SPECIFICATIONS AND PROPOSAL

FOR

SUBSTRUCTURE REPAIRS AT PIERS 16 AND 17

HONOLULU HARBOR, OAHU, HAWAII

JOB S10852

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HARBORS DIVISION

TABLE OF CONTENTS

Sample Forms

- Performance Bond (Surety)
- Performance Bond
- Labor and Material Payment Bond (Surety)
- Labor and Material Payment Bond
- Chapter 104, HRS Compliance Certificate
- Certificate of Compliance for Employment of State Residents, Act 192, SLH 2011

NOTICE TO BIDDERS
(Chapter 103D, Hawaii Revised Statutes)

The receiving of SEALED BIDS for SUBSTRUCTURE REPAIRS AT PIERS 16 AND 17, HONOLULU HARBOR, OAHU, HAWAII - JOB S10852, will begin as advertised in HIePRO. Bidders are to register and submit bids through HIePRO only. See the following HIePRO link for important information on registering: https://hiepro.ehawaii.gov/welcome.html.

Plans, specifications, proposal, contract forms, and any other applicable documents may be obtained from HIePRO.

Deadline to submit bids is Wednesday, June 7, 2023, at 2:00 p.m. Hawaii Standard Time (HST). Bids received after said due date and time shall not be considered.

The scope of work for this project consists of repairing substructure spalls at Piers 16 and 17 at Honolulu Harbor, Oahu, Hawaii. The estimated construction cost is between $1,600,000 and $1,700,000.

To be eligible for award, bidders must possess a valid State of Hawaii General Engineering Contractor's "A" license at the time of the bid opening.

The GENERAL PROVISIONS dated 2016 applicable to this project are available on the internet at http://hidot.hawaii.gov/administration/con/.

A pre-bid meeting is scheduled for Monday, May 15, 2023, at 11:00 a.m. HST. All prospective bidders or their representatives (employees) are encouraged to attend, but attendance is not mandatory. The pre-bid meeting will be conducted on Microsoft Teams. Contact Mr. Gregg Hirokawa, Harbors Project Manager, by phone at (808) 587-1985 or by email at gregg.hirokawa@hawaii.gov, a minimum of 24 hours prior to the scheduled pre-bid meeting to receive the Teams meeting invitation. Anything said at the conference is for clarification purposes and any changes to the bid documents will be made by addendum and posted in HIePRO.

All questions and requests for information (RFI) applicable to the bid documents shall be

submitted via HIePRO no later than 14 calendar days before bid opening. Questions received after the deadline will not be addressed. Verbal RFI will not receive a response.

Apprenticeship Preference. A 5% bid adjustment for bidders that are parties to apprenticeship agreements pursuant to §103-55.6, Hawaii Revised Statutes (HRS), is applicable to this project.

Employment of State Residents on Construction Procurement Contracts. Compliance with §103B-3, HRS, is a requirement for this project whereby a minimum of 80% of the bidder' s work force on this project **must** consist of Hawaii residents.

Campaign Contributions by State and County Contractors. Contractors are hereby notified of the applicability of §11-355, HRS, which states that campaign contributions are prohibited from specified State or County government contractors during the term of the contract if the contractors are paid with funds appropriated by a legislative body. For more information, contact the Campaign Spending Commission at (808) 586-0285.

Protests. Any protest of this solicitation shall be submitted in writing to the Director of Transportation, in accordance with §103D-701, HRS, and §3-126, Hawaii Administrative Rules.

The Equal Employment Opportunity Regulations of the Secretary of Labor implementing Executive Order 11246, as amended, shall be complied with on this project.

The U.S. Department of Transportation Regulation entitled "Nondiscrimination in Federally-Assisted Programs of the U.S. Department of Transportation," Title 49, Code of Federal Regulations (CFR), Part 21, is applicable to this project. Bidders are hereby notified that the State Department of Transportation will affirmatively ensure that the contract entered into pursuant to this advertisement will be awarded to the lowest responsible bidder without discrimination on the grounds of race, color, national origin, or sex (as directed by 23 CFR, Part 200).

For additional information, contact Mr. Hirokawa as noted above.

The State reserves the right to reject any or all proposals and to waive any defects in said proposals for the best interest of the public.

DREANALEE K. KALILI
Deputy Director
Department of Transportation, Harbors

Internet Posting: May 10, 2023

INSTRUCTIONS FOR CONTRACTOR'S LICENSING

"A" general engineering contractors and "B" general building contractors are reminded that due to the Hawaii Supreme Court's January 28, 2002 decision in Okada Trucking Co., Ltd. v. Board of Water Supply, et al., 97 Haw. 450 (2002), they are prohibited from undertaking any work, solely or as part of a larger project, which would require the general contractor to act as a specialty contractor in any area where the general contractor has no license. Although the "A" and "B" contractor may still bid on and act as the "prime" contractor on an "A" or "B" project *(See, HRS § 444-7 for the definitions of an "A" and "B" project.)*, respectively, the "A" and "B" contractor may only perform work in the areas in which they have the appropriate contractor's license *(An "A" or "B" contractor obtains "C" specialty contractor's licenses either on its own, or automatically under HAR § 16-77-32.)*. The remaining work must be performed by appropriately licensed entities. It is the sole responsibility of the contractor to review the requirements of this project and determine the appropriate licenses that are required to complete the project.

