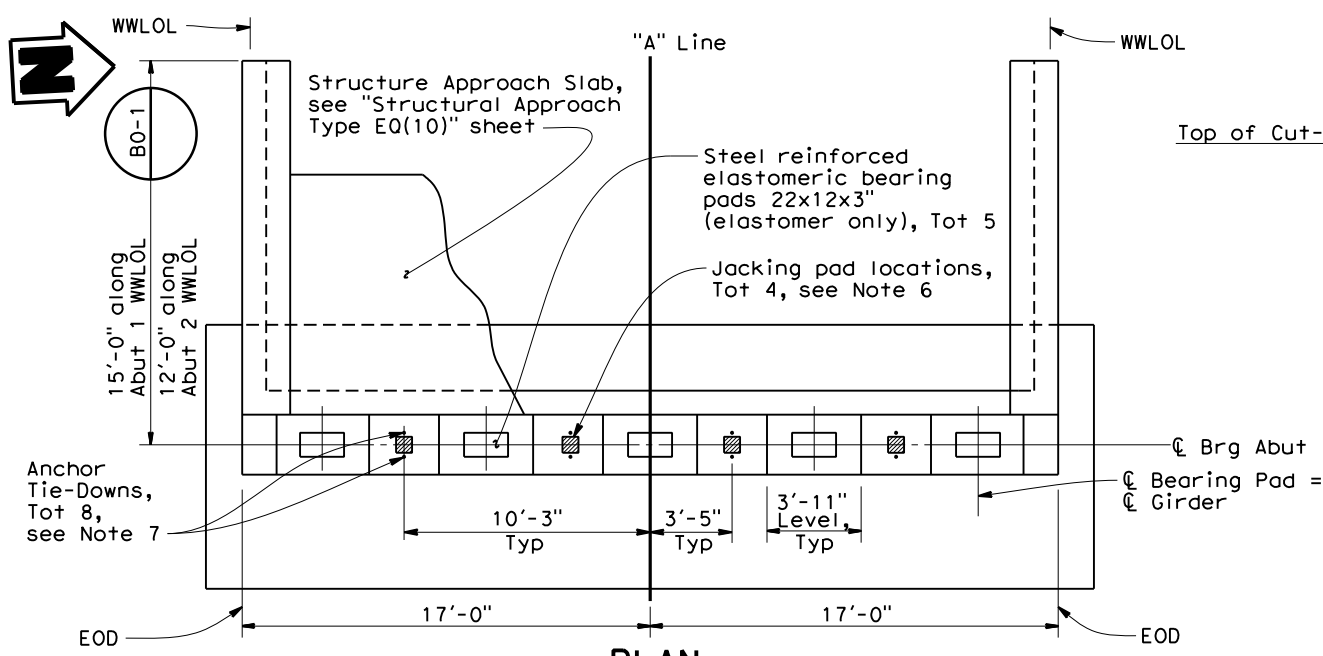
SCOTT A. MCCAULEY  
 No. 71495  
 Exp. 12-31-19  
 CIVIL  
 STATE OF CALIFORNIA

PLANS APPROVAL DATE

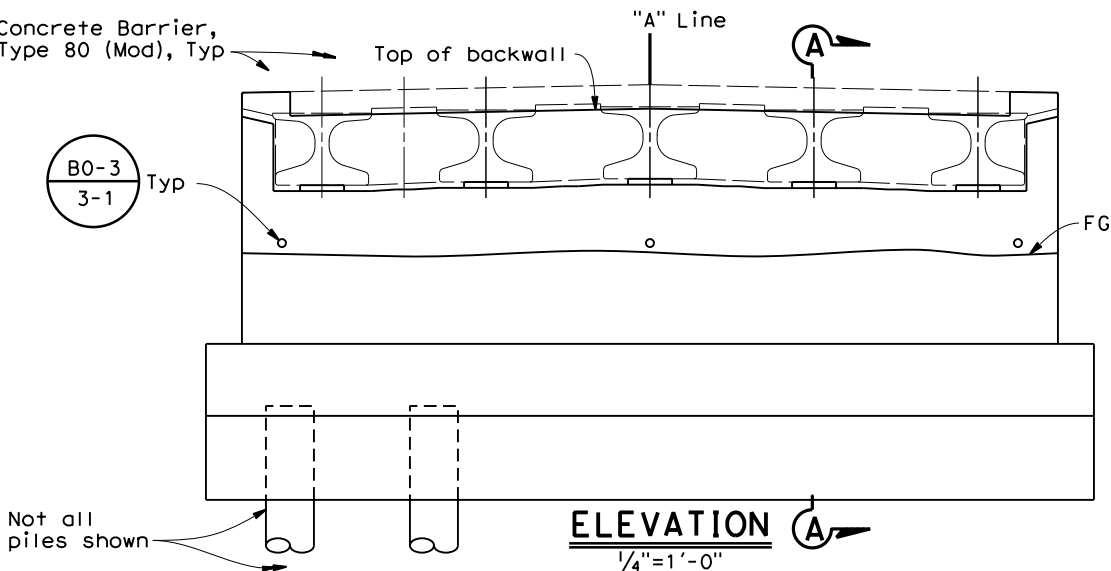
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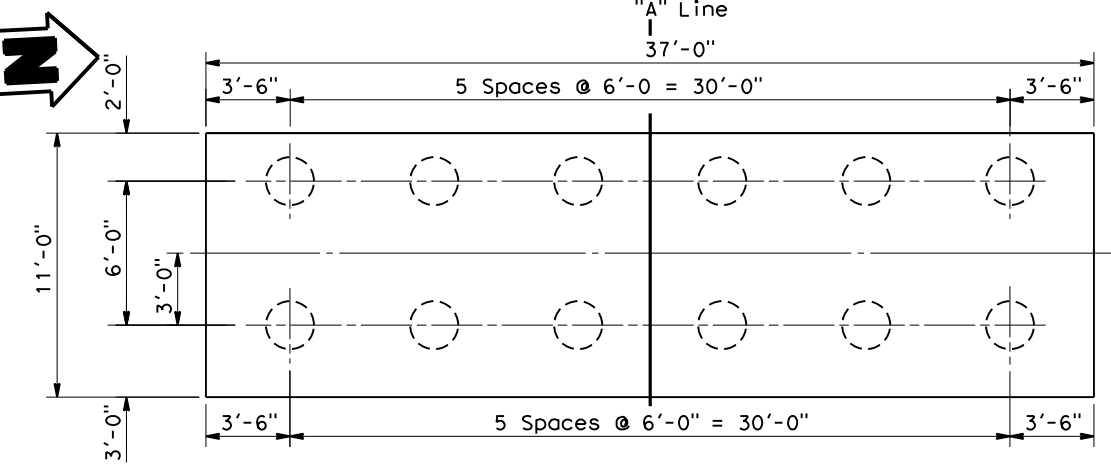
COUNTY OF HUMBOLDT  
 DEPARTMENT OF PUBLIC WORKS  
 1106 2nd Street  
 Eureka, CA 95501



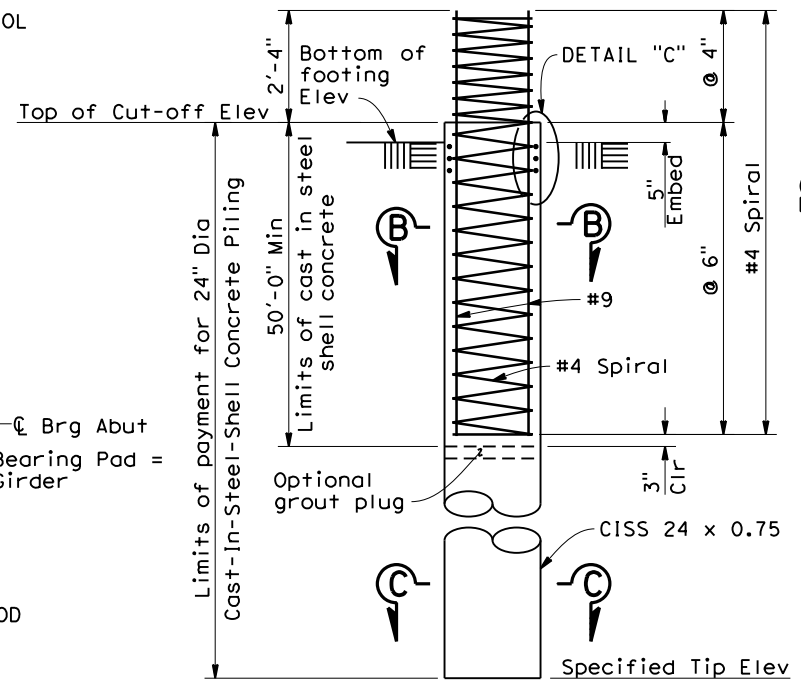
**PLAN**  
1/4"=1'-0"



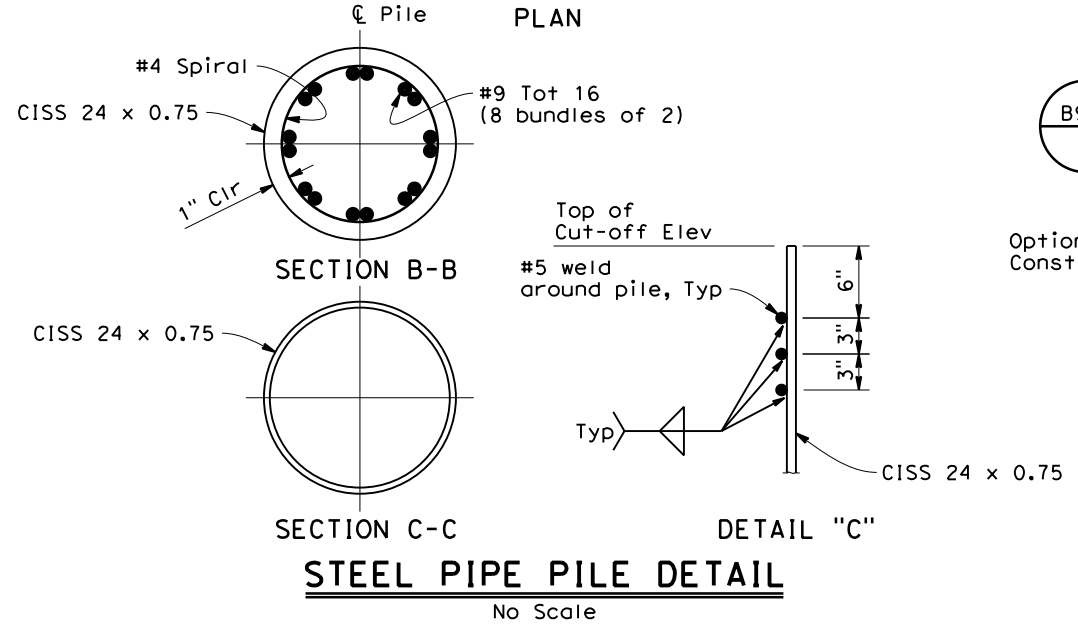
**ELEVATION A**  
1/4"=1'-0"



**FOOTING PLAN**  
1/4"=1'-0"



**DETAIL 1**  
No Scale

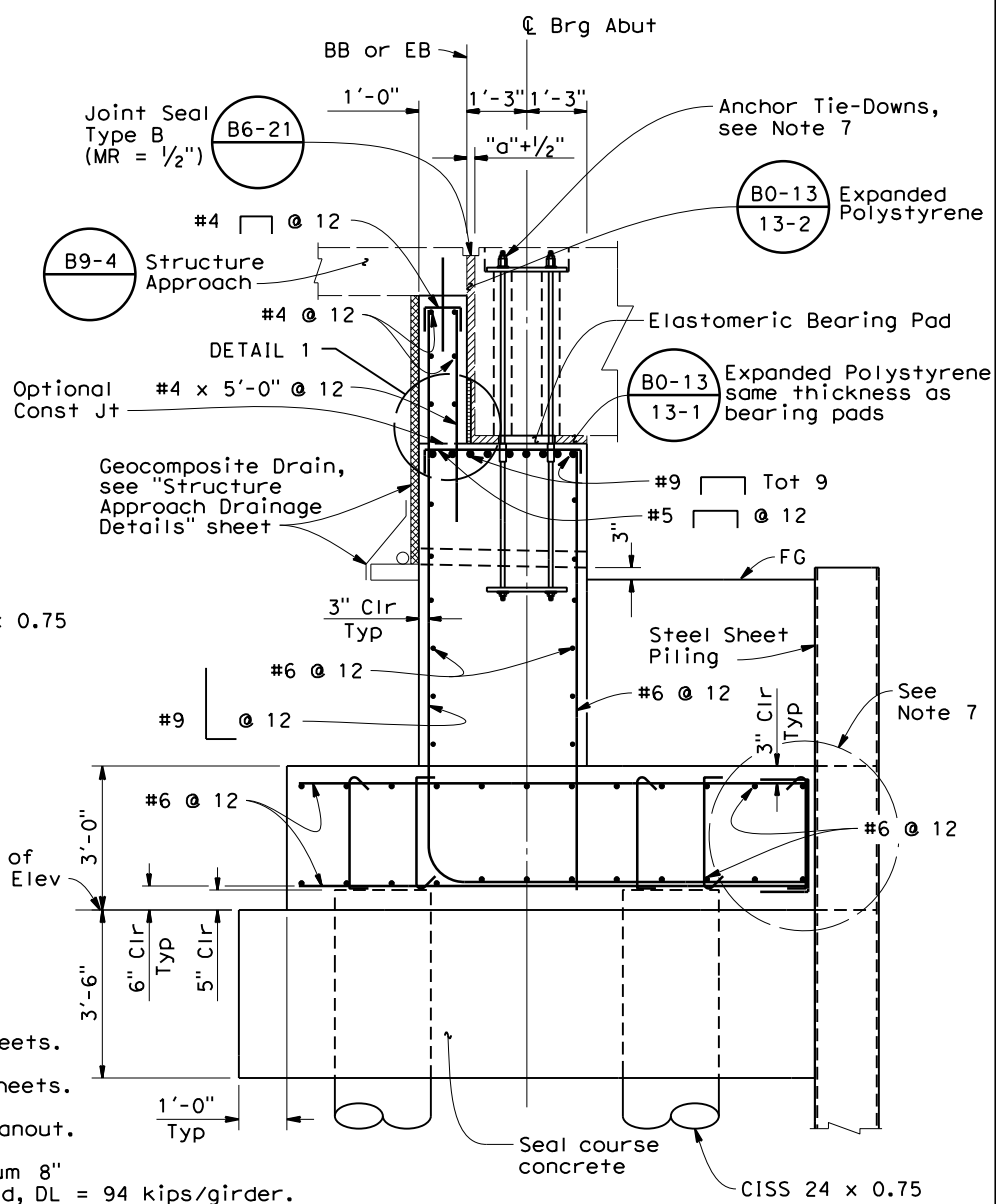
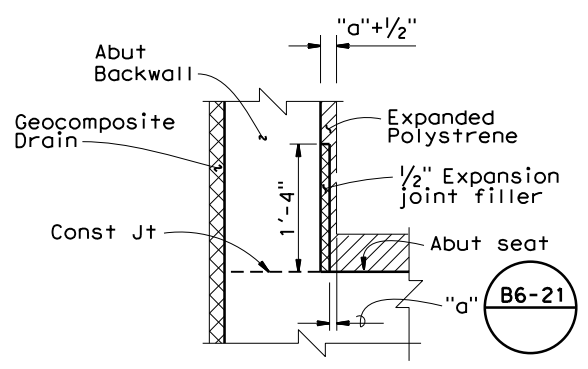


**Legend:**

○ Indicates vertical CISS 24 x 0.75

**Notes:**

1. Abutment 1 shown, Abutment 2 similar.
2. All reinforcement shall be pre-fabricated epoxy coated.
3. For sections and details not shown, see Abutment Detail sheets.
4. For Elastomeric Bearing Pad Details, see Abutment Detail sheets.
5. Retain 15 feet of undisturbed soil plug in piles during cleanout.
6. Jacking pads are for future grade rise only. Provide minimum 8" square level surface for jacking pads. Unfactored dead load, DL = 94 kips/girder.
7. For Anchor Tie-Down and Permanent Sheet Pile shoring details, see "Miscellaneous Details" sheet.



**SECTION A-A**  
1/2"=1'-0"

X DESIGN OVERSIGHT  
 X SIGN OFF DATE

DESIGN	BY L. Smith	CHECKED J. Chou
DETAILS	BY B. Maechler	CHECKED J. Chou
QUANTITIES	BY J. Cruz	CHECKED H. Chou

PREPARED FOR THE  
 COUNTY OF HUMBOLDT  
 DEPARTMENT OF PUBLIC WORKS

Scott McCauley  
 PROJECT ENGINEER

BRIDGE NO.	04C0260
POST MILE	0.19

**SWAIN SLOUGH BRIDGE**  
**ABUTMENT LAYOUT**

DESIGN DETAIL SHEET (ENGLISH) (REV.03/14/12)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