SPECIAL PROVISIONS

The General Provision is amended as follows:

A. ARTICLE I - TERMS, ABBREVIATIONS, AND DEFINITIONS

1. Section 1.3 Definitions: The definition for "Subcontractor" is amended by deleting it and replacing it with the following:

   "Subcontractor – An individual, partnership, firm, corporation, or joint venture, or other legal entity, as licensed or required to be licensed under Chapter 444, Hawaii Revised Statutes, as amended, which enters into an agreement with the Contractor to perform a portion of the work."

2. Add the following to section 1.3 Definitions.

   "HAWAII ePROCUREMENT SYSTEM (HIePRO) - The State of Hawaii eProcurement System for issuing solicitations, receiving proposals and responses, and issuing notices of award."

B. ARTICLE II – STANDARD PROVISIONS FOR COMPETITIVE SEALED BIDS AND AWARDS

1. 2.7 Request for Substitution of Specified Materials and Equipment Before Bid Opening is amended as follows:

   a. The last sentence in the first paragraph (line 147 to 152) be replaced with the following:

      "Where a bidder intends to use a material or equipment of an unspecified brand, make, or model, the bidder must submit a request to the Department for review and approval at the earliest date possible. Requests shall be submitted via email to the Contact person listed in HIePRO for the solicitation and also posted as a question in HIePRO under the question/answer tab referencing the email with the request. The request must be posted in HIePRO no later than seventeen (17) calendar days before the bid opening date, not including the bid opening date."

   b. The first sentence in the second paragraph (line 154 to 156) shall be replaced with the following:

      "It shall be the responsibility of the bidder to submit sufficient evidence based upon which a determination can be made by the Department that the alternate brand is a qualified equivalent."

2. 2.8 Preparation and Delivery of Bid is amended as follows: Last paragraph (line 189 to 192) shall be replaced with the following:

   "The bidder shall submit the proposal in HIePRO. The proposal shall be UPLOADED to HIePRO prior to the bid opening date and time. Proposals received after said due date and time shall not be considered. Original (wet ink) proposal documents are not required to be submitted. The award will be made based on proposals uploaded in HIePRO. Any and all other additional documents explicitly designated and labeled as CONFIDENTIAL OR PROPRIETARY shall be UPLOADED SEPARATELY to HIePRO."

3. 2.11 Bid Security is amended by deleting (a) and replacing it with:

   "(a) Unless directed otherwise in the invitation for bids, each bid shall be accompanied by bid security which is intended to protect the Department against the failure or refusal of a bidder to execute the contract for the work bid or to supply the required performance and payment bonds. Bid security shall be in an amount equal to at least five percent of the base bid and additive alternates. Bid security shall be in one of the following forms:

   (1) A deposit of legal tender;

   (2) A valid surety bid bond, underwritten by a company licensed to issue bonds in the State of Hawaii; or

   (3) A certificate of deposit; credit union share certificate; or cashier's, treasurer's, teller's, or official check drawn by or a certified check accepted by a bank, savings institution, or credit union insured by the Federal Deposit Insurance Corporation (FDIC) or the National Credit Union Administration (NCUA) and payable at sight or unconditionally assigned to the Department. These instruments may be utilized only to a maximum of one hundred thousand dollars ($100,000.00). If the required amount totals over one hundred thousand dollars ($100,000.00), more than one instrument not exceeding one hundred thousand dollars ($100,000.00) each and issued by different financial institutions shall be accepted.

   (4) Proposal Guaranty listed in (1) and (3) shall be in its original form, and shall be received at the Contracts Office, Department of Transportation, Aliiaimoku Hale, 869 Punchbowl Street, Room 105, Honolulu, Hawaii 96813 before the bid deadline."

4. 2.12 Pre-Opening Modification or Withdrawal of Bids is amended by deleting 2.12 Pre-Opening Modification or Withdrawal of Bids in its entirety and replacing it with the following:

"2.12 Pre-Opening Modification or Withdrawal of Bids. A bidder may withdraw or modify a proposal after the bidder submits the proposal in HIePRO. Withdrawal or modify of proposal must be completed before the time set for the receiving of bids."

5. 2.14 Public Opening of Bids is amended by deleting 2.14 Public Opening of Bids in its entirety.

6. 2.20 Bid Evaluation and Award is amended by replacing 2.20(a) and 2.20(b) with the following:

"(a) The award shall be made to the lowest, responsive, responsible bidder within 120 days after bid opening and shall be based on the criteria set forth in the invitation for bids. The Department may request the bidders to allow the Department to consider the bids for the issuance of an award beyond the 120 day period. Agreement to such an extension must be made by a bidder in writing. Only bidders who have agreed to such an extension will be eligible for the award.

(b) No bid shall be withdrawn or corrected for a period of 120 days after bid opening except for a mistake as described in this article; however, a bidder may withdraw a bid without penalty anytime prior to award of the contract if it finds it is unable to comply with the provisions regarding the employment of State of Hawaii residents as described in Section 7.2 and 103B-3, H.R.S."

C. ARTICLE VII – LEGAL RELATIONS AND RESPONSIBILITY TO PUBLIC

1. 7.1 Insurance Requirements is amended by deleting paragraph "(b)(4) Builder's Risk for All Work" in its entirety.

STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

HONOLULU, HAWAII

SPECIFICATIONS

PART II

TECHNICAL PROVISIONS

ARTICLE X - PROJECT DESCRIPTION

10.1 GENERAL - The work to be done under this project includes furnishing of all labor, material, and equipment necessary to repair spalls and delaminations at Piers 16 and 17 at Honolulu Harbor, Oahu, Hawaii.

Bidders are advised to examine the existing conditions at the project site to familiarize themselves with the nature and extent of work involved and working conditions. Appointments may be made with the State Harbors Division Project Engineer for clarification of the work involved or definition of the limits of the work.

Approximate repair locations are indicated on the plans. Actual methods of repair may vary from that indicated on the drawings. The Construction Engineer reserves the right to alter repair methods, sizes, and locations to suit field conditions.

10.2 SCOPE OF WORK - The major items of work to be done includes, but not necessarily limited to the following major items of work:

A. Mobilization and demobilization.

B. Performing spall repairs including the following:

1. Sounding of all concrete surfaces for spalls and delaminations on the pier underside.

2. Repair of spalls and delaminations on slabs and beams at the pier underside.

3. Abatement of the existing coal tar coating from the pier underside.

4. Coating of the pier underside with an epoxy coating.

10.3 CONTRACT DRAWINGS – The location and size of the repair area shown on the plan are approximate and are included for bidding purposes only. All structures and portions of structures shown on the plan are existing unless specifically noted. Existing conditions shown are based on the best available information. No guarantee is given that they are more than approximately correct.

10.4 WORK SCHEDULE - The work schedule and assignment of storage area(s) shall be discussed and coordinated with the Harbors Division Oahu District Manager and the Construction Engineer and shall be subject to their written approval. The contractor shall turn in a work schedule two (2) weeks prior to actual construction for approval by the Harbors Division Oahu District Manager and the Construction Engineer. The Contractor shall be responsible for maintaining the work and storage areas in neat and orderly condition.

Shipping and dock activities by tenants/users will take precedence over the Contractor's activities. Vessels call at various days of the week. An approximate vessel schedule for the

project area can be found at hawaii.portcall.com. The exact scheduling of the work and restrictions on the Contractor's activities will be established at the pre-construction meeting. The Contractor shall assume they will not have a consistent 5-day work week schedule due to tenant's activities and daily operations, therefore, weekend work may be required for successful completion of the project.

Phasing and careful coordination of the work will be required to allow continuous use of the project location and adjacent areas. The Contractor shall be responsible for coordination with all tenants/users of the area and the Harbors Division daily regarding scheduling of all work at no additional cost to the State.

The Contractor shall provide appropriate signage and barriers on the pier when travel is restricted or when a portion of the pier is shut down.

Limited space is available on the pier restricting the staging area size for the Contractor. Exact size and location of staging area shall be determined at the Pre-Construction meeting after bidding.

The Contractor shall coordinate its work to minimize interference with harbor operations. All work shall be scheduled to minimize interference with any operations in the project area. Weekend and night work may be required.

The exact scheduling at sequencing of the work and restrictions on the Contractor's operation while working at the project site will be established at the pre-construction meeting. The Contractor shall attend the pre-construction meeting to coordinate its work with others and shall complete all work within the work schedule.

10.5 LIABILITY AND RESPONSIBILITY - The Contractor shall provide, erect and maintain warning signs, lights, barricades, fences, watchmen and/or other means as necessary to prevent unauthorized persons from wandering onto the job site where they may suffer injury or create a hazard to the construction operations or the work in progress. The Contractor shall also take reasonable precautions for safety in its operations and to prevent injury to its employees and to others having lawful business at the job site.

The Contractor shall be responsible for any and all damages to the existing Harbors Division pier facilities caused by its operations or negligence. The Contractor shall, at its own expense, make prompt restitution for damages to the facilities caused by its operations or negligence. The Contractor shall hold the State harmless from all claims for loss or injury.

The Contractor SHALL verify existing conditions in the field prior to ordering any materials. The existing conditions are based on the best available information. The Contractor shall make no claim for extra compensation should actual existing conditions differ from those shown on the plans.

The Contractor shall remove defective work and replace the required work at no cost to the State.

Hawaii One Call. The Contractor shall comply with the Hawaii One Call law, HRS Section 269E-4. This includes, but is not limited to, coordination with the Hawaii One Call Center (HOCC) for any work involving excavation at least five (5) working days but not more than twenty-eight (28) calendar days prior to commencing excavation. The contractor shall provide to HOCC a description of the excavation site that may include the county, place, address and measurements as needed. HOCC contact information: telephone 811; website http://www.digsafelyhawaii.com.

Microbial water quality test results of harbor waters in the vicinity of the project (taken in April 2018) indicate that fecal coliform and enterococci bacterial levels can exceed applicable Hawaii Department of Health and U.S. Environmental Protection Agency water quality standards at times. These bacterial levels may remain elevated during and after heavy storm runoff conditions. Accordingly, the Contractor will notify its employees of the potential of fecal-contaminated harbor waters while working on the water in the project area and provide the necessary precautions to protect its workers from potential waterborne illnesses and skin infections at no additional cost to the State.

10.6 BEST MANAGEMENT PRACTICES (BMPs) - The Contractor must follow standard best management practices (BMPs) for air pollution, water pollution, noise and solid waste control, as required by Federal, State and County regulations, to protect the environment from effects of construction activity, including prohibiting any construction debris or other deleterious materials to fall, flow or otherwise enter harbor waters.