UNIT: PROJECT NUMBER & PHASE: X

CONTRACT NO.: X

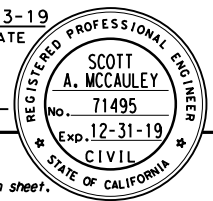
DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES	5/22/15	SHEET	4	OF	15
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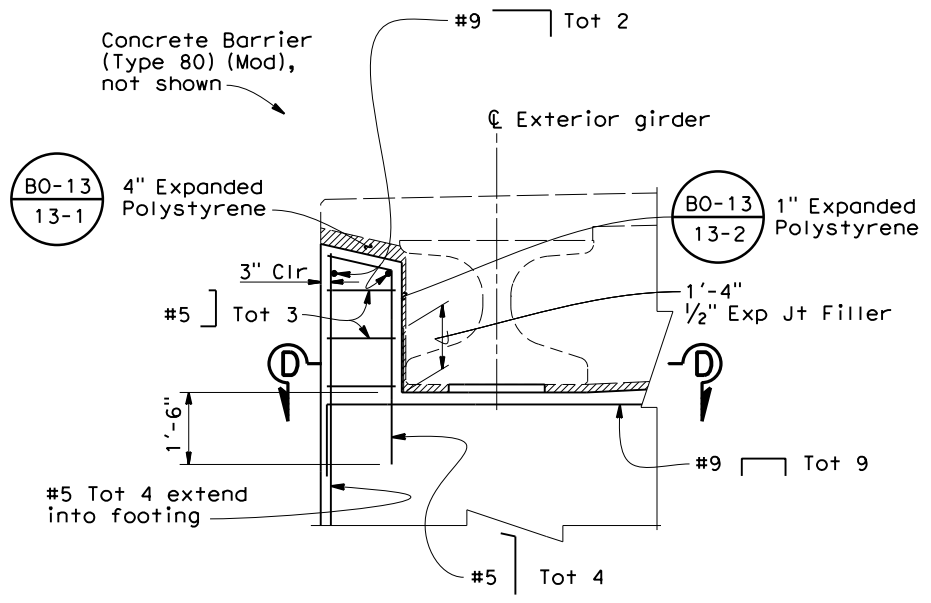
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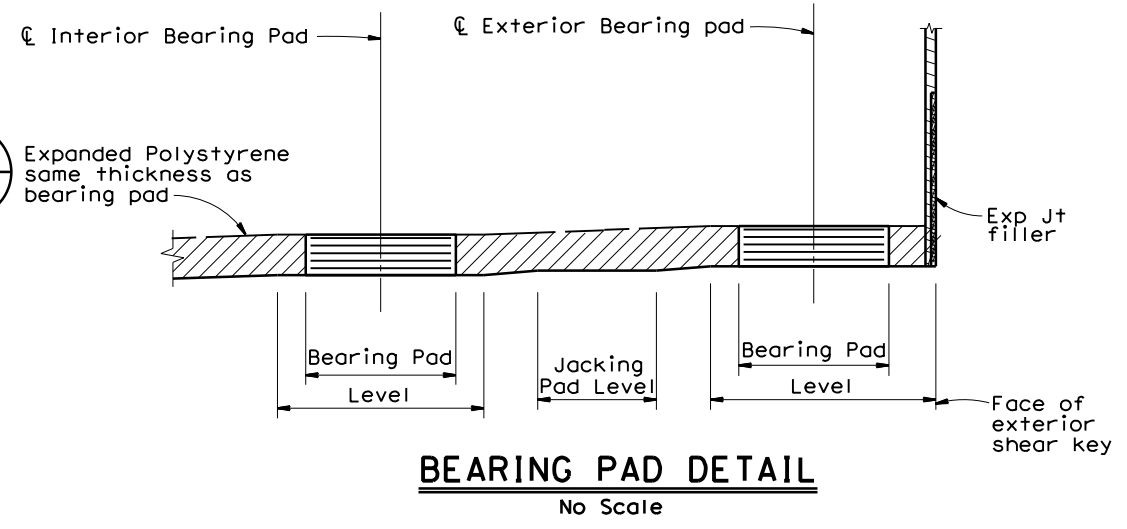
Scott McCauley 12-3-19  
 REGISTERED CIVIL ENGINEER DATE  
 PLANS APPROVAL DATE  
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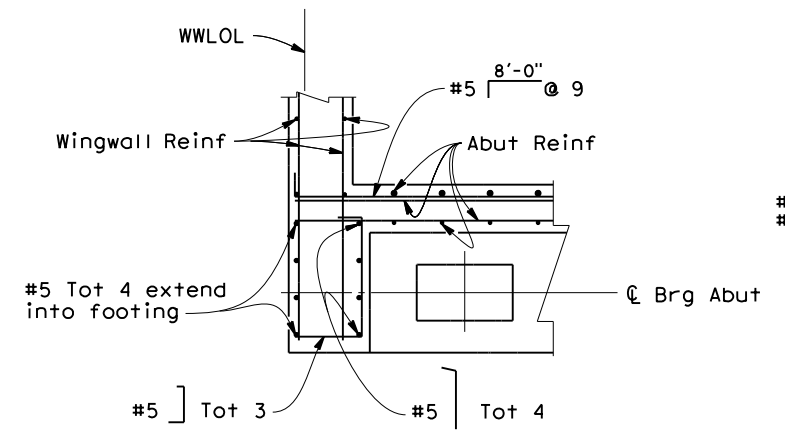
QUINCY ENGINEERING, INC  
 11017 Cobblestone Drive, Suite 100  
 Rancho Cordova, CA 95670  
 COUNTY OF HUMBOLDT  
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 1106 2nd Street  
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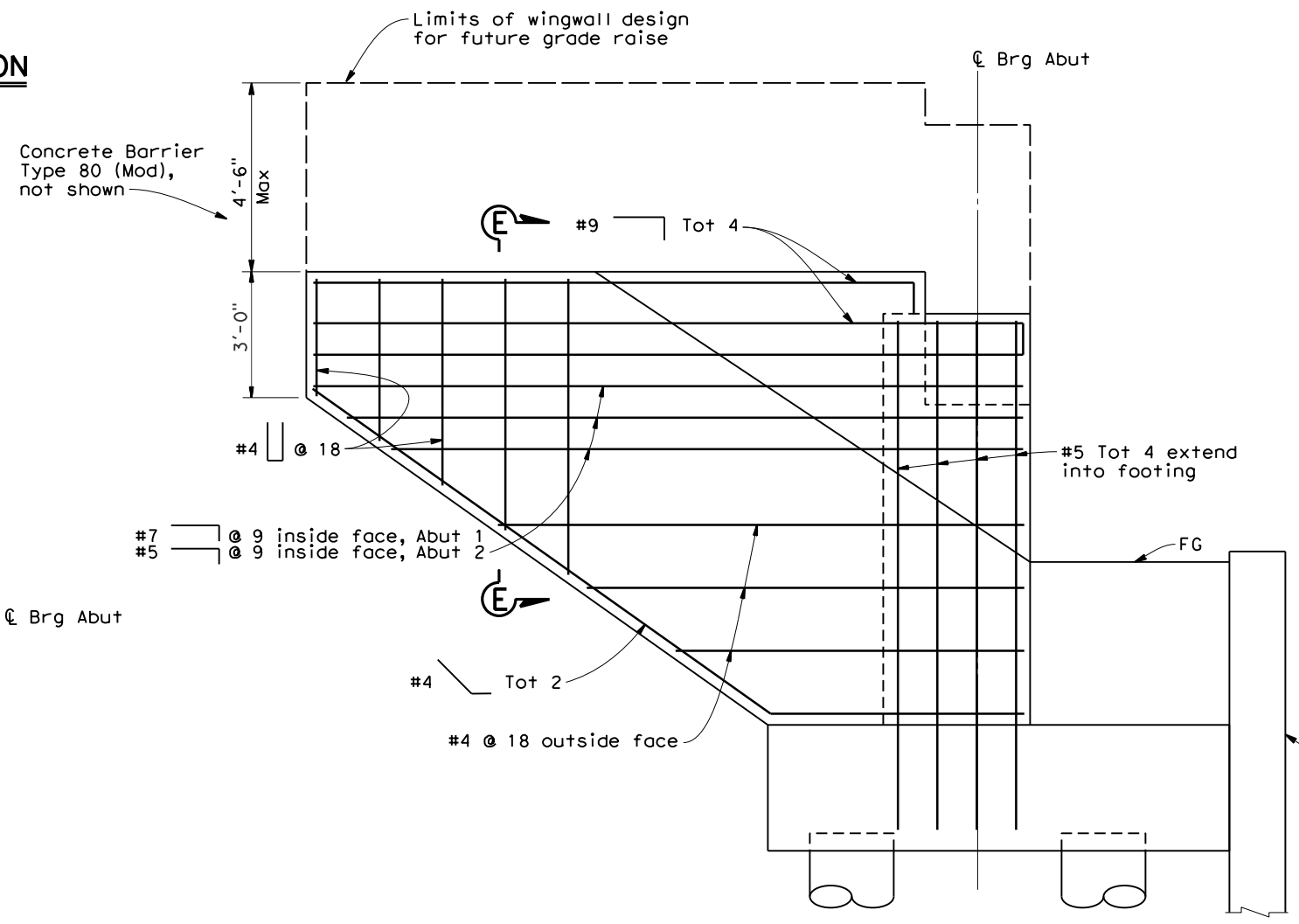
**SHEAR KEY ELEVATION**  
1/2"=1'-0"



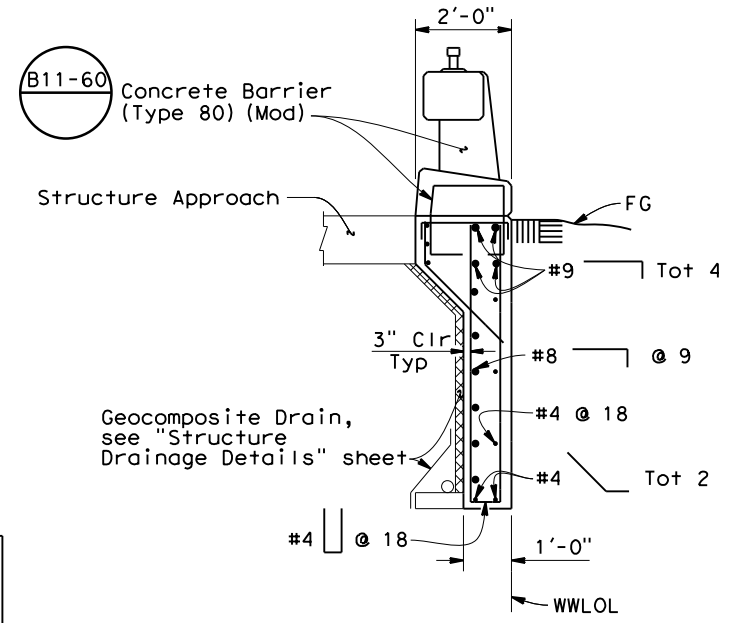
**BEARING PAD DETAIL**  
No Scale



**SECTION D-D**  
1/2"=1'-0"



**WINGWALL ELEVATION**  
1/2"=1'-0"



**SECTION E-E**  
1/2"=1'-0"

- Notes:
- All reinforcement shall be pre-fabricated epoxy coated.
  - For Anchor Tie-Down and Permanent Sheet Pile shoring details, see "Miscellaneous Details" sheet.

X	DESIGN OVERSIGHT
X	SIGN OFF DATE

DESIGN	BY L. Smith	CHECKED J. Chou
DETAILS	BY B. Maechler	CHECKED J. Chou
QUANTITIES	BY J. Cruz	CHECKED H. Chou

PREPARED FOR THE  
**COUNTY OF HUMBOLDT**  
 DEPARTMENT OF PUBLIC WORKS

Scott McCauley  
 PROJECT ENGINEER

BRIDGE NO.	04C0260
POST MILE	0.19

**SWAIN SLOUGH BRIDGE**  
**ABUTMENT DETAILS No. 1**

DESIGN DETAIL SHEET (ENGLISH) (REV. 03/14/12)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

0 1 2 3

UNIT: PROJECT NUMBER & PHASE: X

CONTRACT NO.: X

REVISION DATES	SHEET	OF
5/22/15	5	15

USERNAME => scottm DATE PLOTTED => 12/3/2019 TIME PLOTTED => 9:40:22 AM

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
01	Hum	CR	0.19	19	28

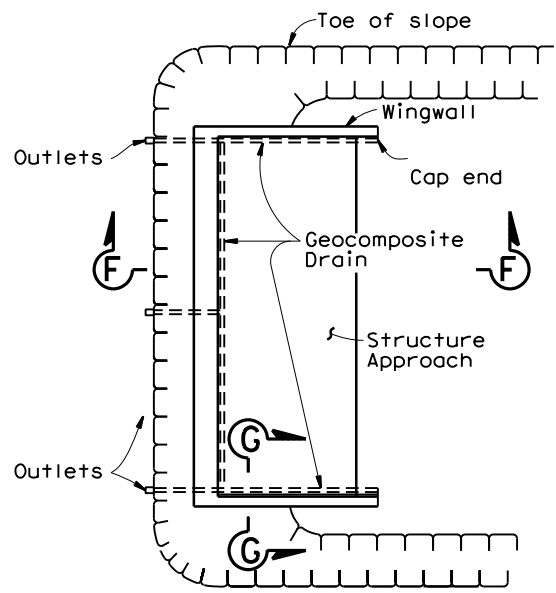
Scott McCauley 12-3-19  
 REGISTERED CIVIL ENGINEER DATE  
 SCOTT A. MCCAULEY  
 No. 71495  
 Exp. 12-31-19  
 CIVIL  
 STATE OF CALIFORNIA

PLANS APPROVAL DATE

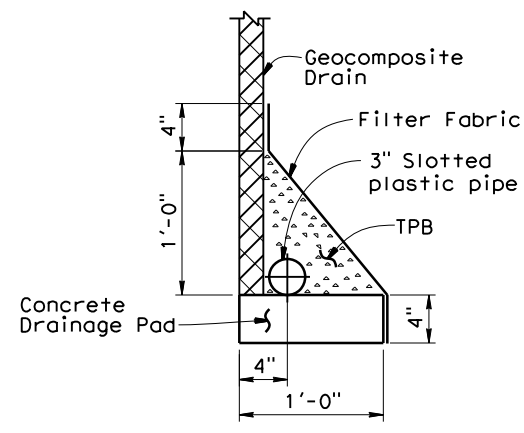
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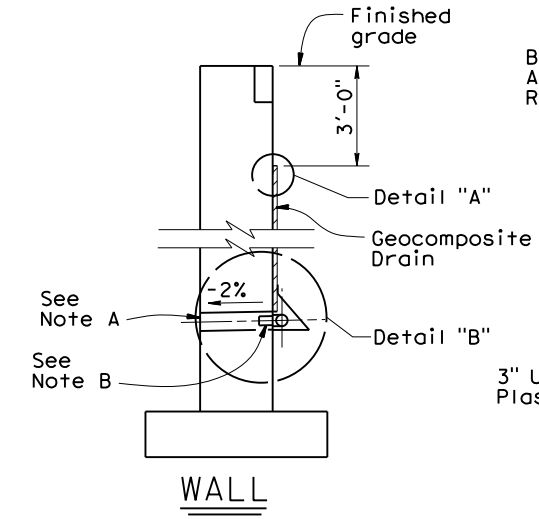
COUNTY OF HUMBOLDT  
 DEPARTMENT OF PUBLIC WORKS  
 1106 2nd Street  
 Eureka, CA 95501



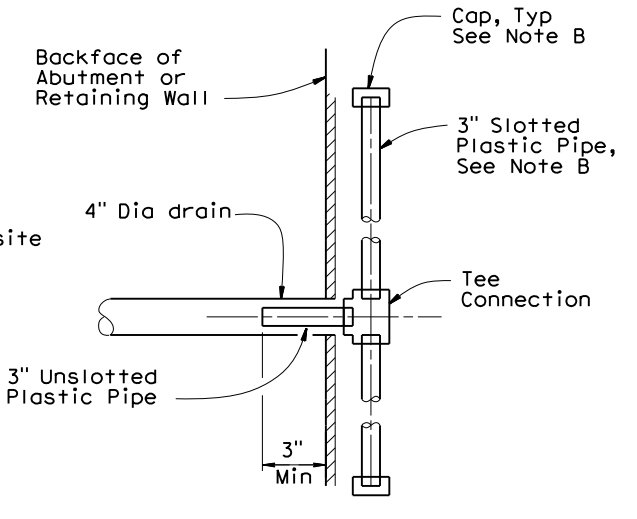
**PLAN**  
No Scale



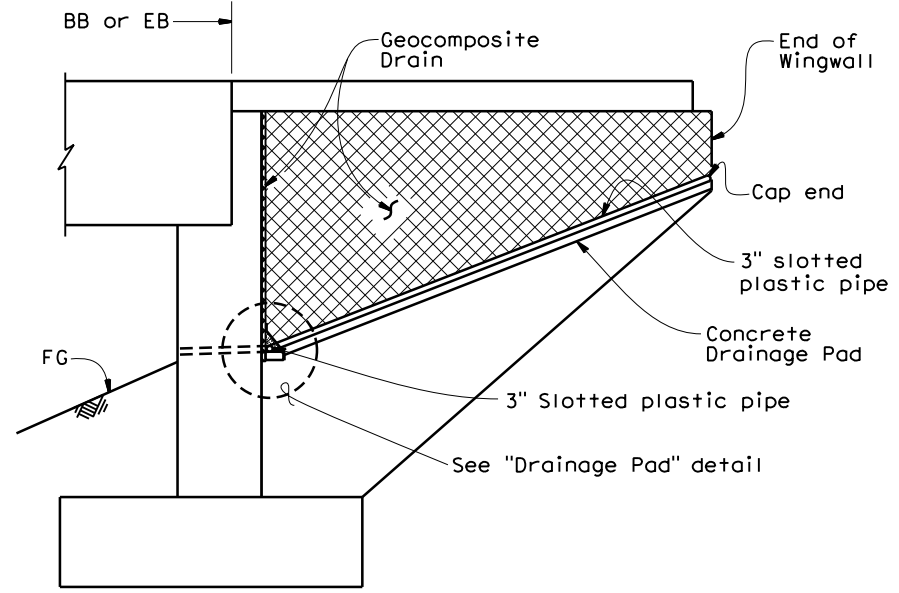
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No Scale



**WALL SECTION**

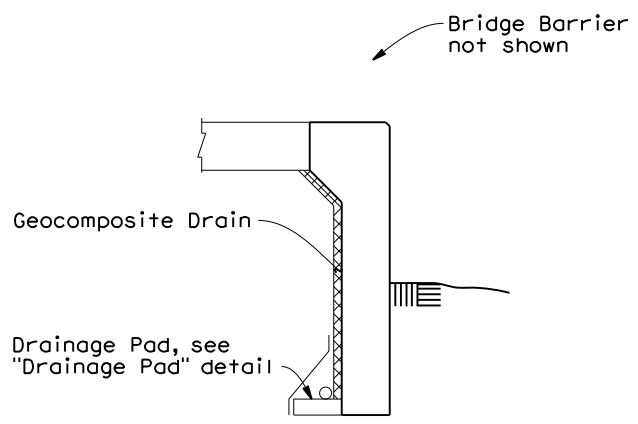


**SECTION A-A**

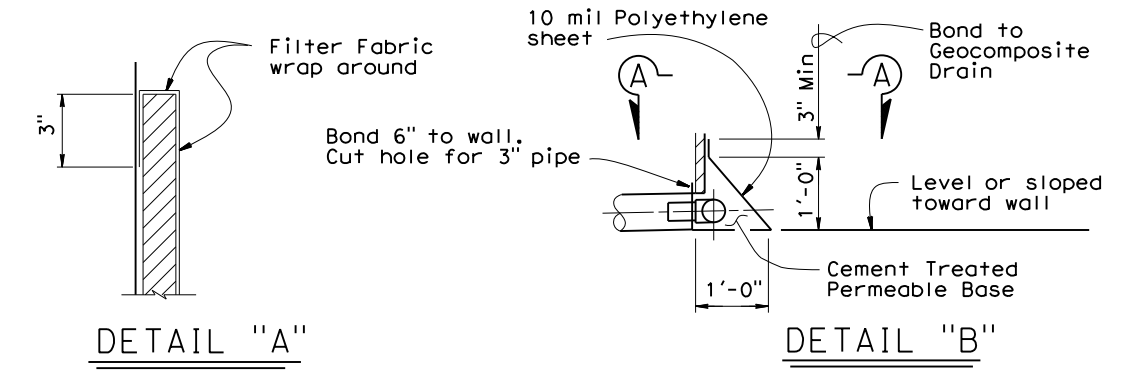


**SECTION F-F**  
No Scale

NOTE: TPB not shown for clarity.



**SECTION G-G**  
No Scale



**ALTERNATIVE DRAINAGE DETAILS**  
**WEEP HOLE AND GEOCOMPOSITE DRAIN**  
No Scale

- Notes:
- 4" Dia drains at intermediate sag points and at 25' max center to center. Exposed wall drains shall be located 3"± above finished grade.
  - Geocomposite drain, cement treated permeable base, and 3" Dia slotted plastic pipe continuous behind retaining wall or abutment. Cap ends of pipe. Provide "Tee" connection at each 4" Dia drain.
  - Connect the low end of plastic pipe to the main outlet pipe as applicable.