The Contractor shall submit a site-specific BMP plan to the Harbors Division for review and comment before work begins. The plan shall satisfy the requirements of ARTICLE XII – TEMPORARY WATER POLLUTION, DUST, AND EROSION CONTROL. This plan shall describe and detail the methods and procedures to be used to prevent air and water pollution, including preventing any materials, wastes, and debris from entering any adjacent storm drain system and harbor waters to the satisfaction of the Harbors Division. The Contractor shall revise the BMP plan, at no additional cost to the State, should it be determined by the Construction Engineer that the plan is insufficient to prevent pollution.

10.7 APPROVED EQUAL – The term “approved equal” as used in these specifications refers to the use of alternate equipment, articles or materials of equal quality and characteristics for the purpose intended. An approved equal will be permitted, upon approval of the Director prior to bid opening, in accordance with the General Provisions.

10.8 SUBMITTALS – The Contractor shall submit for review one (1) copy of the following items in PDF format.

A. Best Management Practices (BMP) Plan including removal of hazardous material.

B. Proof of valid TWIC and MARSEC credential card for all Contractor and Sub-contractor workers.

C. Demolition and Removal Plan and Schedule

D. Concrete Spall Repair Work

1. Concrete Mix Design for Spall Repairs

2. Patching Compound for Form and Pour Repairs

3. Patching Compound for Vertical Surface Repairs

4. Reinforcing Steel

5. Reinforcing Steel Coating

6. Epoxy for Grouting of Dowels

7. Curing Compound

8. Embedded Galvanic Anodes

1. Migrating Corrosion Inhibitor

E. Epoxy Coating System

F. Existing Coal Tar Epoxy Abatement

10.9 STANDARD SPECIFICATIONS - The term "Standard Specifications" as used in the Technical Specifications shall mean the Hawaii Standard Specifications for Road and Bridge Construction, State of Hawaii, Department of Transportation, Highways Division, 2005.

10.10 AS BUILT DRAWINGS - The Contractor shall keep one (1) set of drawings at the job site and make all field changes thereon. After completion of the project, a PDF/A formatted digital file marked up with all the field changes shall be submitted to the Construction Engineer.

10.11 HARBOR SECURITY - The Contractor shall submit required documentation of all Contractor and subcontractor's employees, their representatives, suppliers, manufacturers, and alike, and of all necessary vehicles needing access to the project site to the Harbors Division Construction Engineer and Oahu District Manager before starting work on the project. The documentation will include the following:

A. Authorized personnel's first name, middle initial(s), and last name by company name.

B. Vehicle(s) license plate number(s) by company name.

C. The Contractor may be directed to use a specified entrance to enter and exit the harbor. Upon every entry, each employee must present and possess a photo identification (ID) card.

D. All Contractor's and sub-contractor's employees, their representatives, suppliers, manufacturers, and authorized personnel needing access to the project site shall wear their photo ID card at all times.

E. Contractor's vehicles must be identified with a company logo and will be subject to search. Any employee's personal belongings will also be subject to search.

F. If the Contractor wishes to remove any fencing or open any locked gates, they shall coordinate with and request approval from the Harbors Division Construction Engineer and Oahu District Manager. If approval is granted, the Contractor shall then be responsible for securing open fencing or gate(s) immediately after entering, or posting security personnel to monitor ingress and egress. Inspections of vehicles and equipment moving through the access points will be done in accordance with current MARSEC level and directives.

G. If security personnel are required, the Contractor shall hire the same contract security that provides service to the State of Hawaii, Department of Transportation, Harbors Division. In the event that the security contract for Harbors changes, contractor must hire the new security contractor.

H. By the end of each day, the Contractor shall re-erect and restore all fencing/barrier/perimeter security measures to the satisfaction of the Harbors Division Construction Engineer and the Oahu District Manager. Electricity and lighting shall also be restored and in satisfactory working order, to no less than pre-construction conditions, by the end of each day, to the satisfaction of the Harbors Division Construction Engineer and District Manager.

I. Under no circumstances shall perimeter security be compromised. If determined by the State, and solely by the State, that the contractor has left the project site in a condition that compromises security of the harbor, the State reserves the right to make the necessary arrangements to provide and enhance perimeter security, including restoration of electrical power and lighting, at the sole expense of the Contractor.

J. At times, the maritime security level for the State of Hawaii and/or the general color-coded security level for State of Hawaii may be temporarily elevated. In these events, the contractor may be prohibited to access the project site and may be required to stop work as directed by either the Harbors Division Construction Engineer or Oahu District Manager. The Harbors Division will consider impacts to the work and schedule as a result of prolonged work stoppages.

K. Maritime Security Awareness training is mandatory for all personnel entering the Harbor facility. The Contractor shall be responsible to ensure all of its employees, representatives, subcontractors, vendors, and all alike, requiring access to the harbor area for this project, have been trained and possess the required maritime security card before entering the Harbor's property. Prior to starting work on this project, the Contractor shall provide a list of names (full

legal name) and birth dates of all employees, representatives, subcontractors, vendors, and all alike, as well as their vehicles license number, year, make, color and model that will be entering the project site, together with a letter attesting that all personnel have received this training to the Harbors Division Oahu District Manager and Construction Engineer. All employees, representatives, subcontractors, vendors, and all alike, shall wear their respective company's identification card bearing the company's name, the individual's first and last name, and middle initial(s), and a recent photograph of the individual on the front of the identification card at all times while on Harbor's property.

With the possible exception of Item J above, all other requirements indicated shall be considered incidental to the project and shall be provided by the contractor at no cost to the State.