X	DESIGN OVERSIGHT
X	SIGN OFF DATE

DESIGN	BY L. Smith	CHECKED J. Chou
DETAILS	BY B. Maechler	CHECKED J. Chou
QUANTITIES	BY J. Cruz	CHECKED H. Chou

PREPARED FOR THE  
**COUNTY OF HUMBOLDT**  
 DEPARTMENT OF PUBLIC WORKS

BRIDGE NO.	04C0260
PROJECT ENGINEER	Scott McCauley
POST MILE	0.19

**SWAIN SLOUGH BRIDGE**  
**ABUTMENT DETAILS No. 2**

DESIGN DETAIL SHEET (ENGLISH) (REV. 03/14/12)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

UNIT: PROJECT NUMBER & PHASE: X CONTRACT NO.: X

DISREGARD PRINTS BEARING EARLIER REVISION DATES

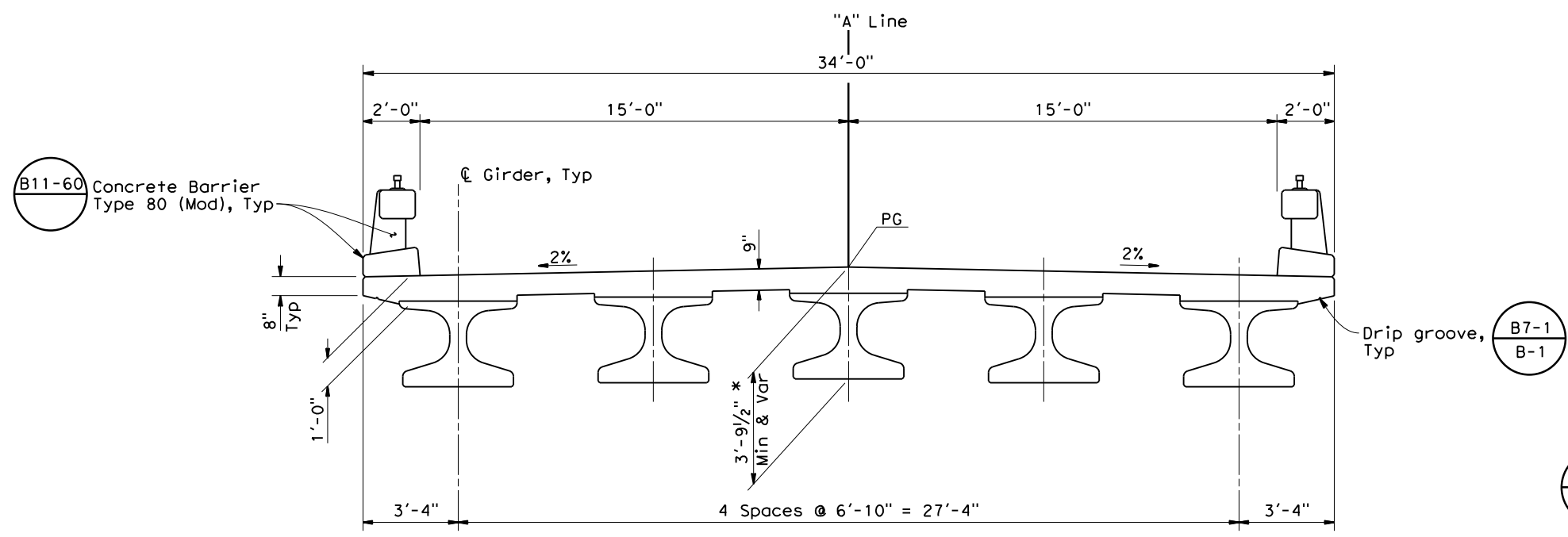
REVISION DATES	SHEET	OF
5/22/15	6	15

USERNAME => scottm DATE PLOTTED => 12/3/2019 9:40:23 AM

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
01	Hum	CR	0.19	20	28

Scott McCauley 12-3-19  
 REGISTERED CIVIL ENGINEER DATE  
 PLANS APPROVAL DATE  
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 11017 Cobblecreek Drive, Suite 100  
 Rancho Cordova, CA 95670  
 COUNTY OF HUMBOLDT  
 DEPARTMENT OF PUBLIC WORKS  
 1106 2nd Street  
 Eureka, CA 95501

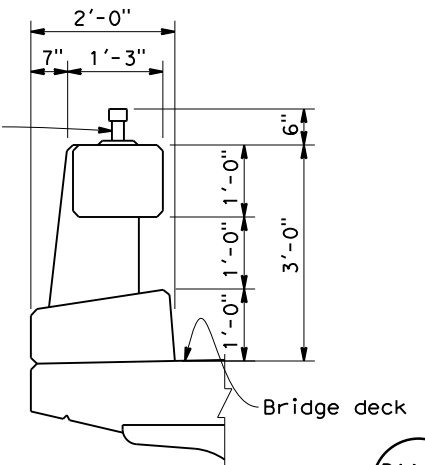


\* 1/2" Minimum haunch at support (along centerline of girder)  
 2" Haunch thickness at mid span (along centerline of girder)

**TYPICAL SECTION**  
3/4" = 1'-0"

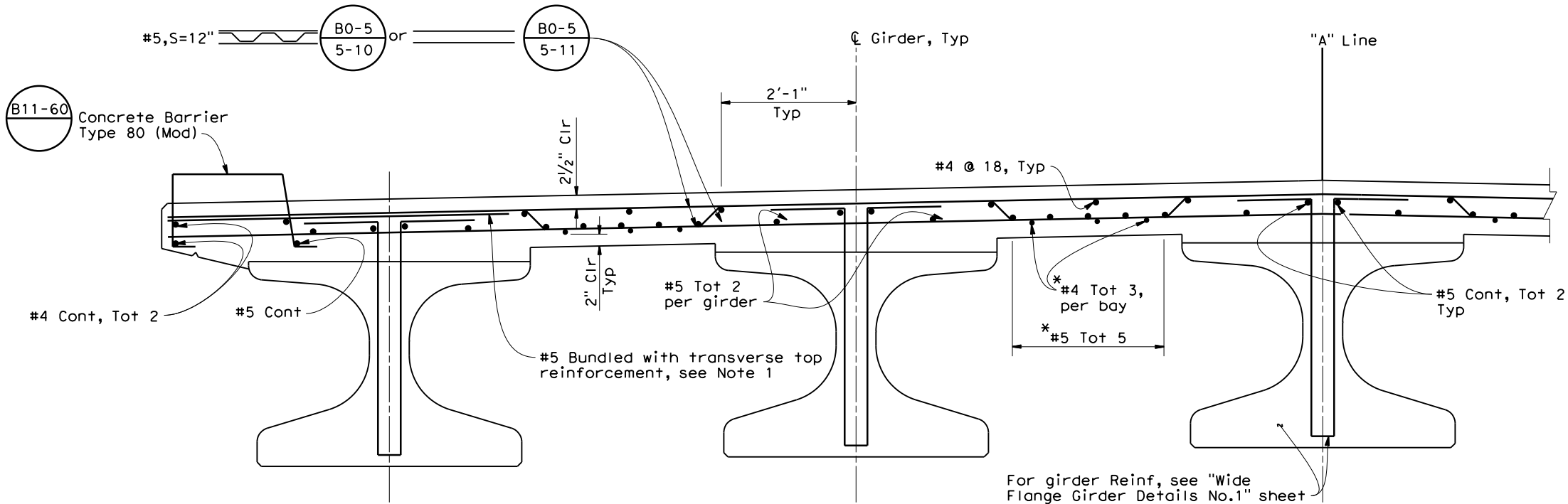
B7-1  
B-1

B11-51  
Tubular Handrailig (Mod)



For dimensions and reinforcement not shown, see B11-51 B11-60

**TYPE 80 (Mod) DETAIL**  
3/4" = 1'-0"

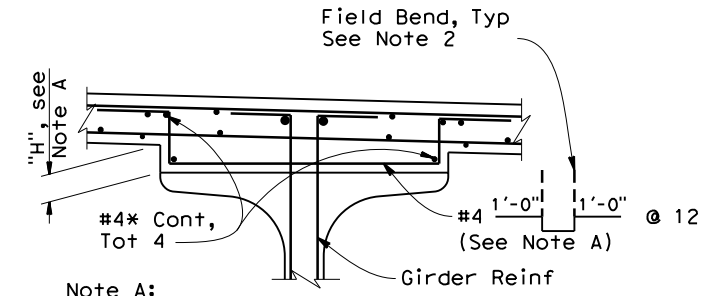


For girder Reinf, see "Wide Flange Girder Details No.1" sheet

**PART TYPICAL SECTION**  
3/4" = 1'-0"

B0-5

\* Distribution Reinforcement, see Note 3



Note A: Reinforcement shown is in addition to Typical Section Reinf. Reinf to be placed over length of each girder where H > 2".

**HAUNCH DETAILS**  
3/4" = 1'-0"

Notes:

1. Provide additional top transverse deck reinforcement for a distance of 5 feet at the ends of barrier rail at expansion joint. Bundle with top transverse reinforcement on bridge and extend 16" beyond centerline of exterior girder.
2. All reinforcement shall be pre-fabricated epoxy coated.
3. For limits of distribution reinforcement into end diaphragm, see "Girder Layout" sheet.

X	DESIGN OVERSIGHT
X	SIGN OFF DATE

DESIGN	BY L. Smith	CHECKED J. Chou
DETAILS	BY B. Maechler	CHECKED J. Chou
QUANTITIES	BY J. Cruz	CHECKED H. Chou

PREPARED FOR THE  
**COUNTY OF HUMBOLDT**  
 DEPARTMENT OF PUBLIC WORKS

BRIDGE NO.	04C0260
POST MILE	0.19
PROJECT ENGINEER	Scott McCauley

**SWAIN SLOUGH BRIDGE**  
**TYPICAL SECTION**

DESIGN DETAIL SHEET (ENGLISH) (REV.03/14/12)

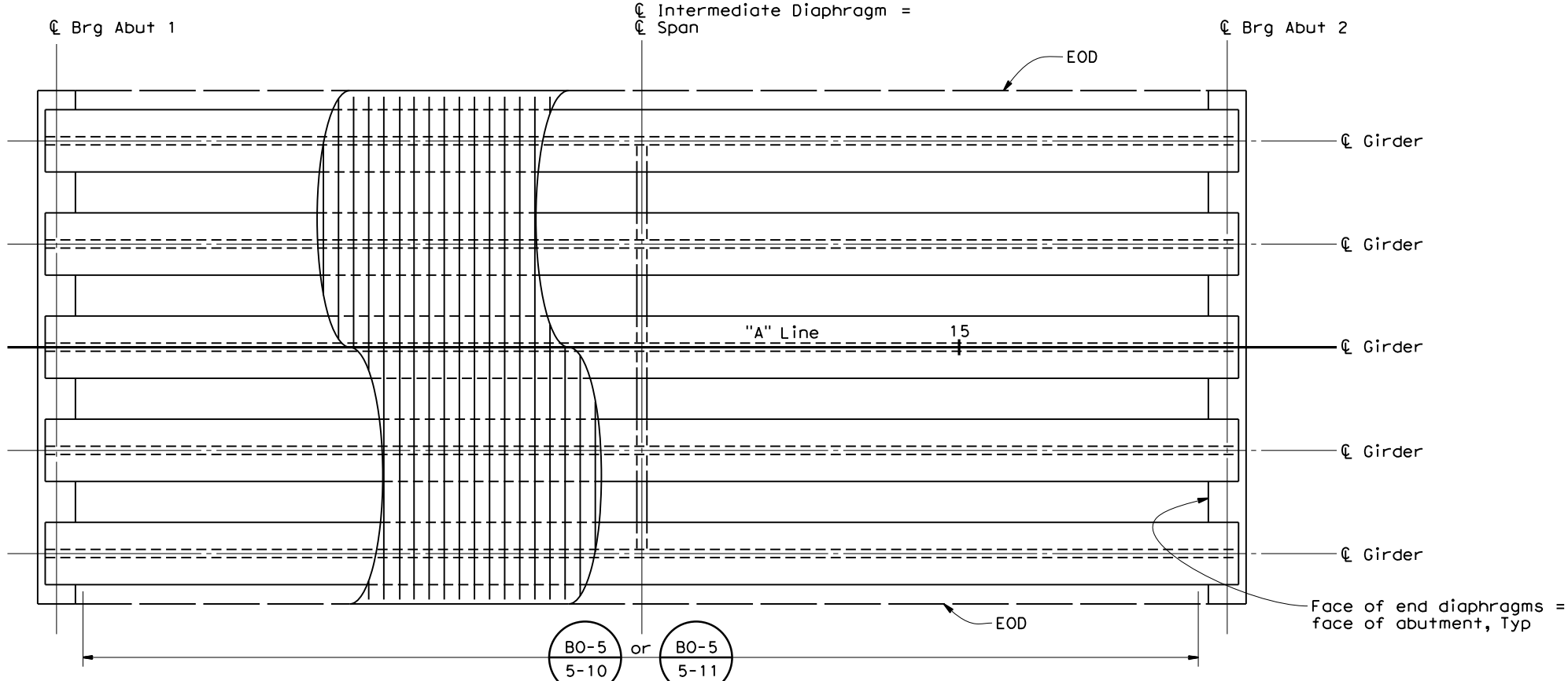
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

UNIT: PROJECT NUMBER & PHASE: X

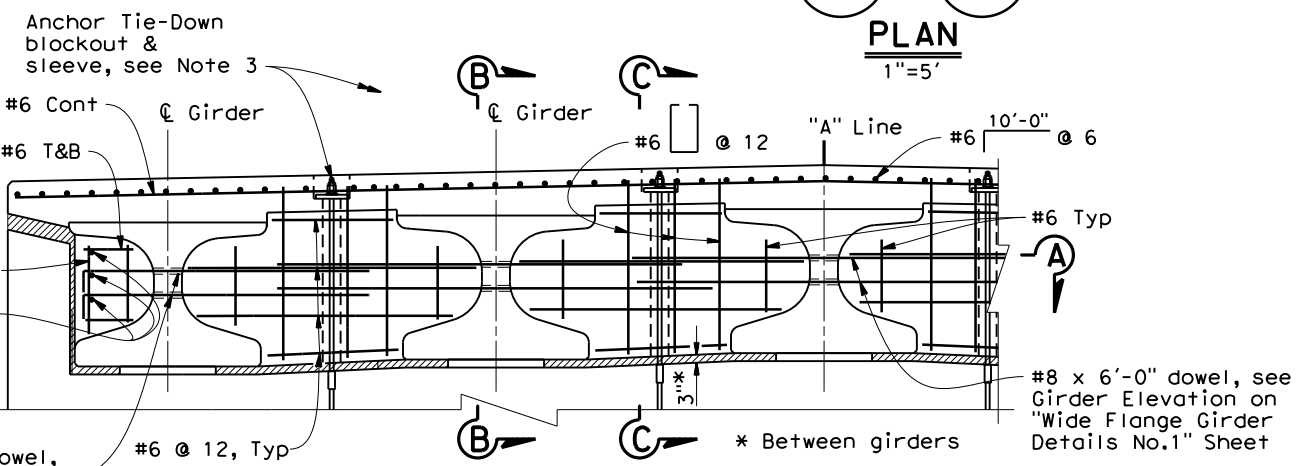
CONTRACT NO.: X

REVISION DATES	SHEET	OF
5/22/15	7	15

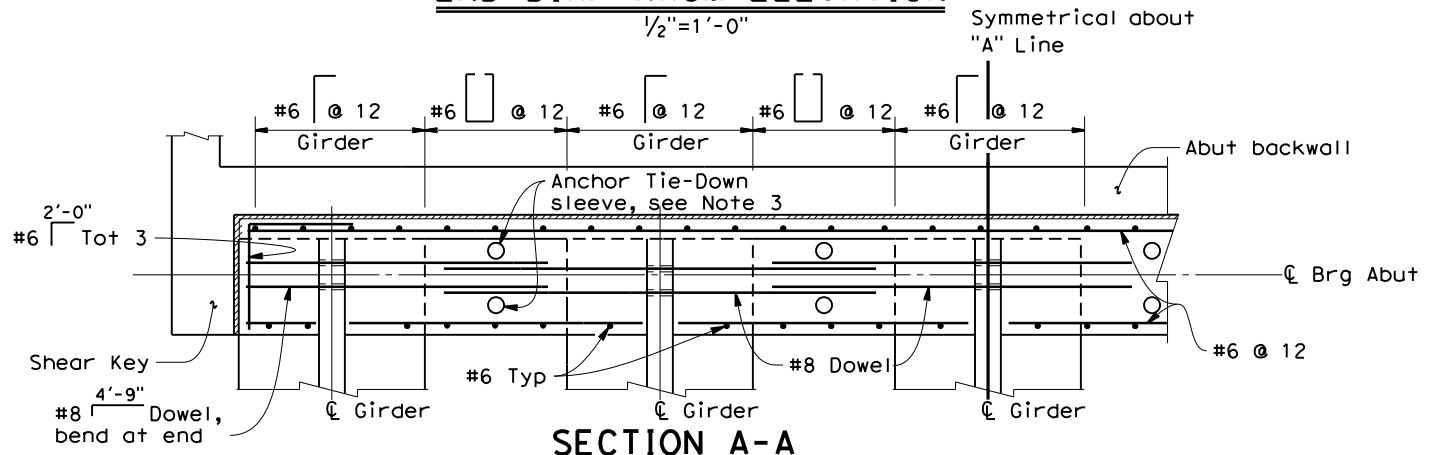
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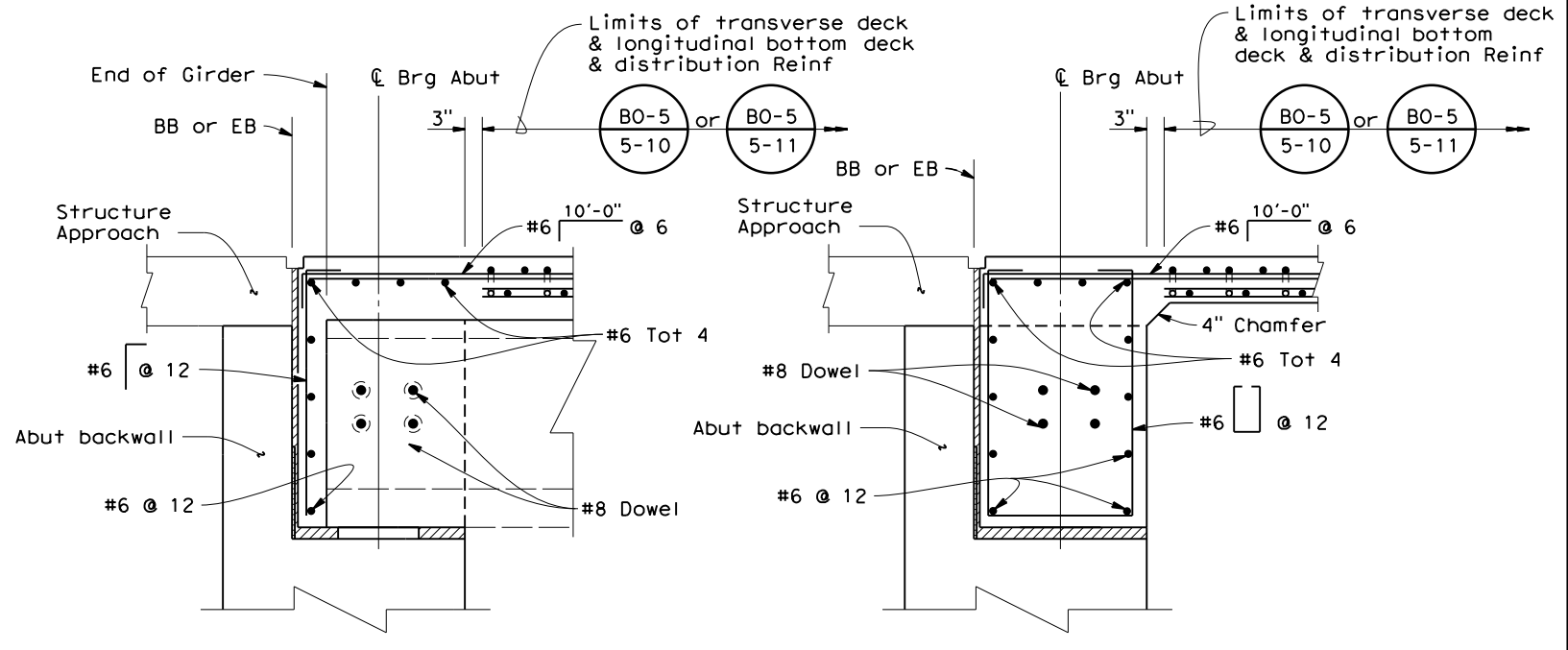
**PLAN**  
1"=5'



**END DIAPHRAGM ELEVATION**  
1/2"=1'-0"



**SECTION A-A**  
1/2"=1'-0"



**SECTION B-B**  
3/4"=1'-0"

**SECTION C-C**  
3/4"=1'-0"

- Notes:
1. For Intermediate Diaphragm, see "Wide Flange Girder Details No. 2" sheet.
  2. All reinforcement shall be pre-fabricated epoxy coated.
  3. Adjust reinforcement to clear sleeve. For Anchor Tie-Down details, see "Miscellaneous Details" sheet.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
01	Hum	CR	0.19	21	28

Scott McCauley 12-3-19  
 REGISTERED CIVIL ENGINEER DATE

SCOTT A. MCCAULEY  
 No. 71495  
 Exp. 12-31-19  
 CIVIL  
 STATE OF CALIFORNIA

PLANS APPROVAL DATE

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QUINCY ENGINEERING, INC  
 11017 Cobblestone Drive, Suite 100  
 Rancho Cordova, CA 95670

COUNTY OF HUMBOLDT  
 DEPARTMENT OF PUBLIC WORKS  
 1106 2nd Street  
 Eureka, CA 95501

X	DESIGN OVERSIGHT
X	SIGN OFF DATE

DESIGN	BY L. Smith	CHECKED J. Chou
DETAILS	BY B. Maechler	CHECKED J. Chou
QUANTITIES	BY J. Cruz	CHECKED H. Chou

**PREPARED FOR THE COUNTY OF HUMBOLDT**  
 DEPARTMENT OF PUBLIC WORKS

BRIDGE NO.	04C0260
POST MILE	0.19

**SWAIN SLOUGH BRIDGE**  
**GIRDER LAYOUT**

DESIGN DETAIL SHEET (ENGLISH) (REV.03/14/12)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

0 1 2 3

UNIT: PROJECT NUMBER & PHASE: X  
 CONTRACT NO.: X

REVISION DATES	SHEET	OF
5/22/15	8	15

USERNAME => scottm DATE PLOTTED => 12/3/2019 TIME PLOTTED => 9:40:25 AM

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
01	Hum	CR	0.19	22	28

Scott McCauley 12-3-19  
 REGISTERED CIVIL ENGINEER DATE

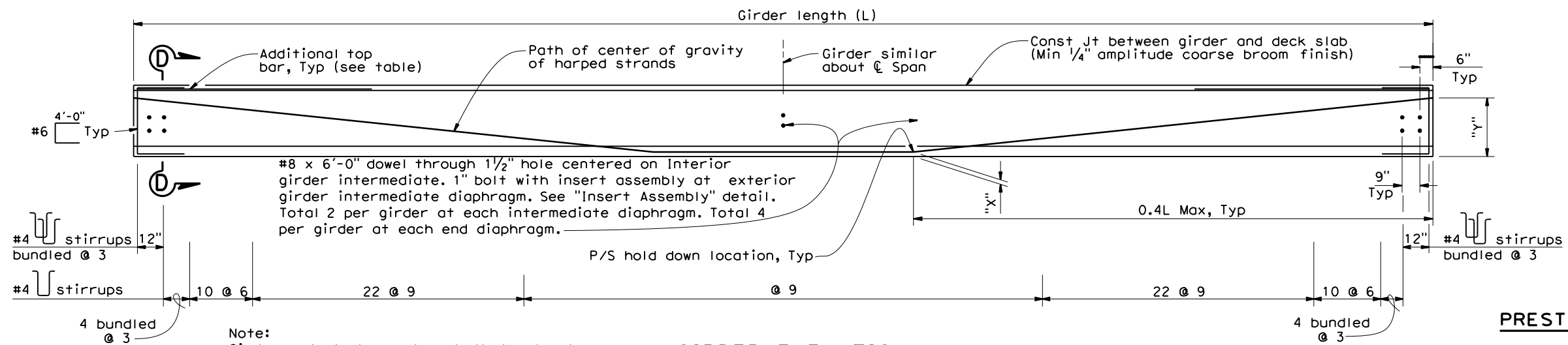
SCOTT A. MCCAULEY  
 No. 71495  
 Exp. 12-31-19  
 CIVIL  
 STATE OF CALIFORNIA

PLANS APPROVAL DATE

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 Rancho Cordova, CA 95670

COUNTY OF HUMBOLDT  
 DEPARTMENT OF PUBLIC WORKS  
 1106 2nd Street  
 Eureka, CA 95501



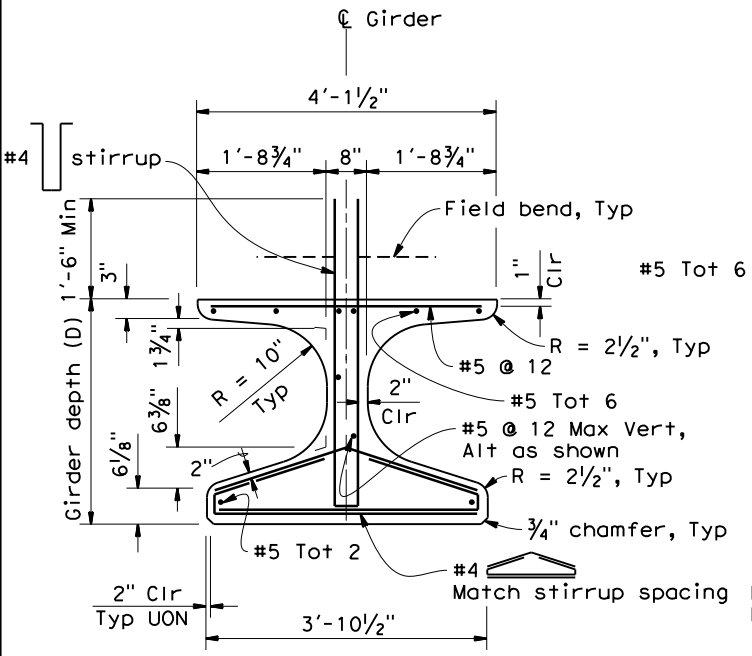
**GIRDER ELEVATION**  
No Scale

LOCATION	GIRDER LENGTH (L)	GIRDER DEPTH (D)	"X" (in)		"Y" (in)*	JACKING FORCE (P)	As, Min (in')	CONCRETE STRENGTH (ksi)		MIDSPAN DEAD LOAD DEFLECTION (in)		ADDITIONAL TOP BAR (EACH END)
			Straight Strands	Harped Strands				f'ci	f'c	DECK	RAIL	
ALL GIRDERS	79'-0"	36"	3.75	4.75	31.5	1300 kips	6.4	5.5	6.5	0.9	0.10	#8 x 8' Tot 4

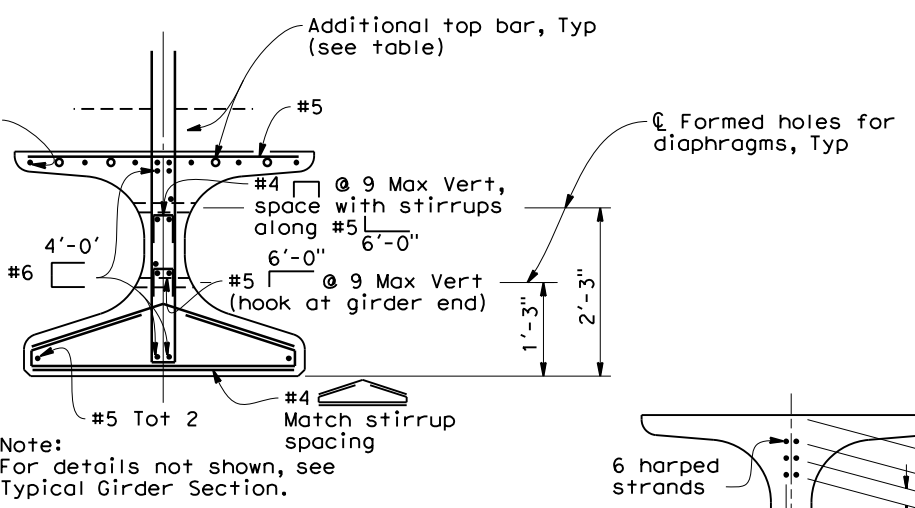
\* Prestressing steel c.g. dimension is for harped strands only. See Strand Template detail.

**PRESTRESSING NOTES**

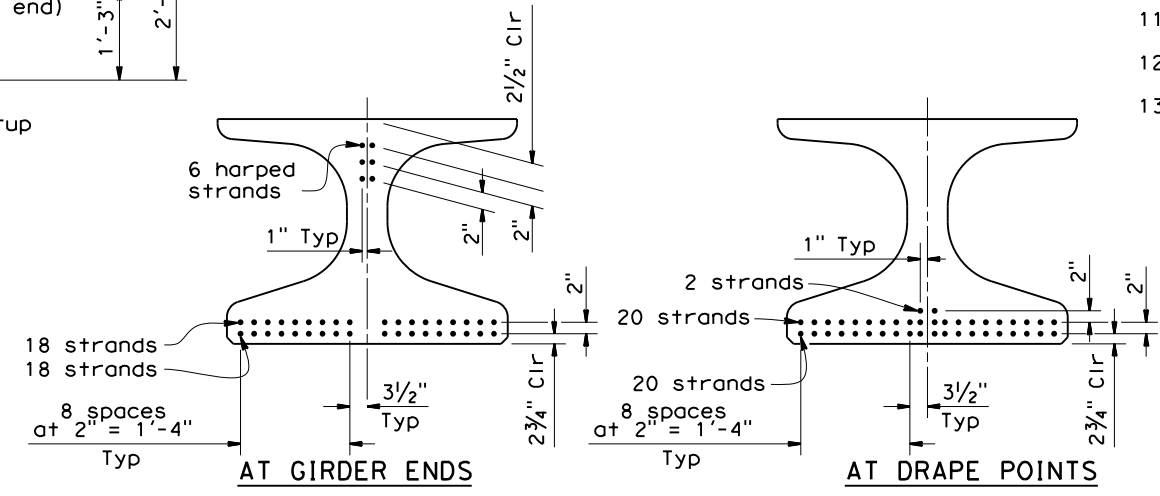
- The Jacking Force (P) is the jacking force required at the point of control along the span. The jacking force does not include any fabrication specific losses.
- The maximum tensile stress in the prestressing steel upon release shall not exceed 75% of the specified minimum ultimate tensile strength of the prestressing steel.
- The maximum temporary tensile stress (jacking stress) in the prestressing steel shall not exceed 80% of the specified minimum ultimate tensile strength of the prestressing steel.
- Concrete strength:  
f'ci is at time of initial stressing  
f'c is at 28 days
- Deflection components are informational and will be used to set screed line elevations.
- Screed line elevations for deck concrete will be determined by the Engineer.
- Prestressing strand shall be 270 ksi low relaxation.
- Strands shall be placed as low as possible in the strand template and symmetrical about C girder.
- Strands may be bundled in groups consisting of 3 vertically, 2 horizontally, and separated at the ends.
- The minimum distance "S" between groups or individual strands is 1 3/4" for 0.5" diameter strand.
- "S" is measured between centers of adjacent strands.
- Approval by the Engineer is required for deviation.
- The prestressing stand and all reinforcement shall be pre-fabricated epoxy coated.



**TYPICAL GIRDER SECTION**  
No Scale



**SECTION D-D**  
No Scale



**STRAND TEMPLATE**

Note: Template shown is for 0.5" diameter strand

Note: For Welded Wire Reinforcement (WWR), see "Wide Flange Girder Details No. 2" sheet.

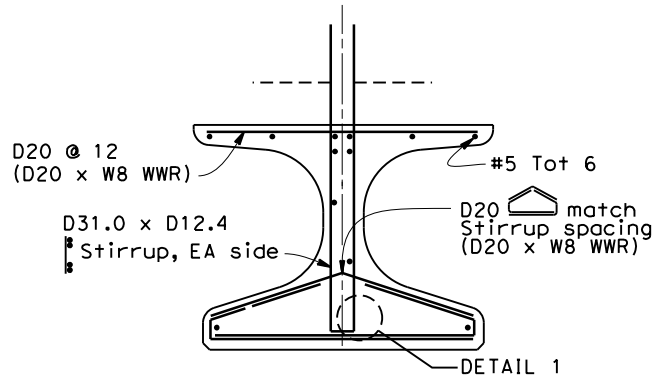
X DESIGN OVERSIGHT X SIGN OFF DATE DESIGN DETAIL SHEET (ENGLISH) (REV.03/14/12)	DESIGN BY L. Smith CHECKED J. Chou	PREPARED FOR THE <b>COUNTY OF HUMBOLDT</b> DEPARTMENT OF PUBLIC WORKS	BRIDGE NO. 04C0260 PROJECT ENGINEER Scott McCauley	<b>SWAIN SLOUGH BRIDGE</b> <b>WIDE FLANGE GIRDER DETAILS No. 1</b>
	DETAILS BY B. Maechler CHECKED J. Chou		POST MILE 0.19	
QUANTITIES BY J. Cruz CHECKED H. Chou	UNIT: PROJECT NUMBER & PHASE: X CONTRACT NO.: X	ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	REVISION DATES 5/22/15	SHEET 9 OF 15

FILE => S:\Client\Humboldt\H07-300 Pine Hill\CAD\Bridges\H07300a-1-gd101.dgn

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
01	Hum	CR	0.19	23	28

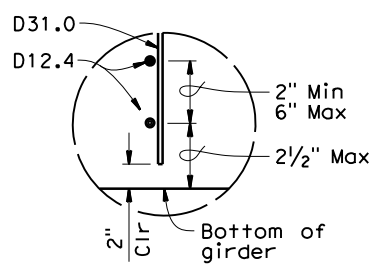
Scott McCauley 12-3-19  
 REGISTERED CIVIL ENGINEER DATE  
 PLANS APPROVAL DATE  
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 COUNTY OF HUMBOLDT  
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 1106 2nd Street  
 Eureka, CA 95501



- Notes:
- For details shown but not noted, see "Typical Girder Section" detail.
  - W8 WWR not shown.

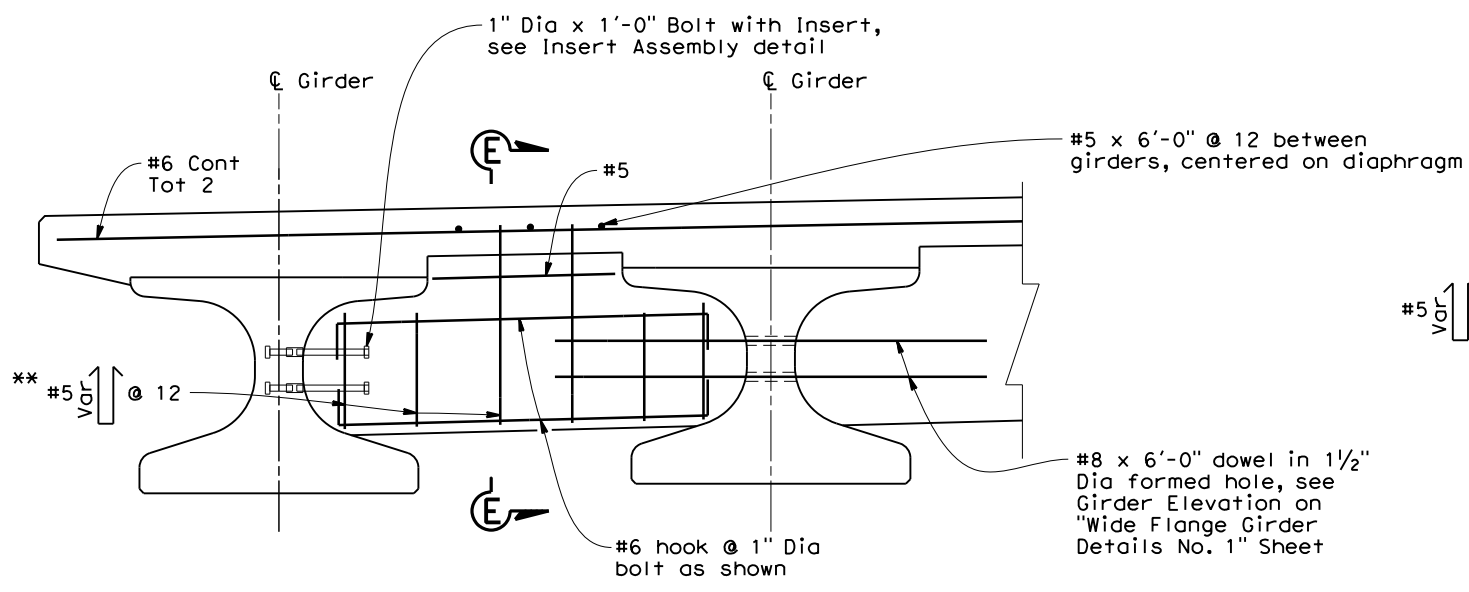
**WELDED WIRE REINFORCEMENT (WWR) ALTERNATIVE**  
No Scale



- Notes:
- Bottom of stirrup WWR detail shown, top similar.
  - Longitudinal wire area shall be 40% or greater of vertical deformed wire's area.

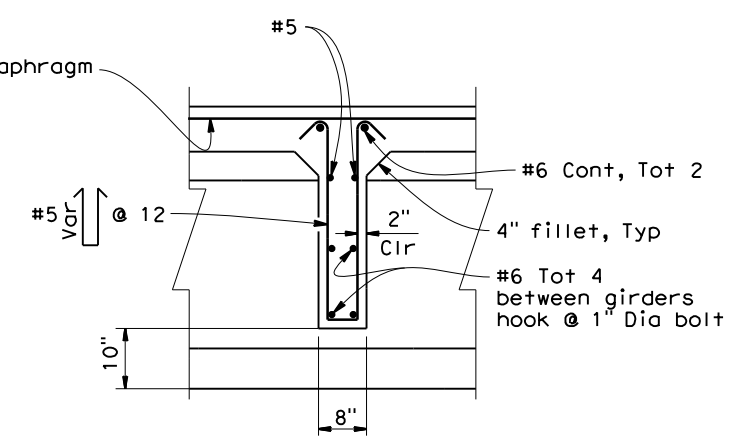
**DETAIL 1**  
No Scale

- Note:
- All reinforcement shall be pre-fabricated epoxy coated.



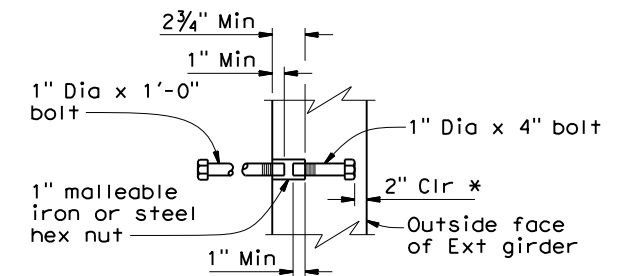
**INTERMEDIATE DIAPHRAGM**  
1/2"=1'-0"

\*\* Hooks inward below girder top flange



**SECTION E-E**  
3/4"=1'-0"

Note:  
Diaphragm may be vertical or normal to deck grade



\* Dimension may be increased when insert assembly is used at end block

**INSERT ASSEMBLY**  
No Scale

X	DESIGN OVERSIGHT
X	SIGN OFF DATE

DESIGN	BY L. Smith	CHECKED J. Chou
DETAILS	BY B. Maechler	CHECKED J. Chou
QUANTITIES	BY J. Cruz	CHECKED H. Chou

PREPARED FOR THE  
 COUNTY OF HUMBOLDT  
 DEPARTMENT OF PUBLIC WORKS

Scott McCauley  
 PROJECT ENGINEER

BRIDGE NO.	04C0260
POST MILE	0.19

**SWAIN SLOUGH BRIDGE**  
**WIDE FLANGE GIRDER DETAILS No. 2**

DESIGN DETAIL SHEET (ENGLISH) (REV.03/14/12)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

0	1	2	3
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UNIT: PROJECT NUMBER & PHASE: X

CONTRACT NO.: X

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES	SHEET	OF
5/22/15	10	15

USERNAME => scottm DATE PLOTTED => 12/23/2019 TIME PLOTTED => 9:40:27 AM



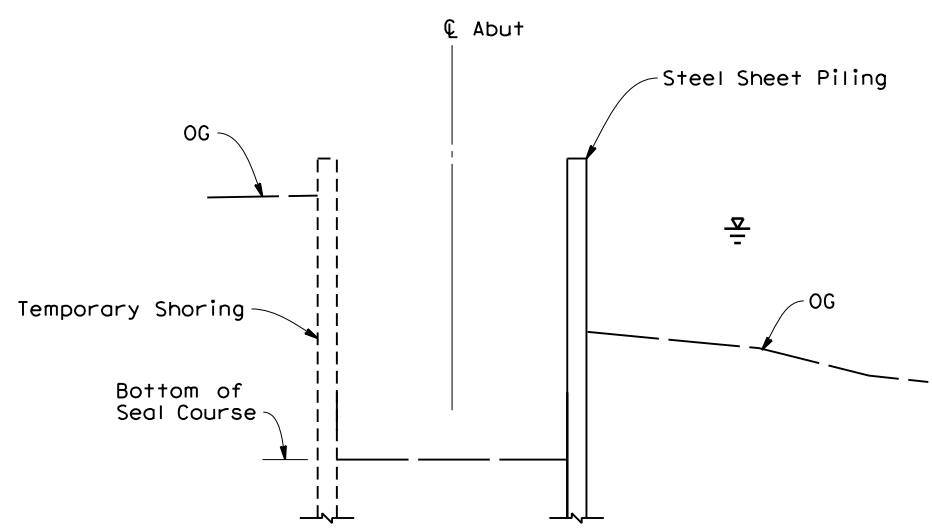
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
01	Hum	CR	0.19	24	28

Scott McCauley 12-3-19  
 REGISTERED CIVIL ENGINEER DATE  
 PLANS APPROVAL DATE  
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 COUNTY OF HUMBOLDT  
 DEPARTMENT OF PUBLIC WORKS  
 1106 2nd Street  
 Eureka, CA 95501

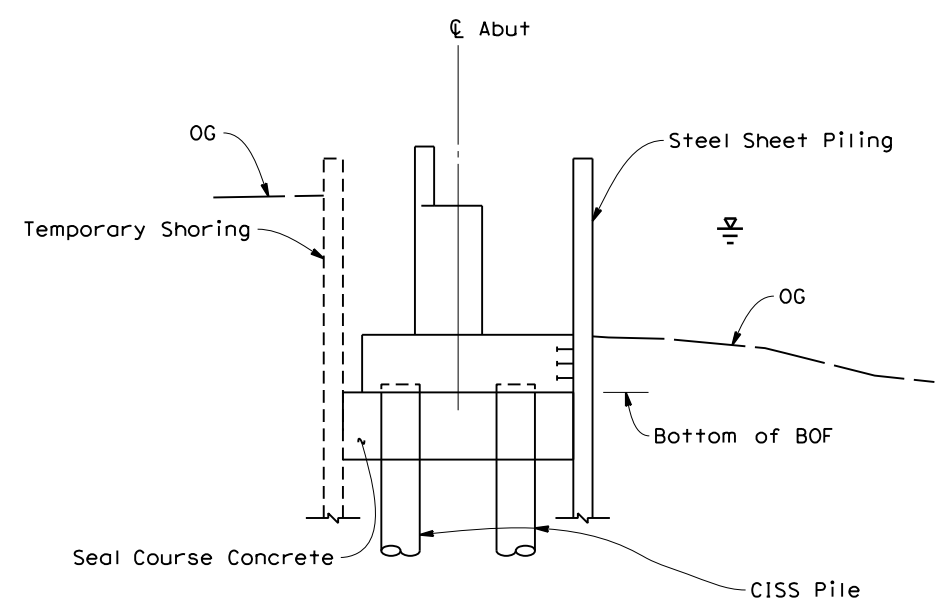
Notes:

1. Temporary Shoring and Steel Sheet Piling shall prevent seepage with Abut footing construction area, contamination of slough from removal of sediments, & leeching of seal course and footing concrete.