The Contractor's personnel requiring access to secure areas of maritime facilities will be required to obtain a Transportation Worker Identification Credential (TWIC). No escorting of personal is allowed. The project area has been deemed to be within a secured area. TWIC was established by Congress through the Maritime Transportation Security Act and is administered by the Transportation Security Administration (TSA) and U.S. Coast Guard. To obtain a TWIC, the applicant must provide biographic and biometric information such as fingerprints, sit for a digital photograph and successfully pass a security threat assessment conducted by TSA. The Contractor will be responsible to obtain and pay for all costs associated in providing their appropriate employees with TWIC. Information regarding TWIC is available on the TSA website at: https://www.tsa.gov/for-industry/twic.

10.12 COMPLETION TIME - All work for this project shall be completed within the specified time period as listed on page P-1 of the Proposal. The number of days shall commence on the issuance of the notice to proceed. The intent of the contract is to provide for the construction final acceptance of the work described by the contract documents at the accepted bid price and within the time established by the contract. The Contractor has the duty to furnish all labor, materials, equipment, tools, transportation, incidentals, and supplies and to determine the means, methods and schedules required to complete the work in accordance with the contract documents.

Unless otherwise directed by the Engineer in writing, the Contractor shall not commence with physical construction without sufficient materials and equipment available at the project site for either continuous construction until completion, or completion of a specified portion of the work.

10.13 PAYMENT - Payment shall be made as specified below. Such payment shall include furnishing all labor, material, equipment and other expenses required to complete each item in accordance with the plans and specifications. The Best Management Practices (BMP) plan, including temporary water pollution, dust, and erosion measures shall be considered incidental to the pay items below.

Item 1 - Mobilization and Demobilization. Payment shall be made at the lump sum price bid in the Proposal Schedule. Sixty percent (60%) of the lump sum bid price will be paid to the Contractor upon completion of mobilization at the work site and approval of the BMP plan. The remaining forty percent (40%) will be included in the final payment under this contract. Such

payment shall include preparation of the BMP plan, setting up and removing all plant equipment and materials at the job site, providing temporary barricades as required for Harbor operations during construction, cleaning up the job site and all other incidental work required to complete this item.

Item 2 – Precast Plank Soffit Spall Repair (Type P). Payment shall be made at the unit price bid per square foot in the Proposal Schedule. Such payment shall include concrete removal work, preparing repair area, cleaning effective reinforcing steel to remain, furnishing and installing reinforcing steel and epoxy grouted dowels, applying reinforcing steel coating, installing and removing formwork, placing concrete, patching core holes and holes used to support form work, and all other incidental work required to complete this item. Payment for reinforcing steel replacement shall be included in this payment item.

Item 3 – Slab Soffit Spall Repair (Type S or SR). Payment shall be made at the unit price bid per square foot in the Proposal Schedule. Such payment shall include concrete removal work, preparing repair area, cleaning effective reinforcing steel to remain, applying reinforcing steel coating, installing and removing formwork, placing concrete or patching compound, patching holes used to support form work, and all other incidental work required to complete this item. Payment for reinforcing steel replacement shall be made in accordance with Item 6 below.

Item 4 - Beam Spall Repair (Type B or BR). Payment shall be made at the unit price bid per square foot in the Proposal Schedule. Such payment shall include removing and reinstalling fenders to facilitate repairs on the fender beam, concrete removal work, preparing repair area, cleaning effective reinforcing steel to remain, applying reinforcing steel coating, installing and removing formwork, placing concrete or patching compound, patching holes used to support form work, and all other incidental work required to complete this item. Payment for reinforcing steel replacement shall be made in accordance with Item 6 below.

Item 5 – Precast Tee Beam Spall Repair (Type T). Payment shall be made at the unit price bid per linear feet in the Proposal Schedule. Such schedule shall include concrete removal work, preparing repair area, cleaning effective reinforcing steel to remain, furnishing and installing reinforcing steel and epoxy grouted dowels, applying reinforcing steel coating, installing and removing formwork, placing concrete, patching core holes and holes used to support form work, and all other incidental work required to complete this item. Payment for reinforcing steel replacement shall be included in this payment item.

Item 6 - Reinforcing Steel Replacement. Payment shall be made at the unit price bid per pound in the Proposal Schedule. Such payment shall include furnishing and installing new reinforcing steel to be welded for Items 2 and 3, welding new reinforcing steel, and all other incidental work required to complete this item.

Item 7 – Zinc Anodes. Payment shall be made at the unit price bid in the Proposal Schedule. Such payment shall include furnishing and installing galvanic anodes at precast spall repairs for Items 2 and 5, and all other incidental work required to complete this item.

Item 8 – Epoxy Coating System. Payment shall be made at the lump sum price bid in the Proposal Schedule. Such payment shall include preparing surfaces to be coated, furnishing and coating all surfaces on the substructure as shown on the drawings, and all other incidental work required to complete this item.

Item 9 – Existing Coal Tar Epoxy Abatement. Payment shall be made at the lump sum price bid in the Proposal Schedule. Such payment shall include hazardous material abatement and disposal of the existing coal tar coating, and all other incidental work required to complete this item.

Preparation of photographs of spall repairs will not be paid for directly but shall be considered incidental to the various contract items.

Concrete repair quantities listed in the Proposal Schedule are increased from actual field quantities to account for growth in repair areas and additional repairs not shown in plans. Additional concrete delaminations and deterioration may be present in project limits. No adjustment to the unit prices listed in the Proposal Schedule will be allowed due to difference between actual quantities and bid quantities.