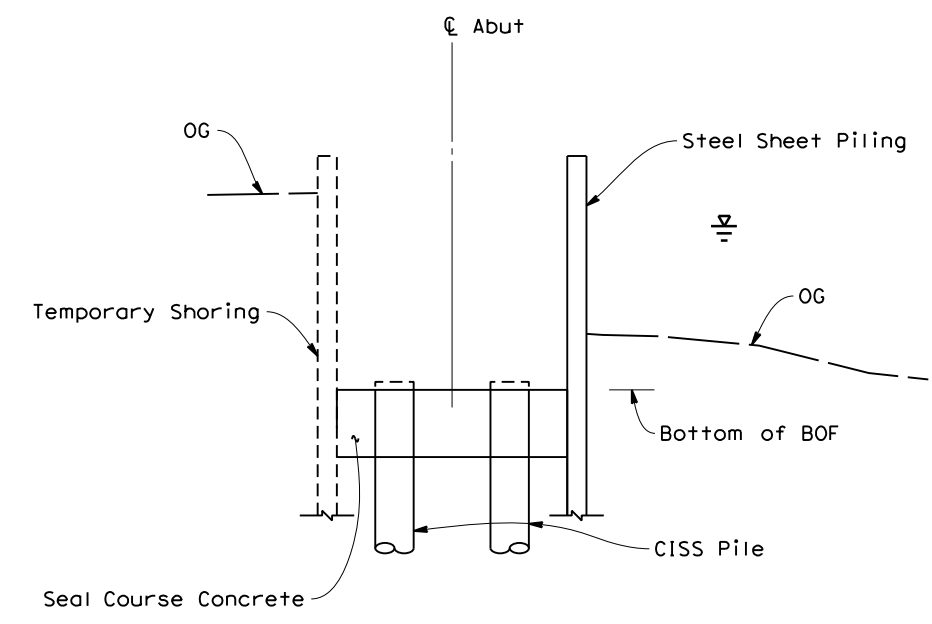
**Step 1**  
No Scale

- Step 1:
- 1) Install Temporary Shoring and Steel Sheet Piling
  - 2) Excavate to bottom of seal course



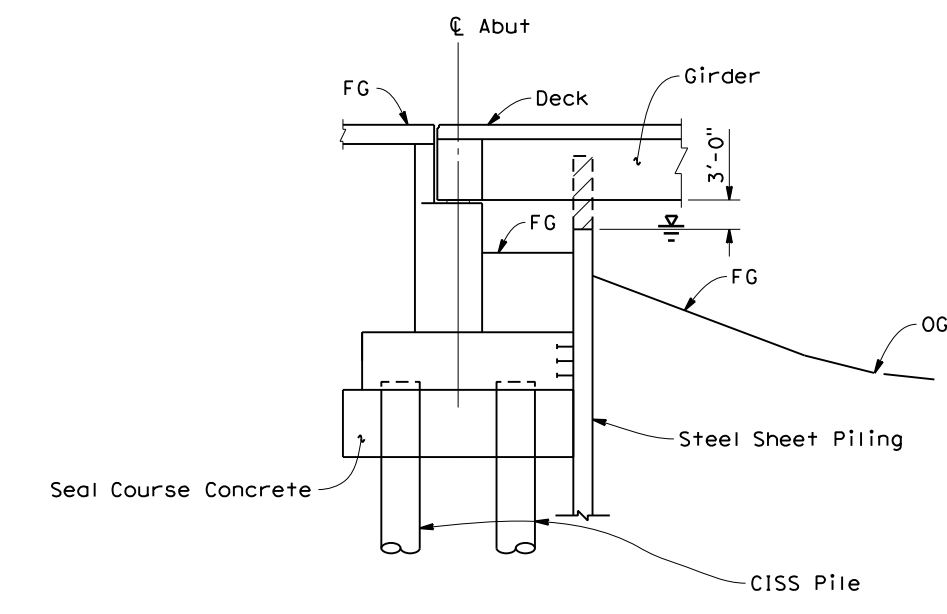
**Step 3**  
No Scale

- Step 3:
- 1) Install studs on sheet pile. Form and pour abutment footing. Pour abutment footing concrete neat along permanent sheet pile shoring.
  - 2) Construct abutment, stem, and backwall



**Step 2**  
No Scale

- Step 2:
- 1) Drive CISS Piles
  - 2) Install Seal Course Concrete



**Step 4**  
No Scale

- Step 4:
- 1) Remove Temporary Shoring
  - 2) Backfill in front of and behind Abutment
  - 3) Cut-off top of permanent sheet pile to maintain 3'-0" vertical clearance to soffit
  - 4) Place girders and construct superstructure

Legend:  
 Approx ordinary high-tide water surface elevation (WSE)

X	DESIGN OVERSIGHT
X	SIGN OFF DATE

DESIGN	BY L. Smith	CHECKED J. Chou
DETAILS	BY B. Maechler	CHECKED J. Chou
QUANTITIES	BY J. Cruz	CHECKED H. Chou

PREPARED FOR THE  
**COUNTY OF HUMBOLDT**  
 DEPARTMENT OF PUBLIC WORKS

Scott McCauley  
 PROJECT ENGINEER

BRIDGE NO.	04C0260
POST MILE	0.19

**SWAIN SLOUGH BRIDGE**  
**CONSTRUCTION SEQUENCE**

DESIGN DETAIL SHEET (ENGLISH) (REV.03/14/12)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

UNIT: PROJECT NUMBER & PHASE: X

CONTRACT NO.: X

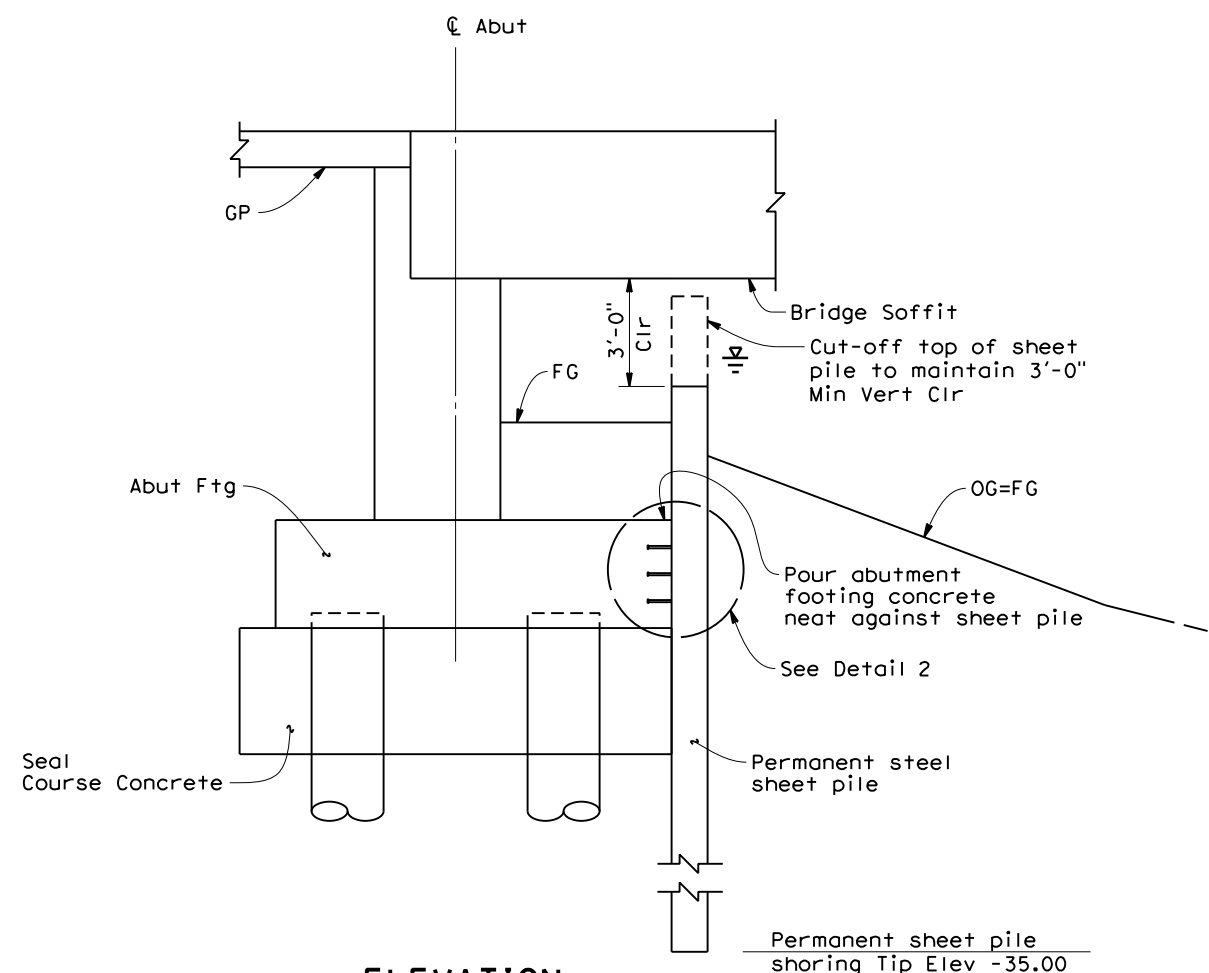
REVISION DATES	SHEET	OF
5/22/15	11	15

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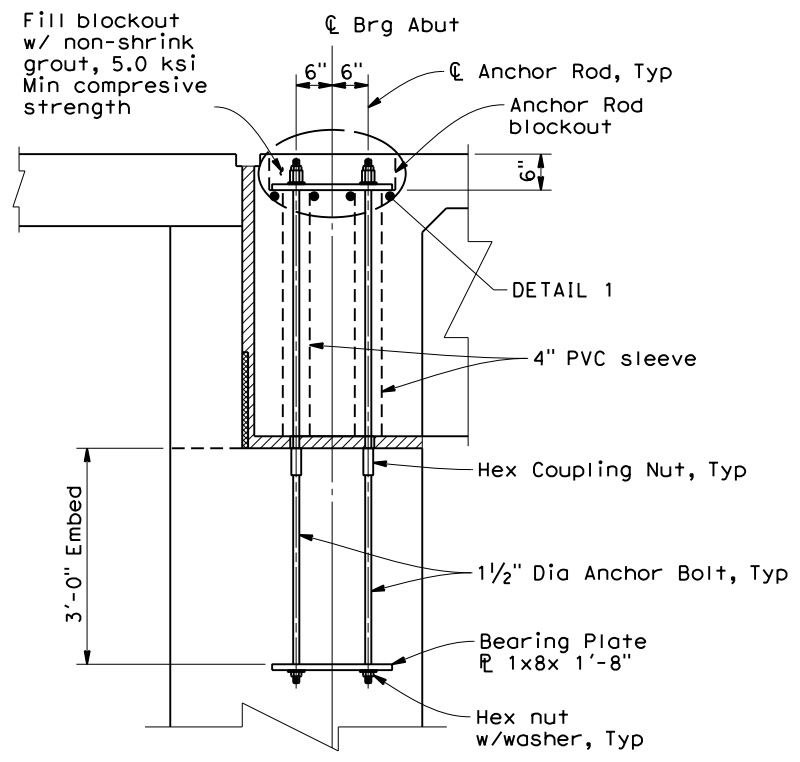
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
01	Hum	CR	0.19	25	28

Scott McCauley 12-3-19  
 REGISTERED CIVIL ENGINEER DATE  
 REGISTERED PROFESSIONAL ENGINEER  
 SCOTT A. MCCAULEY  
 No. 71495  
 Exp. 12-31-19  
 CIVIL  
 STATE OF CALIFORNIA

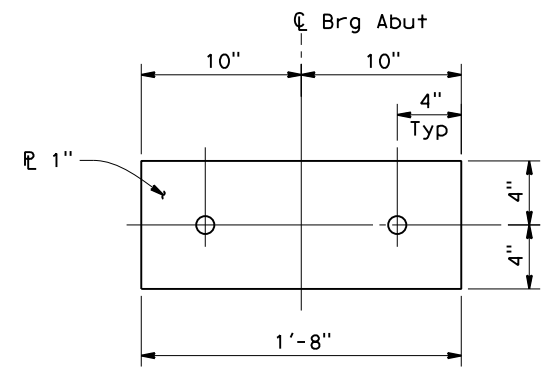
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 1106 2nd Street  
 Eureka, CA 95501



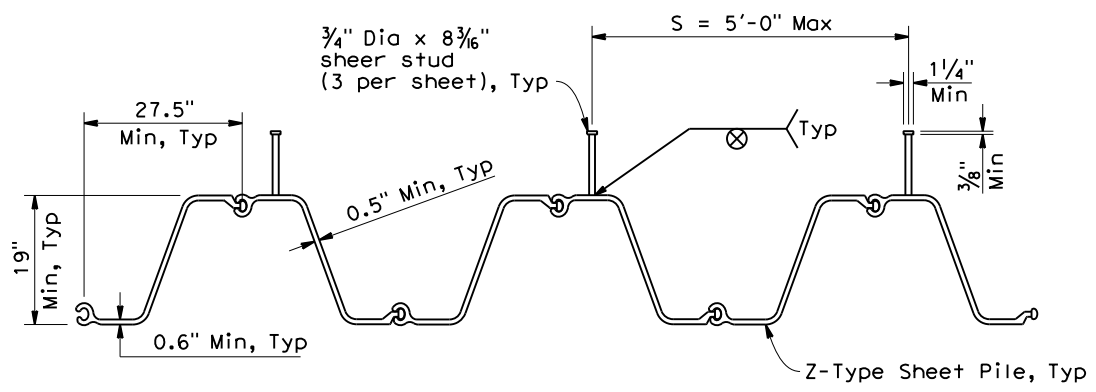
**ELEVATION**  
3/8"=1'-0"



**ANCHOR TIE-DOWN DETAIL**  
3/4"=1'-0"

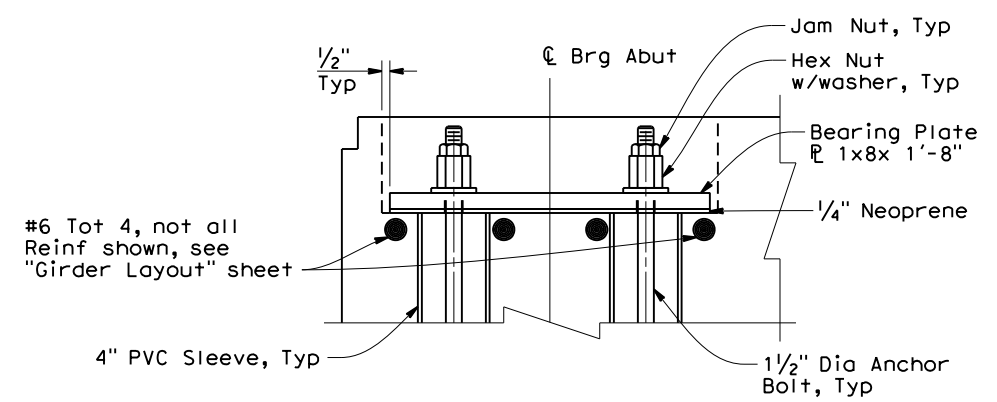


**BEARING PLATE DETAIL**  
3/4"=1'-0"

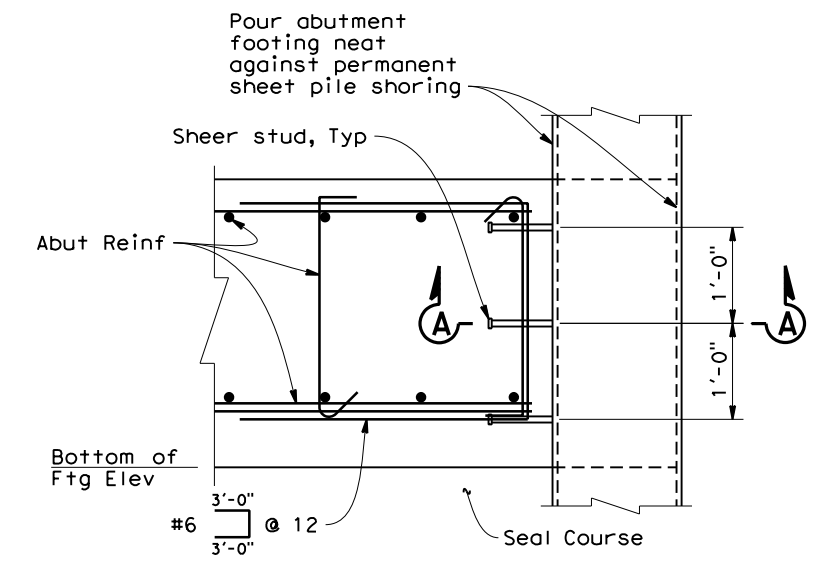


Note: Minimum Elastic Section Modulus = 70 in<sup>3</sup>/ft

**SECTION A-A**  
3/8"=1'-0"



**DETAIL 1**  
3/4"=1'-0"



**DETAIL 2**  
3/4"=1'-0"

Legend:  
 Approx ordinary high-tide water surface elevation (WSE)

X	DESIGN OVERSIGHT
X	SIGN OFF DATE

DESIGN	BY L. Smith	CHECKED J. Chou
DETAILS	BY B. Maechler	CHECKED J. Chou
QUANTITIES	BY J. Cruz	CHECKED H. Chou