ARTICLE XI - MOBILIZATION AND DEMOBILIZATION

11.1 GENERAL - The work consists of furnishing at the job site, plant, equipment, materials, labor and appliances and performing all work in connection with mobilization and demobilization for the job in accordance with this Article of the Specifications.

11.2 DESCRIPTION

A. Mobilization shall include setting up, ready for use, all plant, equipment and necessary materials at the job site.

B. Providing temporary barricades as required for Harbor operations during construction.

C. Demobilization shall include the removal of all the Contractor's plant and equipment and surplus material from the job site. The cleanup of the job site, satisfactory to the Construction Engineer, shall also be included in this article.

11.1 PAYMENT - Payment for Mobilization and Demobilization shall be made as described in Article X of these Specifications.

ARTICLE XII – TEMPORARY WATER POLLUTION, DUST, AND EROSION CONTROL
For Project NOT Subject to NPDES NOI-C Permit

12.1 DESCRIPTION – This section is required for all work, including the Contractor's storage sites. It describes the following:

A. A detailed site-specific Best Management Practice (BMP) Plan including diagrams and narratives; constructing, maintaining, and repairing temporary water pollution, dust, and erosion control measures at the project site including local material sources, work areas and access roads; removing and disposing of wastes and hazardous wastes; and control of fugitive dust (defined as uncontrolled emission of solid airborne particulate matter from any source other than combustion). Additionally, all projects at Honolulu, Kalaeloa Barbers Point, and Kahului Harbors are subject to State of Hawaii, Department of Transportation (HDOT) Harbors Division, Stormwater Management Plan (SWMP) requirements, unless exempted, and are subject to Harbors Stormwater BMP inspections. If any requirement conflicts with those administered by State of Hawaii, Department of Health (HDOH), the Contractor shall follow the more stringent requirement.

B. Compliance with applicable federal and other state permit conditions.

C. Work associated with dewatering and hydrotesting activities and compliance with conditions of the NPDES general permit coverage authorizing discharges associated with construction activity dewatering and hydrotesting.

12.2 GENERAL REQUIREMENTS – In order to provide for the control of water pollution, dust, and erosion arising from the construction activities of the Contractor and his subcontractors in the performance of this contract, the work performed shall comply with all applicable federal, state, and local laws and regulations concerning water pollution control including, but not limited to, the following regulations:

A. State of Hawaii, HDOH Hawaii Administrative Rules (HAR) Chapter 11-54 – Water Quality Standards and Chapter 11-55 – Water Pollution Control.

B. For projects at Honolulu, Kalaeloa Barbers Point, and Kahului Harbors ONLY, HDOT Harbors Division, Stormwater Management Plan.

C. For projects at Honolulu, Kalaeloa Barbers Point, and Kahului Harbors ONLY, City and County of Honolulu (CCH), Rules Relating to Water Quality.

D. For projects at Honolulu, Kalaeloa Barbers Point, and Kahului Harbors ONLY, CCH, Storm Water BMP Manual for Construction.

E. 40 CFR Part 110, Environmental Protection Agency (EPA) Discharge of Oil.

F. 40 CFR Part 117, EPA Determination of Reportable Quantities for Hazardous Substances.

G. 40 CFR Part 261, EPA Identification and Listing of Hazardous Waste.

H. 40 CFR Part 302, EPA Designation, Reportable Quantities, and Notification.

I. 49 CFR Part 171, U.S. Department of Transportation Hazardous Materials Regulations.

12.3 MATERIALS - Materials shall conform to the following when applicable:

A. Slope Drains**.** Slope drains may be constructed of pipe, fiber, mats, erosion control fabric, geotextiles, rubble, Portland cement concrete, bituminous concrete, plastic sheets, or other materials acceptable to the Construction Engineer.

B. Grass**.** Grass shall be quick growing species such as rye grass, Italian grass, or cereal grasses. Grass shall be suitable to the area and provide a temporary cover that will not compete later with permanent cover. Alternative grasses are allowable if acceptable to the Construction Engineer.

C. Fertilizer and Soil Conditions**.** Fertilizer and soil conditioners shall be a standard commercial grade acceptable to the Construction Engineer.

D. Silt Fences**.** Silt fences shall be synthetic filter fabric mounted on posts and embedded in compacted ground in compliance with American Society for Testing and Materials (ASTM) D6462-03, Standard Practice for Silt Fence Installation.

E. Berms**.** Berms shall be gravel or sand wrapped with geotextile material. Alternate materials are allowable if acceptable to the Construction Engineer.

F. Alternate materials or methods to control, prevent, remove, and dispose of pollution are allowable if acceptable to the Construction Engineer.

12.4 CONSTRUCTION

A. Preconstruction Requirements.

1. Temporary Water Pollution, Dust, and Erosion Control Meeting. The contractor shall be required to submit a site-specific BMP Plan to the Construction Engineer and address all comments by the Construction Engineer. After the Plan is accepted in writing by the Construction Engineer, the Contractor shall schedule a meeting with the Construction Engineer before the start of construction work to discuss the sequence of work, and plans and proposals for water pollution, dust, and erosion control.