PREPARED FOR THE  
**COUNTY OF HUMBOLDT**  
 DEPARTMENT OF PUBLIC WORKS

BRIDGE NO.	04C0260
PROJECT ENGINEER	Scott McCauley
POST MILE	0.19

**SWAIN SLOUGH BRIDGE**  
**MISCELLANEOUS DETAILS**

DESIGN DETAIL SHEET (ENGLISH) (REV.03/14/12)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

UNIT: PROJECT NUMBER & PHASE: X CONTRACT NO.: X

REVISION DATES	SHEET	OF
5/22/15	12	15

USERNAME => scottm DATE PLOTTED => 12/3/2019 TIME PLOTTED => 9:40:29 AM

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
01	HUM	CR		26	28

CERTIFIED ENGINEERING GEOLOGIST DATE \_\_\_\_\_

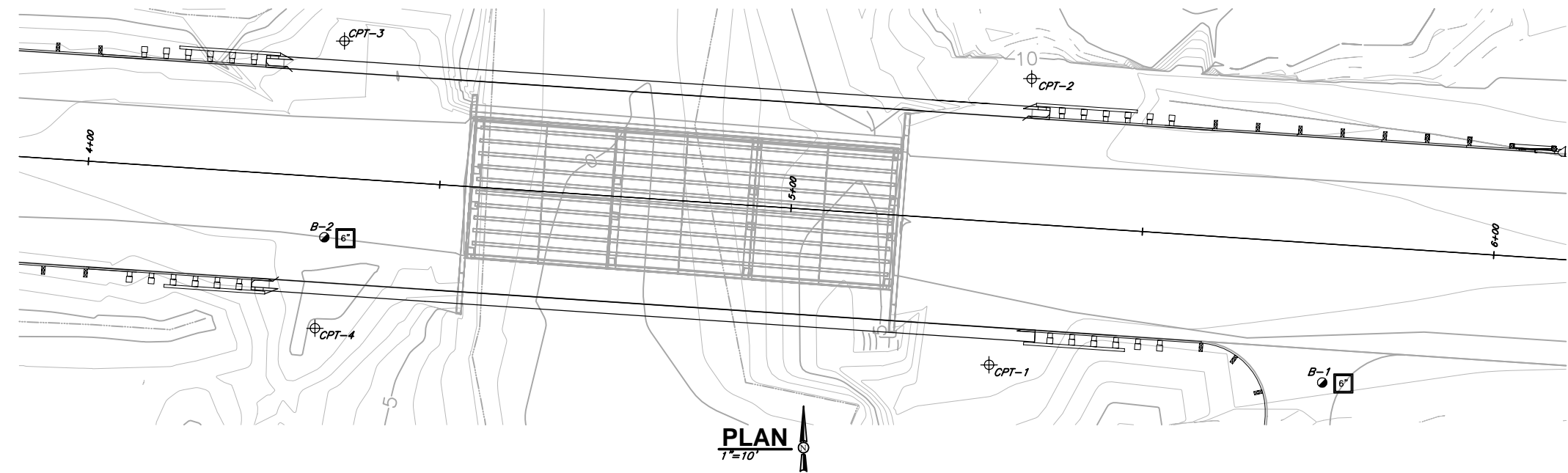
PROFESSIONAL GEOLOGIST  
 Gary Simpson  
 No. 2107  
 CERTIFIED ENGINEERING GEOLOGIST  
 STATE OF CALIFORNIA

PLANS APPROVAL DATE \_\_\_\_\_

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SHN CONSULTING ENGINEERS & GEOLOGISTS, INC.  
 812 W WABASH  
 EUREKA, CA 95501  
 FILE No. 012163

QUINCY ENGINEERING, INC.  
 3247 RAMOS CIRCLE  
 SACRAMENTO, CA 95827-2501



**NOTES:**

1. THIS LOTB SHEET WAS PREPARED IN ACCORDANCE WITH THE "CALTRANS SOIL & ROCK LOGGING, CLASSIFICATION, AND PRESENTATION MANUAL" (2010).
2. FIELD CLASSIFICATION OF SOILS WAS IN ACCORDANCE WITH ASTM D2488-06 "DESCRIPTION AND IDENTIFICATION OF SOILS (VISUAL-MANUAL PROCEDURE)".
3. STANDARD PENETRATION TESTS WERE COMPLETED IN ACCORDANCE WITH ASTM D 1586-11 USING A HAMMER WITH AN AUTOMATED DROP SYSTEM. DRILL RODS WERE 1 5/8-INCH DIAMETER "A" RODS; 1.4-INCH INSIDE DIAMETER SPLIT SPOON SAMPLER WAS DRIVEN WITHOUT BRASS LINERS.
4. 2.5-INCH INSIDE DIAMETER MODIFIED CALIFORNIA SAMPLER WAS DRIVEN IN THE SAME MANNER AS SPT, BUT WITH BRASS LINERS.
5. 3.0-INCH SHELBY TUBE WAS PUSHED INTO SOFT SOILS.
6. THE LENGTH OF EACH SAMPLES INTERVAL IS SHOWN GRAPHICALLY ON THE BORING LOG. WHOLE NUMBER BLOW COUNTS ("N") REPRESENT THE "STANDARD PENETRATION RESISTANCE" INTERVAL IN ACCORDANCE WITH ASTM D1586-11. WHERE LESS THAN 1 FOOT OF PENETRATION IS ACHIEVED, THE BLOW COUNT SHOWN IS FOR THAT FRACTION OF THE INTERVAL ACTUALLY PENETRATED AND THE AMOUNT OF PENETRATION IS SHOWN IN INCHES.
7. SPT HAMMER ENERGY MEASUREMENTS WERE NOT TAKEN DURING FIELD EXPLORATION.
8. GROUNDWATER SURFACE (GWS) ELEVATIONS IN THE BORINGS INDICATED ON THE LOG OF TEST BORINGS SHEETS REFLECT THE FLUID LEVEL IN THE BORING ON THE SPECIFIED DATE.
9. SEISMIC CONE PENETRATION TESTING LOGS SHOW SHEAR WAVE VELOCITY IN FEET PER SECOND.
10. ELECTRONIC MEDIA FOR PLAN VIEW PROVIDED BY QUINCY ENGINEERING.
11. BORING AND CPT ELEVATIONS ESTIMATED FROM TOPOGRAPHY PROVIDED BY QUINCY ENGINEERING.

DESIGN OVERSIGHT	DRAWN BY C. NEWELL	John Dailey, G.E.	PREPARED FOR THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	BRIDGE NO. 04C-0173	PINE HILL BRIDGE		
SIGN OFF DATE	CHECKED BY G.D. SIMPSON	FIELD INVESTIGATION BY: DATE: October 2012	Jason P. Jurens PROJECT ENGINEER	POST MILES	LOG OF TEST BORINGS		
GS GEOLOGIST LOG OF TEST BORINGS SHEET (ENGLISH) (REV. 03/14/12)		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	UNIT: PROJECT NUMBER & PHASE: X	CONTRACT NO.: X	REVISION DATES	SHEET 13	OF 15

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
01	HUM	CR		27	28

CERTIFIED ENGINEERING GEOLOGIST DATE \_\_\_\_\_

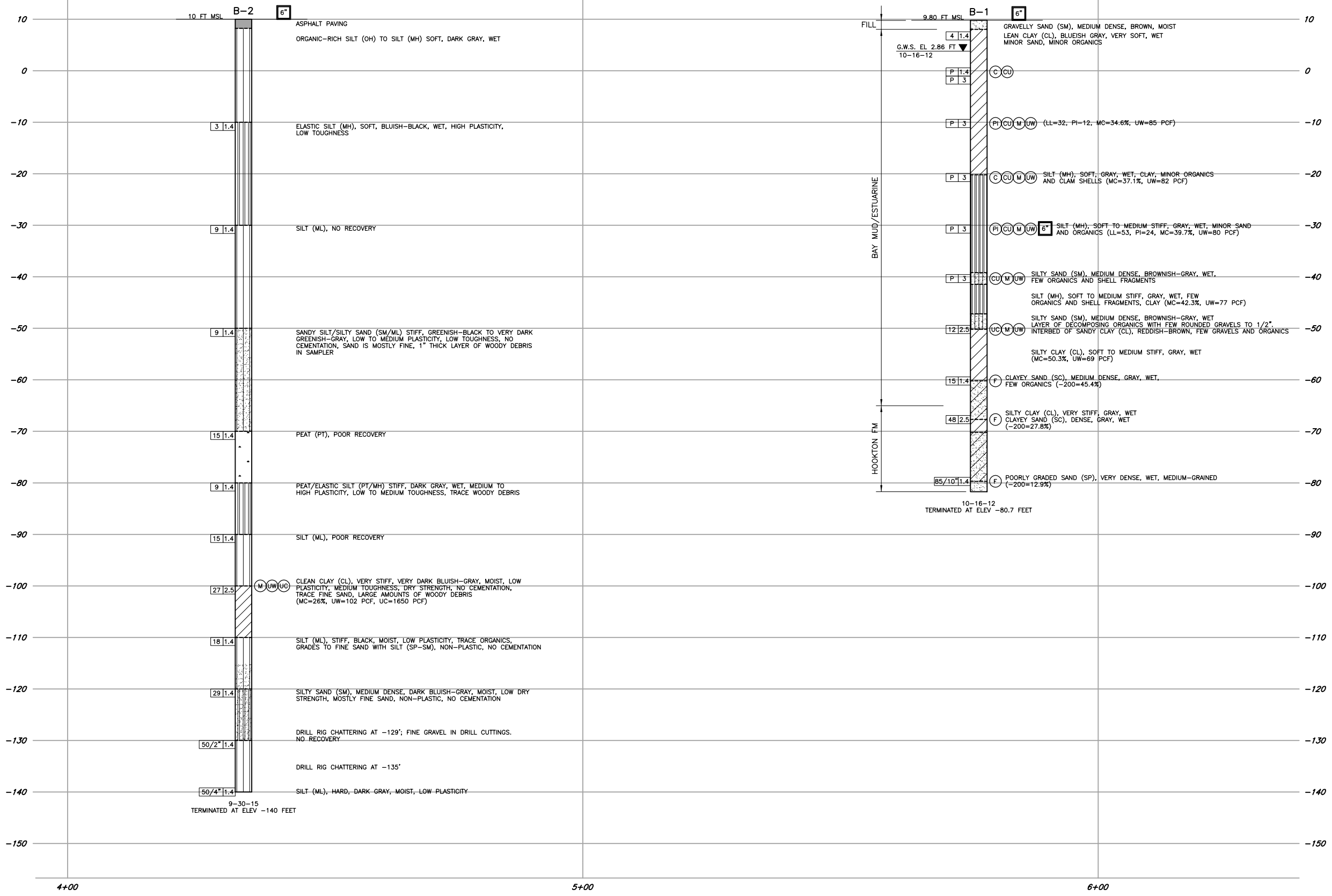
PROFESSIONAL GEOLOGIST  
 Gary Simpson  
 No. 2107  
 CERTIFIED ENGINEERING GEOLOGIST  
 STATE OF CALIFORNIA

PLANS APPROVAL DATE \_\_\_\_\_

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 EUREKA, CA 95501 FILE No. 012163

QUINCY ENGINEERING, INC.  
 3247 RAMOS CIRCLE  
 SACRAMENTO, CA 95827-2501



**PROFILE**  
 NTS

DESIGN OVERSIGHT	DRAWN BY C. NEWELL	John Dailey, G.E.	PREPARED FOR THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	BRIDGE NO. 04C-0173	PINE HILL BRIDGE	
SIGN OFF DATE	CHECKED BY G.D. SIMPSON	FIELD INVESTIGATION BY: DATE: October 2012	Jason P. Jurens PROJECT ENGINEER	POST MILES	LOG OF TEST BORINGS	
GS GEOLOGIST 100 OF TEST BORINGS SHEET (ENGLISH) (REV. 03/14/12)	ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		UNIT: PROJECT NUMBER & PHASE: X	CONTRACT NO.: X	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES X
					SHEET 14	OF 15

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
01	HUM	CR		28	28

CERTIFIED ENGINEERING GEOLOGIST DATE \_\_\_\_\_

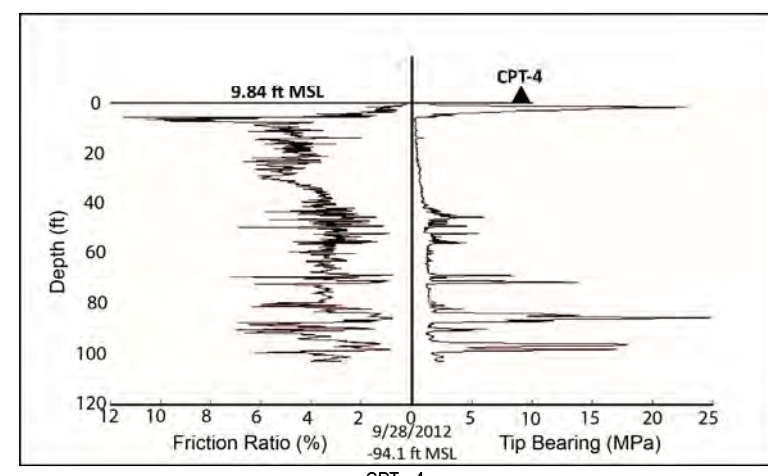
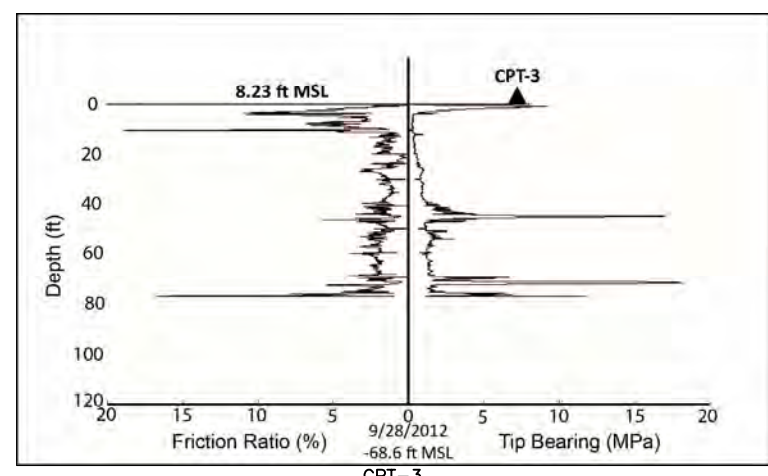
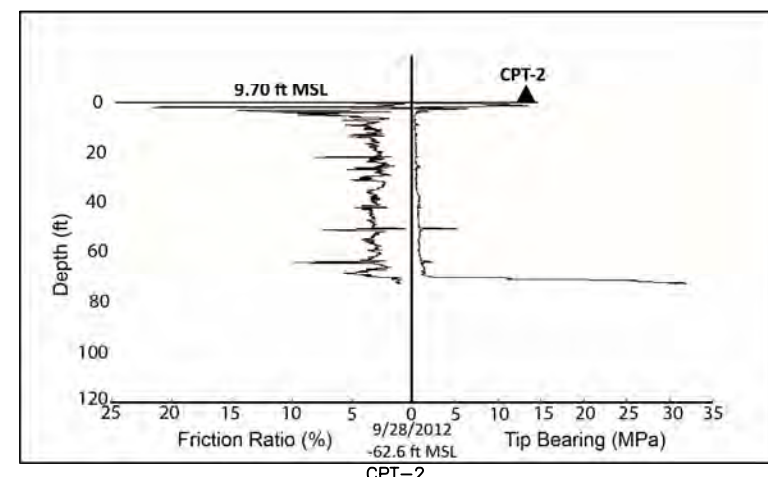
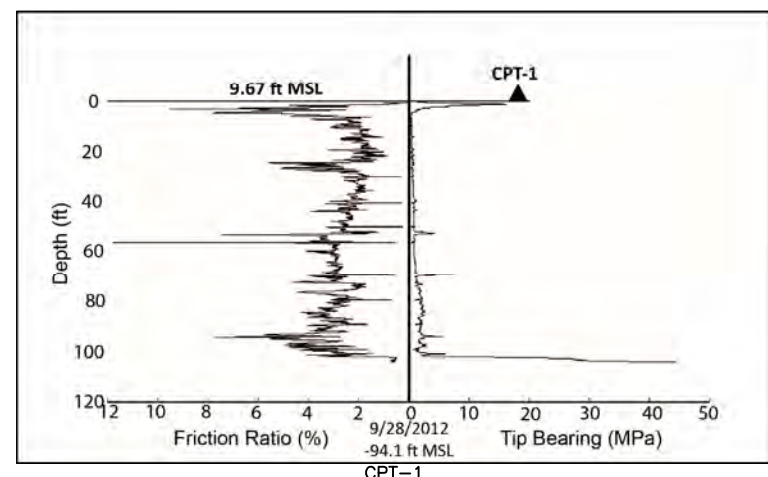
PROFESSIONAL GEOLOGIST  
 Gary Simpson  
 No. 2107  
 CERTIFIED ENGINEERING GEOLOGIST  
 STATE OF CALIFORNIA

PLANS APPROVAL DATE \_\_\_\_\_

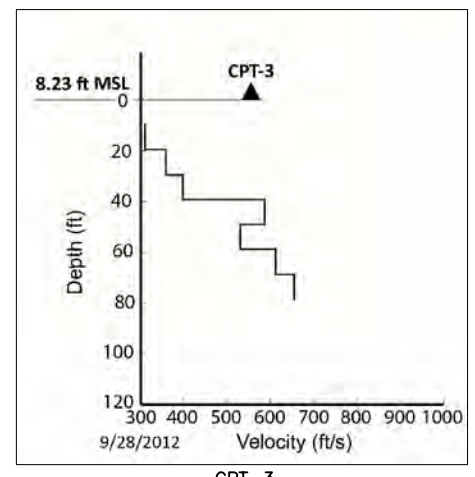
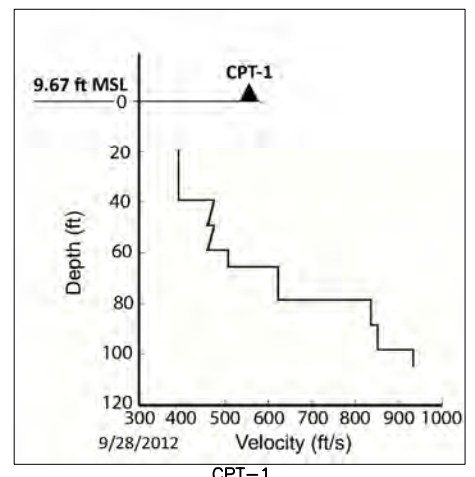
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of scanned copies of this plan sheet.

SHN CONSULTING ENGINEERS & GEOLOGISTS, INC.  
 812 W WABASH  
 EUREKA, CA 95501 FILE No. 012163

QUINCY ENGINEERING, INC.  
 3247 RAMOS CIRCLE  
 SACRAMENTO, CA 95827-2501



**CONE PENETRATION TEST (CPT) BORINGS**



**SEISMIC CONE PENETRATION BORINGS**

DESIGN OVERSIGHT	DRAWN BY C. NEWELL	John Dailey, G.E.	PREPARED FOR THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	BRIDGE NO. 04C-0173	PINE HILL BRIDGE	
SIGN OFF DATE	CHECKED BY G.D. SIMPSON	FIELD INVESTIGATION BY: DATE: October 2012	PROJECT ENGINEER Jason P. Jurens	POST MILES	LOG OF TEST BORINGS	
GS GEOLOGIST LOG OF TEST BORINGS SHEET (ENGLISH) (REV. 03/14/12)			UNIT: PROJECT NUMBER & PHASE: X	CONTRACT NO.: X	REVISION DATES	SHEET OF 15 15

GENERAL NOTES:

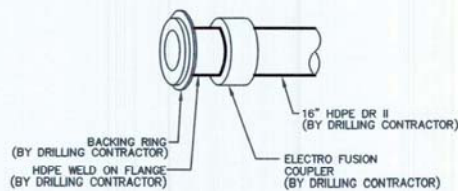
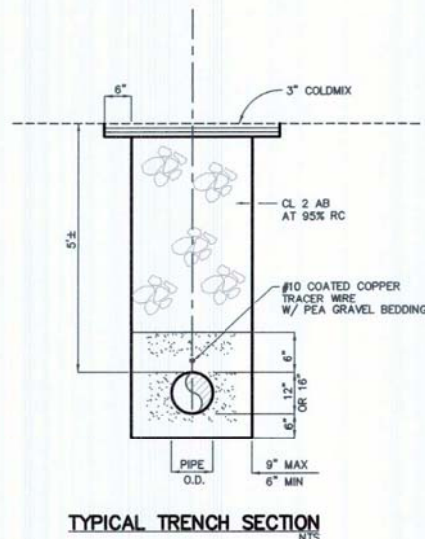
- THE WORKING DRAWINGS ARE GENERALLY DIAGRAMMATIC. THEY DO NOT SHOW EVERY OFFSET, BEND, OR ELBOW REQUIRED FOR INSTALLATION IN THE SPACE PROVIDED. THEY DO NOT SHOW EVERY DIMENSION, COMPONENT PIECE, SECTION, JOINT OR FITTING REQUIRED TO COMPLETE THE PROJECT. ALL LOCATIONS FOR WORK SHALL BE CHECKED AND COORDINATED WITH EXISTING CONDITIONS IN THE FIELD BEFORE BEGINNING CONSTRUCTION. EXISTING UNDERGROUND UTILITIES WITHIN THE LIMITS OF EXCAVATION FOR ENTRY/EXIT PITS SHALL BE VERIFIED AS TO CONDITION, SIZE, AND LOCATION BY UNCOVERING, PROVIDED SUCH IS PERMITTED BY LOCAL PUBLIC AUTHORITIES WITH JURISDICTION, BEFORE BEGINNING CONSTRUCTION. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES, BEFORE PROCEEDING.
- THE CONTRACTOR SHALL SECURE ALL NECESSARY PERMITS NOT PROVIDED BY OWNER PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
- THE CONTRACTOR SHALL PROVIDE TO THE OWNER A COPY OF THE TRENCH PERMIT FROM THE CALIFORNIA DIVISION OF INDUSTRIAL SAFETY PRIOR TO THE EXCAVATION OF ANY TRENCH OVER 5 FEET IN DEPTH.
- CONTRACTOR SHALL PERFORM TRENCH WORK IN CONFORMANCE WITH THE CALIFORNIA DIVISION OF INDUSTRIAL SAFETY REQUIREMENTS AND SHALL CONFORM TO ALL APPLICABLE OCCUPATIONAL SAFETY AND HEALTH STANDARDS, RULES, REGULATIONS, AND ORDERS ESTABLISHED BY THE STATE OF CALIFORNIA AND OTHER APPLICABLE AGENCIES.
- CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, GENERAL CONTRACTOR WILL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. ALL WORK AND EQUIPMENT SHALL COMPLY WITH THE CALIFORNIA DIVISION OF INDUSTRIAL SAFETY REQUIREMENTS. THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY, AND NOT BE LIMITED TO NORMAL WORKING HOURS. CONTRACTOR FURTHER AGREES TO HOLD HARMLESS, INDEMNIFY, AND DEFEND THE OWNER, THE ENGINEER AND HIS/HER CONSULTANTS.
- THE CONTRACTOR SHALL INDEPENDENTLY REVIEW GROUND, TOPOGRAPHY, AND TREE CONDITIONS THROUGHOUT THE SITE, AND ASSUME THE RISK OF COMPLETING THE WORK SET OUT ON THESE PLANS, REGARDLESS OF ROCK, WATER TABLE, OR OTHER CONDITIONS THAT MAY BE ENCOUNTERED IN THE COURSE OF THE WORK.
- ANY DISCREPANCY DISCOVERED BY THE CONTRACTOR IN THESE PLANS, OR ANY FIELD CONDITIONS DISCOVERED BY THE CONTRACTOR THAT MAY DELAY OR OBSTRUCT THE PROPER COMPLETION OF THE WORK SHOWN HEREIN, SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER AND THE ENGINEER IMMEDIATELY UPON DISCOVERY. SAID NOTIFICATION SHALL BE IN WRITING.
- ALL UNDERGROUND IMPROVEMENTS SHALL BE INSTALLED TESTED AND APPROVED PRIOR TO PAVING. THE CONTRACTOR SHALL NOT BEGIN EXCAVATING UNTIL ALL EXISTING UTILITIES HAVE BEEN MARKED IN THE FIELD. THE CONTRACTOR SHALL NOTIFY EACH APPLICABLE ENTITY AT LEAST 48 HOURS PRIOR TO COMMENCING WORK. CALL UNDERGROUND SERVICE ALERT (USA) TWO WORKING DAYS BEFORE DIGGING AT (800) 227-2600 FOR LOCATES.
- GRADING AND CONSTRUCTION CONTRACTORS SHALL STOP WORK AND NOTIFY THE OWNER AND THE ENGINEER IF CULTURAL RESOURCES ARE DISCOVERED DURING CONSTRUCTION.
- THE CONTRACTOR SHALL GIVE THE INSPECTOR 48 HOURS ADVANCE NOTICE OF ANY CONSTRUCTION OR REQUIRED TESTING.
- SHOULD THE CONTRACTOR OR ANY OF HIS AGENTS OR EMPLOYEES ENCOUNTER OR DISCOVER MATERIALS THAT APPEAR TO BE HAZARDOUS DURING THE PERFORMANCE OF THE WORK, THE CONTRACTOR SHALL INFORM THE ENGINEER IMMEDIATELY AND SUSPEND WORK IN THE AFFECTED AREA UNTIL THE ENGINEER HAS INSPECTED THE LOCATION AND MATERIALS IN QUESTION. SHOULD IT BE NECESSARY TO UNDERTAKE REMEDIATION, THE ENGINEER WILL GIVE WRITTEN NOTICE TO SUSPEND WORK IN THE AFFECTED AREA UNTIL THE PROPER COURSE OF ACTION HAS BEEN DETERMINED. OPERATIONS IN THE AFFECTED AREA SHALL BE RESUMED ONLY UPON WRITTEN NOTICE BY THE ENGINEER.
- ALL SITE GRADING WILL BE INSPECTED BY THE ENGINEER. COMPACTION TESTING WILL BE CONDUCTED IN EACH LIFT AFTER SUFFICIENT DENSITIES HAVE BEEN ACHIEVED IN THE CONTRACTOR'S OPINION. ANY SOILS THAT FAIL TO MEET THE REQUIRED COMPACTION LEVELS SHALL BE REMOVED AND RECOMPACTED. ALL COSTS ASSOCIATED WITH ACHIEVING COMPACTION STANDARDS SHALL BE INCLUDED IN THE CONTRACTOR'S ORIGINAL BID.
- ALL BACKFILL MATERIAL WITHIN THE ROAD RIGHT OF WAY SHALL BE CL 2 AGGREGATE BASE, 3/4 INCH MAX, PER CALTRANS SPECIFICATION SECTION 26, 95% RELATIVE COMPACTION.
- NO CHANGES OR MODIFICATIONS SHALL BE MADE TO THESE PLANS WITHOUT WRITTEN APPROVAL BY THE ENGINEER.
- CONSTRUCTION TO COMPLY WITH TECHNICAL REPORTS COMPLETED FOR THE PROJECT.

PROJECT SPECIFIC NOTES

- THE CONTRACTORS ARE ENCOURAGED TO FAMILIARIZE THEMSELVES WITH THE PERMITS AND AGREEMENTS BY OVERSIGHT AGENCIES, THE SPECIAL CONDITIONS OF APPROVAL AND REQUIREMENTS FOR EXECUTION OF THE WORK AS DESCRIBED IN THESE DOCUMENTS:  
A. HUMBOLDT COUNTY ENCROACHMENT PERMIT  
B. HDD FRAC-OUT CONTINGENCY PLAN
- THESE NOTES DO NOT ATTEMPT TO REITERATE ALL REQUIREMENTS OF THE DOCUMENTS MENTIONED ABOVE. THE CONTRACTOR SELECTED TO PERFORM THE WORK OF THIS HORIZONTAL DIRECTIONAL DRILL PROJECT SHALL BE RESPONSIBLE FOR CONFORMING TO THE REQUIREMENTS AND SPECIAL CONDITIONS OF THE DOCUMENTS MENTIONED ABOVE, AND FOR PERFORMING THE WORK AS SHOWN ON THE PLANS, AS SPECIFIED IN THE CONTRACT DOCUMENTS AND SPECIFICATIONS, AND AS DIRECTED BY THE ENGINEER. IN THE CASE OF A CONFLICT OR CONTRADICTION, ADVISE THE ENGINEER AND OWNER BEFORE PROCEEDING.
- THE CONTRACTOR SELECTED TO PERFORM THE HDD PROJECT SHALL HAVE A CALIFORNIA CSLB C-34 PIPELINE OR A-GENERAL ENGINEERING CLASSIFICATION, AND SHALL PROVIDE A COPY OF THE LICENSE TO THE OWNER BEFORE COMMENCEMENT OF DRILLING ACTIVITIES.
- THE CONTRACTOR SHALL HAVE COPIES OF AGREEMENTS AND PERMITS FROM ALL OVERSIGHT AGENCIES ON-SITE THROUGHOUT CONSTRUCTION AND SHALL MAKE SAID DOCUMENTS AVAILABLE TO AGENCY PERSONNEL UPON REQUEST.
- TEMPORARY FENCING SHALL BE PLACED AROUND THE CONSTRUCTION AREA PERIMETER AS NEEDED.
- EXCAVATED SOIL SHALL NOT BE PLACED OR STORED WHERE IT MAY BE SUBJECT TO ENTERING DRAINAGE FACILITIES. ALL ON-SITE STOCKPILES OF SOIL AND CONSTRUCTION MATERIALS SHALL BE CONTAINED AT ALL TIMES TO MINIMIZE THE DISCHARGE OF SEDIMENT OR OTHER POLLUTANTS.
- THE CONTRACTOR SHALL IMPLEMENT CONSTRUCTION BEST MANAGEMENT PRACTICES (BMP'S) AND AVOIDANCE AND MINIMIZATION MEASURES DURING CONSTRUCTION AS DESCRIBED IN THE HUMBOLDT COUNTY ENCROACHMENT PERMIT. BMP'S SHALL BE IMMEDIATELY AVAILABLE FOR DEPLOYMENT AT ALL TIMES TO PREVENT DISCHARGES TO WATERS OF THE STATE.
- DURING ALL DRILLING, REAMING, AND PULL-BACK OPERATIONS, A QUALIFIED OBSERVER (SOIL ENGINEER OR BIOLOGICAL MONITOR EXPERIENCED IN MONITORING FOR FRAC-OUTS) SHALL MONITOR THE BORE PATH.
- THE CONTRACTOR SHALL IMMEDIATELY STOP CONSTRUCTION OPERATIONS AND IMPLEMENT THE FRAC-OUT CONTINGENCY PLAN IN THE EVENT OF ANY DRILLING FLUID RELEASE. IMMEDIATELY NOTIFY THE OWNER AND ENGINEER OF THE RELEASE. DIRECTIONAL DRILLING OPERATIONS SHALL NOT RESUME UNTIL THE FRAC-OUT IS LOCATED, CONTAINED, CLEANED UP, AND APPROVED BY THE ENGINEER. THE HDD MEANS AND METHODS EMPLOYED BY THE CONTRACTOR SHALL BE COMPATIBLE WITH PERTINENT SECTIONS OF THE HORIZONTAL DIRECTIONAL DRILLING: FRAC-OUT CONTINGENCY.
- THE CONTRACTOR SHALL HAVE AVAILABLE ON-SITE, AT ALL TIMES, MATERIALS NECESSARY FOR CLEANUP OF DRILLING FLUIDS RELEASE AND PETROCHEMICAL SPILLS, AS DESCRIBED IN THE CONTRACT DOCUMENTS.
- ALL EQUIPMENT USED DURING CONSTRUCTION SHALL BE FREE OF OIL AND FUEL LEAKS. STATIONARY EQUIPMENT SHALL USE DRIP PANS AND OTHER DEVICES TO PREVENT SOIL AND WATER CONTAMINATION BY OIL OR OTHER PETROCHEMICAL PRODUCTS. CONTRACTOR SHALL HAVE "SPILL-KITS" AVAILABLE FOR ALL EQUIPMENT.
- DRILLING CONTRACTOR IS RESPONSIBLE FOR PROPER DISPOSAL OF ALL SPOILS.

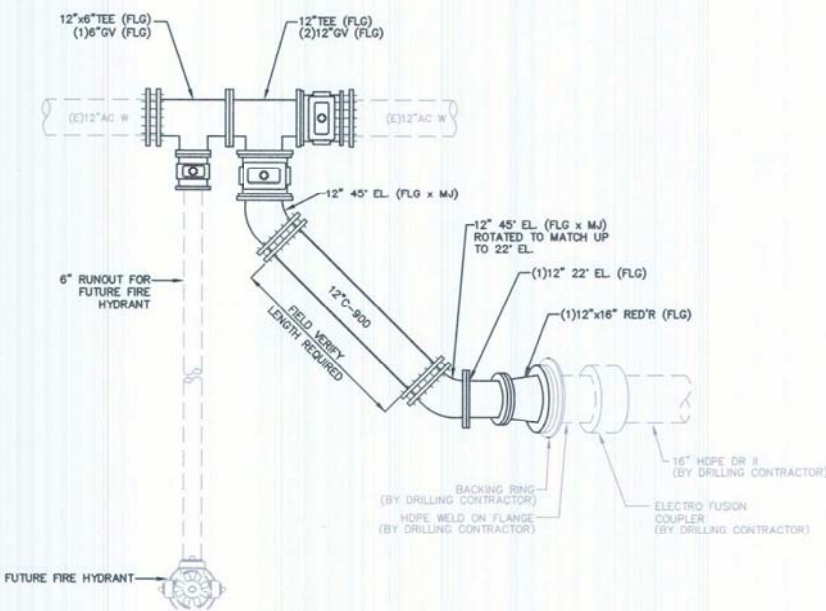
PAVING

- ALL ASPHALT CONCRETE SHALL BE IN ACCORDANCE WITH CALTRANS STANDARD SPECIFICATIONS SECTION 39.
- ASPHALT MATERIAL SHALL BE HMA TYPE A WITH 1/2 INCH AGGREGATE GRADATION. ASPHALT BINDER SHALL BE PG64-16.
- ASPHALT CONCRETE SHALL BE INSTALLED AND TESTED ACCORDING TO THE "STANDARD PROCESS" SPECIFIED IN SECTION 39. ACCEPTANCE CRITERIA PER CALTRANS TEST 309.
- WHERE NEW PAVING MEETS EXISTING PAVEMENT, EXISTING PAVEMENT SHALL BE SAWCUT.
- APPLY TACK COAT TO CONTACT SURFACES OF CURBS, GUTTERS, AND EXISTING PAVEMENT. PLACE ASPHALT CONCRETE WITHIN 24 HOURS OF APPLYING PRIMER OR TACK COAT. TACK COAT SHALL BE TYPE SS-1.
- MAXIMUM COMPACTED LIFT THICKNESS IS 3 INCHES.
- COMPACT PAVEMENT BY ROLLING TO A MINIMUM OF 95% OF MAXIMUM DENSITY. DO NOT DISPLACE OR EXTRUDE PAVEMENT FROM POSITION. HAND COMPACT IN AREAS INACCESSIBLE TO MECHANICAL ROLLING EQUIPMENT. PERFORM ROLLING WITH CONSECUTIVE PASSES TO ACHIEVE SMOOTH FINISH WITHOUT ROLLER MARKS.
- AGGREGATE BASE SHALL MEET THE REQUIREMENTS DESCRIBED IN THE GENERAL COMPACTION SECTION OF THESE SPECIFICATIONS, COMPACTED TO 95% RELATIVE COMPACTION PER ASTM D1557/D6938.
- UNLESS OTHERWISE SHOWN ON THESE PLANS, NEW ASPHALT CONCRETE SURFACES AND NEW FINISH GRADE SURFACES SHALL BE INSTALLED SO AS TO MAINTAIN EXISTING SURFACE DRAINAGE PATTERNS.



- NOTES:
- DRILL CONTRACTOR TO LEAVE FINAL FLANGE DEPTH AT 4"±
  - FINAL TIE-IN TO BE DONE BY HCSDFORCES AT A LATER DATE.

**END OF PIPELINE DETAIL  
TYPICAL BOTH ENDS  
(BY DRILL CONTRACTOR)**  
NOT TO SCALE



**CONNECTION DETAIL  
TYPICAL BOTH SIDES  
(BY HCSDFORCES)**  
NOT TO SCALE



Humboldt  
Community  
Services  
District

555 WALNUT DRIVE, EUREKA, CA. 95501 (707) 443-4558 FAX: (707) 443-0818  
Water Distribution Sewage Collection Street Lighting

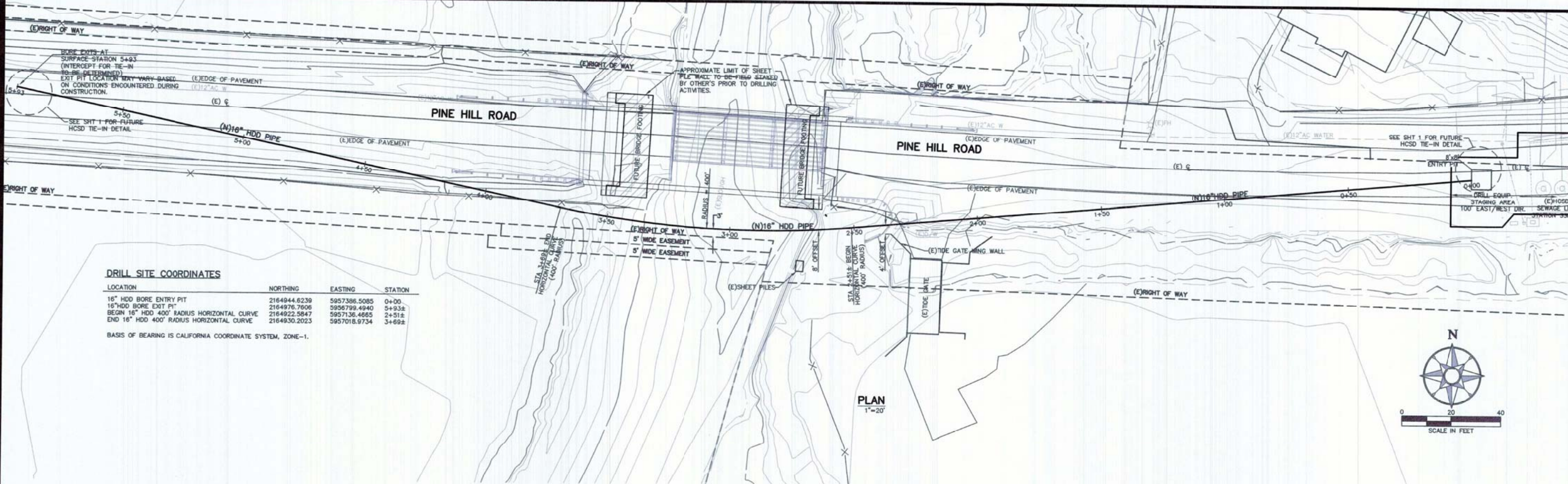
PINE HILL BRIDGE 16" HDPE  
WATER MAIN BYPASS  
HUMBOLDT COUNTY, CALIFORNIA

NOTES AND DETAILS

PINE HILL ROAD

0+00 TO 5+93±

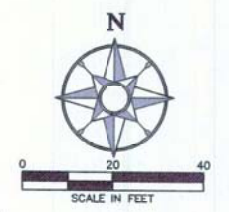
DATE	NOVEMBER 2019
SCALE	AS SHOWN
DRAWN	CHECKED
BB	
JOB NO.	011707
DRAWING NUMBER	