2. Temporary Water Pollution, Dust, and Erosion Control Submittals. The Contractor shall submit the site-specific BMP Plan to the Construction Engineer prior to the start of work for review of compliance with this Article. A site-specific BMP Plan template is available online at https://hidot.hawaii.gov/harbors/malamaikeawakai/, under **HDOT Harbors Construction and Post-Construction Programs – Documents and Forms**.

   a. Written site-specific BMP Plan shall include the following as applicable:

      1) Identification of potential pollutants and their sources and other factors that may cause water pollution, dust, and erosion.

      2) A list of all material and heavy equipment to be used during construction. Vehicles and equipment shall be well maintained and free from any type of fluid leaks.

      3) Construction schedule.

      4) Name(s) of specific individual(s) designated responsible for water pollution, dust and erosion controls on the project site. Include home, business, and cellular telephone numbers, fax numbers, and e-mail addresses.

      5) Descriptions of the methods and devices used to eliminate certain pollutants (e.g., wastewater, fuels, solvents, detergents, toxic or hazardous substances) from discharging into state waters and drainage systems, and provide details of BMP(s) to be installed or utilized. Indicate approximate dates when BMP(s) will be installed and removed.

      6) Description of maintenance and subsequent removal of BMP(s).

      7) Method(s) of removal and disposal of solid and regulated hazardous wastes encountered or generated during construction. The Contractor is advised to procure regulated hazardous materials on an as-needed basis, as feasible. All excess regulated hazardous materials at the conclusion of this project shall remain the property of the Contractor and shall be removed from HDOT Harbors Division property upon the completion of the project.

8) Method(s) of removing and disposing concrete and asphalt pavement cutting slurry, concrete curing water, and hydrodemolition water.

9) Method(s) of containing, removing and disposing of demolition dust and debris to minimize the discharge of these pollutants into state waters and drainage systems.

10) Spill kit contents and location.

11) Fugitive dust control, including dust from grinding, sweeping, or brooming off operations or combination thereof.

12) Method(s) of storing and handling of regulated hazardous materials (e.g. oils, paints) and other products used for the project. Safety Data Sheets (SDS) for all regulated hazardous materials used during construction activities shall be kept on-site throughout the duration of the project and readily available upon inspection. All containers of regulated hazardous materials should be provided with secondary containment during storage. Regulated hazardous materials not specifically needed in the execution of this project shall not be brought or stored on site. As feasible, the Contractor is encouraged to use products that do not contain any regulated constituents. The use of green products is encouraged.

13) Method(s) of concrete washout/waste control.

14) Method(s) of managing material stockpiles to minimize erosion and dust.

15) Good housekeeping practices.

    a) Minimize tracking of sediment offsite from project entrances and exits.

    b) Litter management. The Contractor shall have a comprehensive housekeeping policy and shall actively enforce housekeeping requirements. Housekeeping items include, but are not limited to, cups, cans, bottles and other forms of lightweight litter, unattended containers of hazardous materials, concrete debris (e.g. dust, chips, and other sweepings), and discarded articles of disposable

Personal Protective Equipment (e.g., earplugs, dust masks, and gloves). Employees who are specifically tasked with housekeeping duties shall be identified by name.

c) The Contractor should provide and maintain covered waste receptacles. No construction debris or other refuse that is generated as a result of project activities is to be disposed in HDOT Harbors Division-owned waste receptacles.

16) Provide plan(s)/drawing(s) showing location of followings when applicable:

a) Boundaries of the property and the locations where construction activities will occur, including:

i. Locations where earth-disturbing activities will occur (noting any sequencing of construction activities);

ii. Approximate slopes and drainage patterns with flow arrows before and after the construction;

iii. Locations where sediment, soil, or other construction materials will be stockpiled;

iv. Locations of any contaminated soil or contaminated soil stockpiles;

v. Locations of any crossings of state waters;

vi. Designated points on the site where vehicle will exit onto paved roads;

vii. Locations of structures and other impervious surfaces upon completion of construction; and

viii. Locations of construction support activity areas.

b) Locations of all state waters, including wetlands and indicate which water bodies are listed as impaired.

c) The boundary lines of any natural buffers.

d) Topography of the site, existing vegetative cover, and features (e.g., forest, pasture, pavement, structures), and drainage pattern(s) of stormwater onto, over, and from the site property before and after major grading activities.

e) Stormwater discharge locations, including locations of any storm drain inlets on-site and in the immediate vicinity of the site to receive stormwater runoff from the project; and locations where stormwater will be discharging to state waters (including wetlands).

f) Locations of all potential pollutant-generating activities.

g) Locations of stormwater control measures; and

h) Locations where chemicals will be used and stored.

17) Procedures for notification of appropriate facility personnel, emergency response agencies, and regulatory agencies where a leak, spill, or other release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR Parts 110, 117, or 302, occurs during a 24-hour period. Contact information must be in locations that are readily accessible and available.

18) The Contractor shall date and sign the site-specific BMP Plan.

b. The Contractor shall keep the accepted Plan on-site or at an easily accessible location throughout the duration of the project. Revisions to the Plan shall be included with the original plan. The Contractor shall obtain written acceptance from the Construction Engineer before revising BMP. An updated Plan shall be kept on-site throughout the remainder duration of the project.

The Contractor shall follow guidelines in the "*The City and County of Honolulu Storm Water Best Management Practice Manual – Construction*," (dated November 2011) in developing, installing, and maintaining BMP for the project. Additionally, the Contractor shall follow applicable CCH *Rules Relating to Water Quality* **for**

all projects at Honolulu, Kalaeloa Barbers Point, and Kahului Harbors, and use respective Soil Erosion Guidelines for other Maui, Kauai and Hawaii County projects. Information can be found at the respective County websites.