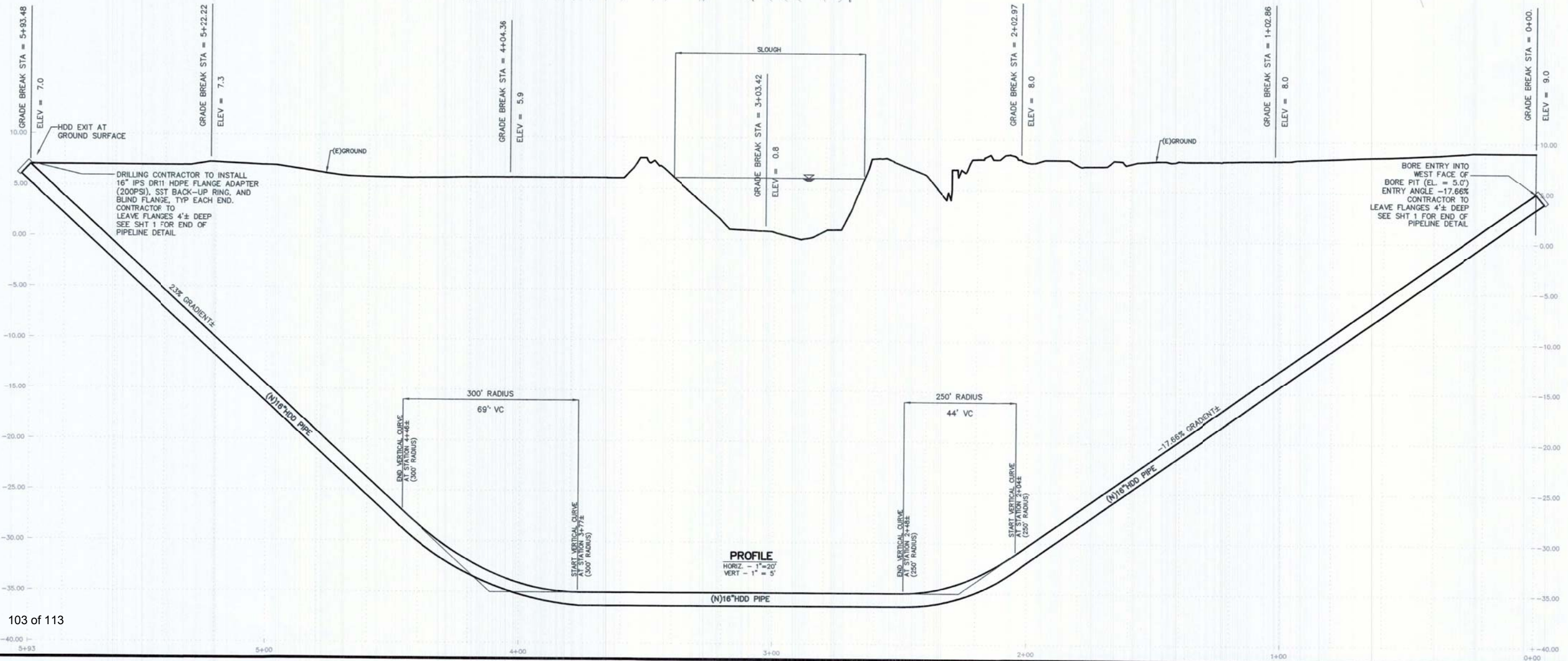
**DRILL SITE COORDINATES**

LOCATION	NORTHING	EASTING	STATION
16" HDD BORE ENTRY PIT	2164944.6239	5957386.5085	0+00
16" HDD BORE EXIT PIT	2164976.7606	5956799.4940	5+93±
BEGIN 16" HDD 400' RADIUS HORIZONTAL CURVE	2164922.5847	5957136.4665	2+51±
END 16" HDD 400' RADIUS HORIZONTAL CURVE	2164930.2023	5957016.9734	3+69±

BASIS OF BEARING IS CALIFORNIA COORDINATE SYSTEM, ZONE-1.



**PLAN**  
1" = 20'



**PROFILE**  
HORIZ - 1" = 20'  
VERT - 1" = 5'

**Humboldt Community Services District**  
2055 WALNUT DRIVE, EUREKA, CA 95503  
(707) 442-4558 FAX: (707) 442-0818  
Water Distribution Sewage Collection Street Lighting

**PINE HILL BRIDGE 16" HDPE WATER MAIN BYPASS**  
HUMBOLDT COUNTY, CALIFORNIA

PLAN & PROFILE  
PINE HILL ROAD  
0+00 TO 5+93±

DATE	NOVEMBER 2019
SCALE	AS SHOWN
DRAWN	CHECKED
BB	
JOB NO.	011707
DRAWING NUMBER	



**COUNTY OF HUMBOLDT**  
**DEPARTMENT OF PUBLIC WORKS**  
**NATURAL RESOURCES DIVISION**

**1106 SECOND STREET**  
**EUREKA, CA 95501-0579**  
**(707) 445-7741 / FAX (707) 445-7409**



DATE: May 18, 2016

TO: Engineering Department

FROM: Natural Resources Division

SUBJECT: Pine Hill Road / Swain Slough Bridge Replacement Project; CEQA Determination

Background

The County of Humboldt is planning on replacing the bridge that spans Swain Slough located on Pine Hill Road Post Mile (PM) 0.20 (Bridge No. 4C-0173) just east of Highway 101 and roughly one mile south of the City of Eureka. Pine Hill Road is a Rural Local Road that connects Elk River road with Meyers Avenue and Herrick Road.

The existing bridge was built in 1955, and is structurally deficient and functionally obsolete with a sufficiency rating of 44.6. The County nominated the bridge for replacement under the federal-aid Highway Bridge Program (HBP) administered by the Federal Highway Administration (FHWA) through Caltrans Local Assistance.

The existing bridge is a 63-foot (ft) timber stringer structure with a concrete deck and concrete abutments and was built in 1955. The existing timber stringers are in poor condition as are the concrete support columns; the bridge has been categorized as both structurally deficient and functionally obsolete. The proposed new bridge will be a single-span precast concrete I-girder, and will be slightly longer than the existing bridge to better fit the site conditions. The single-span bridge option will minimize the environmental impacts to the slough as it will not require any supports in the slough channel. The recommended new roadway would consist of two 10-ft lanes and two 5-ft shoulders.

CEQA Determination

Staff has determined that this project fits the definition of a Class 2 Categorical Exemption (CEQA Guidelines, Section 15302) as it involves the replacement of an existing public facility on the same site with the same purpose and capacity as the structure being replaced. Furthermore, this project has been analyzed under both CEQA and NEPA and it has been determined that the project, as designed, will not adversely impact air quality, water quality, historical or cultural resource, or any other environmental area. The project will improve vehicular/pedestrian/bicyclist safety and reduce the potential of accidents and injuries. This project fits within the definition of the Class 2 Categorical Exemption as set forth in CEQA Guidelines, Section 15302. Additionally, staff has determined that none of the exceptions to the Categorical Exemptions set forth in CEQA Guidelines, Section 15300.2, apply. As such, staff has concluded that this Categorical Exemption applies to this project.

Andrew Bundschuh  
Senior Environmental Analyst



COMMISSIONERS

1<sup>st</sup> Division

Larry Doss

2<sup>nd</sup> Division

Greg Dale

3<sup>rd</sup> Division

Stephen Kullmann

4<sup>th</sup> Division

Richard Marks

5<sup>th</sup> Division

Patrick Higgins

Humboldt Bay  
Harbor, Recreation and Conservation District  
(707) 443-0801  
P.O. Box 1030  
Eureka, California 95502-1030



**STAFF REPORT – HARBOR DISTRICT MEETING**  
**February 27,2020**

**TO:** Honorable Board President and Harbor District Board Members

**FROM:** Larry Oetker, Executive Director

**DATE:** February 18, 2020

**TITLE:** **Discuss, Review, and Authorize the Executive Director to Execute the Samoa Peninsula Infrastructure Workgroup Agreement.**

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**STAFF RECOMMENDATION:** Staff recommends the Board: Authorize the Executive Director to execute the Agreement.

**BACKGROUND:** Staff from the Harbor District, Humboldt County, Humboldt Bay Municipal Water District, Samoa Peninsula Community Services District, City of Eureka, and City of Arcata have been meeting to discuss how we can work together to complete upgrades and maintenance to the public infrastructure on the Samoa Peninsula. Since the infrastructure is owned and managed by several different governmental agencies, there is a need to coordinate our efforts in order to effectively manage and plan for future development opportunities. The proposed Samoa Peninsula Infrastructure Workgroup Agreement is included as Attachment A.

**ATTACHMENTS:**

- A.** Samoa Peninsula Infrastructure Workgroup Agreement

# Samoa Peninsula Infrastructure Workgroup Agreement

The undersigned agree to form a workgroup to determine whether a public and /or private entity should be formed to collectively gather resources to invest into the infrastructure needs of the Samoa Peninsula.

## Recitals

A. Public agencies with a variety of jurisdictions have been engaged in conversations and activity concerning numerous potential coastal dependent or aquaculture-based development opportunities for the Samoa Peninsula.

B. Currently, a substantial lack or limitation on the utility related infrastructure on the Samoa Peninsula needed for both economic development and the safety of future residents.

C. The Samoa Peninsula falls into a congressionally established Opportunity Zone. Opportunity Zones are a new tool for community development. Established in the Tax Cuts and Jobs Act of 2017, Opportunity Zones provide tax incentives for long-term investment in low-income communities.

D. Interested agencies desire to create a workgroup, to determine the best way stakeholders can collaborate to attract private investment, federal or state funding to meet the infrastructure needs of the Samoa Peninsula.

Now, therefore the undersigned public agencies, referred herein as “Members” agree as follows:

## Agreement

**1. Formation.** The “Samoa Peninsula Infrastructure Workgroup” is hereby formed.

**2. Parties to this agreement.** For the purposes of this agreement, each member intends to explore the creation of a separate public entity or special district for a period of no more than one year.

**3. Purpose.** The purpose is to explore the possibility of creating an entity that can seek resources for the infrastructure needs of the Samoa Peninsula for economic development improvements and the betterment of the community members who live there and the

economy of Humboldt County. To further that purpose, the membership will work toward the following goals:

- A. Study the collective infrastructure needs including, but not limited to: water, sewer, power, fire, broadband
- B. Create an overview on upcoming projects, their funding status, and additional projects likely to emerge seeking to locate in the region.
- C. Increase awareness and understanding of the regional capacity needed to protect the area from threats including fire, safety and climate adaptation.
- D. Expand the regional capacity to be responsive to economic development opportunities

**4. Membership.** Any public agency which has jurisdiction within the boundaries of the Samoa Peninsula Opportunity Zone.

**5. Timeline.** The workgroup shall disband on December 31, 2020, or sooner at the discretion of the membership. The Task Force can be extended for a period of one year by the membership if the entities it represents are notified of the need for an extension.

**6. Principal Office.** The principal office shall be 520 E Street, Eureka, CA 95501

**7. Staffing.** The County of Humboldt Economic Development Department will staff the task force. Consultants may be hired to assist the County with staffing needs.

COMMISSIONERS  
1<sup>st</sup> Division  
Larry Doss  
2<sup>nd</sup> Division  
Greg Dale  
3<sup>rd</sup> Division  
Stephen Kullmann  
4<sup>th</sup> Division  
Richard Marks  
5<sup>th</sup> Division  
Patrick Higgins

**Humboldt Bay**  
**Harbor, Recreation and Conservation District**  
(707)443-0801  
P.O. Box 1030  
Eureka, California 95502-1030



**STAFF REPORT – HARBOR DISTRICT MEETING**  
**February 27, 2020**

**TO:** Honorable Board President and Harbor District Board Members

**FROM:** Larry Oetker, Executive Director

**DATE:** February 21, 2020

**TITLE:** Consider Adopting Resolution 2020-02 Designating Business Matters, Appointment and Authorization for the Humboldt Bay Harbor, Recreation and Conservation District for Calendar Year 2020

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**STAFF RECOMMENDATION:** Staff recommends the Board Adopt Resolution 2020-02

**BACKGROUND:** Annually the Board approves a Resolution which appoints specific staff and/or consultants, established financial limitations, legal notice designations, meeting schedules, and other business matters of the District.

Staff recommends adopting the 2020 Regular Meeting Schedule (Attachment A), which cancels the meetings scheduled for November 26, 2020 and December 24, 2020 and schedule Special Meetings on the second Thursday of those months instead.

**DISCUSSION:** A Business Matters Resolution has been adopted annually since 2013 and is used as a guideline for staff regarding media contacts and spending limits, as well as appointed district staff and the officers of the Board of Commissioners. It establishes the board meeting schedule and legal notice designations.

**ATTACHMENTS:**

- A. Humboldt Bay Harbor District Board of Commissioners Regular Meeting Schedule for the Calendar Year 2020
- B. Resolution 2020-02



**Humboldt Bay Harbor District Board of Commissioners  
Regular Meeting Schedule  
Calendar Year 2020**

MONTH	DATE	TIME
January	01/23/2020	7:00 P.M.
February	02/27/2020	7:00 P.M.
March	03/26/2020	7:00 P.M.
April	04/23/2020	7:00 P.M.
May	05/28/2020	7:00 P.M.
June	06/25/2020	7:00 P.M.
July	07/23/2020	7:00 P.M.
August	08/27/2020	7:00 P.M.
September	09/24/2020	7:00 P.M.
October	10/22/2020	7:00 P.M.
<del>November*</del>	<del>11/26/2020</del>	<del>7:00 P.M. CANCELLED</del>
<del>December*</del>	<del>12/24/2020</del>	<del>7:00 P.M. CANCELLED</del>

**\*Special Meeting Dates for November and December 2020:**

November	11/12/2020	7:00 P.M.
December	12/10/2020	7:00 P.M.

**HUMBOLDT BAY HARBOR, RECREATION  
AND CONSERVATION DISTRICT**

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**RESOLUTION NO. 2020-02**

**A RESOLUTION DESIGNATING BUSINESS MATTERS,  
APPOINTMENT AND AUTHORIZATION FOR THE HUMBOLDT BAY HARBOR,  
RECREATION AND CONSERVATION DISTRICT FOR CALENDAR YEAR 2020**

**BE IT RESOLVED THAT** the Board of Commissioners for the Humboldt Bay Harbor, Recreation and Conservation District hereby appoints and/or authorizes the following Business Matters for the calendar year beginning January 1, 2020 and ending December 31, 2020 for all divisions of the Humboldt Bay Harbor, Recreation and Conservation District:

**OFFICERS FOR THE BOARD OF COMMISSIONERS:**

President -	Stephen Kullmann
Vice President -	Larry Doss
Secretary -	Patrick Higgins
Commissioner -	Greg Dale
Commissioner -	Richard Marks

**ENABLING LEGISLATION:**

Appendix II of the State of California Harbors and Navigation Code: Humboldt Bay Harbor, Recreation and Conservation District.

**FINANCIAL:**

1. Auditors- As approved by the Board.
2. District Treasurer – Mark Wetzel, CPA; David L. Moonie & Co., LLP; 325 Second Street, Suite 301; Eureka, CA 95501
3. Budget Officer – District Treasurer and Executive Director
4. Custodians of Funds – District Treasurer and Executive Director
5. Authorized to Open Accounts – District Treasurer and Executive Director
6. Investment of Surplus Funds – Custodians of Funds
7. Custodians of State, Federal and other funds, whether loans or grants, to make application for, receive and expend – Custodians of Funds and Executive Director
8. Expenditures:
  - a. Checks require any two signatures from the following: Current Commissioner or Executive Director.

- b. Expenditures over \$5,000 shall follow § 36 of Appendix II of the State of California Harbors and Navigation Code: Humboldt Bay Harbor, Recreation and Conservation District
  - c. Purchase Order for non-recurring, single expenditures over \$300.00
  - d. Board approval of any expenditure over \$5,000.00
9. Authorized Revenue Facilities:
- a. Local Bank Checking, Money Market & Savings Accounts – TriCounties Bank, Eureka Branch
  - b. Remote Bank Checking, Money Market/Savings Accounts – BBVA Compass Bank
  - c. Humboldt County Treasurer to receive Humboldt County imposed tax revenues and other collected revenues for disbursement to the Humboldt Bay Harbor, Recreation and Conservation District
10. Grants
- a. The Board President and/or Executive Director are authorized to sign grant agreements
11. Contracts
- a. The Board President and/or Executive Director are authorized to sign contracts and expenditures over \$5,000.00 which have been approved by the Board

#### **LEGAL NOTICE DESIGNATIONS:**

1. Official Notice posting sites:
  - a. District Conference Room – aside main door on outside wall
  - b. District website: [www.humboldtby.org](http://www.humboldtby.org)
2. The Times-Standard (newspaper of general circulation) as the newspaper for legal publications
3. Email notification to News Media: The Times-Standard, North Coast Journal, Ferndale Enterprise, Mad River Union, KEET-TV, KIEM-TV, KMUD Radio, and KHUM Radio.
4. Email notification to:
  - a. Cities: Eureka, Fortuna, Arcata
  - b. Counties: Humboldt
  - c. Chambers of Commerce: Eureka, Arcata
  - d. Interested parties list

#### **REGULAR MONTHLY BOARD MEETINGS:**

1. Location: Humboldt Bay Harbor, Recreation and Conservation District; 601 Startare Drive; Eureka, CA
2. Time: Closed Session: 6:00 p.m. PST; Regular Session: 7:00 p.m. PST
3. When: 4<sup>th</sup> Thursdays of each month. Exceptions only if regular meeting dates conflict with November and December holidays.
4. Notices posted a minimum of 72 hours prior to the meeting.

**SPECIAL BOARD MEETINGS:**

1. Location: Humboldt Bay Harbor, Recreation and Conservation District; 601 Startare Drive; Eureka, CA
2. When: As needed.
3. Notices posted a minimum of 24 hours prior to the meeting.

**OTHER BUSINESS:**

1. Election Officer – Executive Director
2. Filing of Bonds - Executive Director
3. Authorized to contract as necessary- Executive Director
4. Legal Counsel – Ryan Plotz of Mitchell, Brisso, Delaney & Vrieze, LLC, 814 7<sup>th</sup> St. Eureka, CA 95501
5. District Planner – George Williamson; Planwest Partners Inc.; 1125 16<sup>th</sup> Street; Arcata, CA 95521
6. District Engineer- Mike Foget; SHN Engineers, 812 W. Wabash Ave, Eureka, CA 95501
7. District Treasurer- Mark Wetzel; DLM & Co. LLP, 325 2<sup>nd</sup> St., Ste 301, Eureka, CA 95501
8. Insurance Agent of Record – Special Districts Risk Management Authority (Property, Liability, Workers Compensation, Marina Operators Liability)
9. Recognize the Humboldt Bay Harbor, Recreation and Conservation District as an equal opportunity employer.
10. Designation of registered office and agent:  
Office: 601 Startare Drive; Eureka, CA 95501  
Agent: Executive Director
11. Custodian of Public Records: Executive Director

**PASSED AND ADOPTED** by the Board of Commissioners of the Humboldt Bay Harbor, Recreation and Conservation District at a duly called meeting held on the 27th day of February 2020, by the following polled vote:

**AYES:**

**NOES:**

**ABSENT:**

\_\_\_\_\_  
**STEPHEN KULLMANN, President  
Board of Commissioners**

**ATTEST:**

\_\_\_\_\_  
**PATRICK HIGGINS, Secretary**



**Board of Commissioners**

**CERTIFICATE OF SECRETARY**

The undersigned, duly qualified and acting Secretary of the HUMBOLDT BAY HARBOR, RECREATION AND CONSERVATION DISTRICT, does hereby certify that the attached Resolution is a true and correct copy of RESOLUTION NO. 2020-02 entitled,

**A RESOLUTION DESIGNATING BUSINESS MATTERS,  
APPOINTMENT AND AUTHORIZATION FOR THE HUMBOLDT BAY HARBOR,  
RECREATION AND CONSERVATION DISTRICT FOR CALENDAR YEAR 2020**

as regularly adopted at a legally convened meeting of the Board of Commissioners of the HUMBOLDT BAY HARBOR, RECREATION AND CONSERVATION DISTRICT, duly held on the 27th day of February 2020; and further, that such Resolution has been fully recorded in the Journal of Proceedings in my office, and is in full force and effect.

IN WITNESS WHEREOF, I have hereunto set my hand this 27th day of February 2020.

\_\_\_\_\_  
PATRICK HIGGINS, Secretary  
Board of Commissioners