B. Construction Requirements are as follows.

1. No work shall be allowed to begin until submittals detailed in Subsection 12.4.A.2 - Temporary Water Pollution, Dust, and Erosion Control Submittals are completed and accepted in writing by the Construction Engineer. The Contractor shall prevent pollutants from entering state waters. These efforts shall address areas such as those that drain to water, are over water, or drain to storm drains adjacent and in the area of the project site. The Contractor shall design, operate, implement, and maintain the Plan to ensure that stormwater discharges associated with construction activities will not cause or contribute to a violation of applicable state water quality standards.

2. All projects at Honolulu, Kalaeloa Barbers Point, and Kahului Harbors are subject to HDOT Harbors Division SWMP requirements for construction at those harbors unless the project meets a specified exemption class. The requirements include, but are not limited to, construction site BMP initial, recurring (i.e. every two weeks from October through March and every two months otherwise), and final inspections at the frequencies outlined in the SWMP. No grading or land disturbance activities are allowed until the initial BMP inspection is completed and required BMPs are found to be properly installed.

3. Address all comments received from the Construction Engineer.

4. Modify and resubmit plans and construction schedules to correct conditions that develop during construction which were unforeseen during the design and pre-construction stages.

5. Coordinate temporary control provisions with permanent control features throughout the construction and post-construction period.

6. BMP shall be in place and operational until the construction is completed and accepted by Harbors.

7. Install and maintain either or both stabilized construction entrances and wheel washes to minimize tracking of dirt and mud onto roadways. Restrict traffic to stabilized construction areas only. Clean dirt, mud, or other material tracked onto the road immediately. Modify stabilized construction entrances to prevent mud from being tracked onto roadways.

8. Chemicals may be used as soil stabilizers for either or both erosion and dust control if acceptable to the Construction Engineer.

9. Cover exposed surface of materials completely with tarpaulin or similar device when transporting aggregate, soil, excavated material or material that may be a source of fugitive dust.

10. Cleanup and remove any pollutant that can be attributed to the Contractor.

11. Install or modify BMP due to change in the Contractor's means and methods, or for omitted condition that should have been allowed for in the accepted site-specific BMP Plan or a BMP that replaces an accepted site-specific BMP that is not satisfactorily performing.

12. Properly maintain BMP.

13. Remove, replace or relocate any BMP that must be removed, replaced or relocated due to potential or actual flooding, or potential danger or damage to the project or public.

14. The Contractor's designated representative specified in Subsection 12.4.A.2.a.(4) shall address any BMP concerns brought up by the Construction Engineer within 24 hours of notification, including weekends and holidays. Should the Contractor fail to satisfactorily address these concerns, the Construction Engineer reserves the right to employ outside assistance or use the Construction Engineer's own labor forces to provide necessary corrective measures. The Construction Engineer will charge the Contractor such incurred costs plus any associated project engineering costs. The Construction Engineer will make appropriate deductions from the Contractor's monthly progress estimate. Failure to apply BMP shall result in either or both the establishment and increase in the amount of retainage due to unsatisfactory progress or withholding of monthly progress payment. Continued failure to apply BMP may result in one or more of the following: The Contractor being fully responsible for all additional costs incurred by HDOT Harbors Division including any fines levied by HDOH, suspension of the Contract, or cancellation of the Contract.

C. Hydrotesting Activities. If work includes removing, relocation or installing waterlines, and the Contractor elects to flush waterline or discharge hydrotesting effluent into state waters or drainage systems, obtain a Notice of General Permit Coverage (NGPC) authorizing discharges associated with hydrotesting waters from the HDOH Clean Water Branch (CWB). If a permit is required, prepare and submit permit application (CWB-Notice of Intent (NOI) Form F) to the HDOH CWB.

Do not begin hydrotesting activities until the HDOH CWB has issued a NGPC. Hydrotesting operations shall be in accordance with conditions in the NGPC. Submit a copy of the NPDES Hydrotesting Waters Application and Permit to the Construction Engineer.

D. Dewatering Activities. If excavation of backfilling operations requires dewatering, and the Contractor elects to discharge dewatering effluent into state waters or existing drainage systems, the Contractor shall obtain an NGPC authorizing discharges associated with construction activity dewatering from the HDOH CWB. If a permit is required, prepare and submit permit application (CWB-NOI Form G) to the HDOH CWB.

Do not begin dewatering activities until the HDOH-CWB has issued an NGPC. Conduct dewatering operations in accordance with the conditions in the NGPC. Submit a copy of the NPDES Dewatering Application and Permit to the Construction Engineer.

12.5 PAYMENT – Payment for Temporary Water Pollution, Dust and Erosion Control shall not be measured and paid for separately but shall be considered incidental to the applicable items described in Article X of these Specifications.

No progress payment will be authorized until the Construction Engineer accepts in writing the site-specific BMP Plan or when the Contractor fails to maintain the project site in accordance with the accepted BMP Plan.

The Contractor shall reimburse the State of Hawaii within 30-day for the full amount of all outstanding costs incurred by the State of Hawaii for all citations or fines received as a result of the Contractor's non-compliance with regulations.

ARTICLE XIII – CONTRACTOR USE OF PREMISES

13.1 GENERAL

A. The substructure coating at Pier 16 is assumed to have the presence of arsenic, lead, polynuclear aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), tributyltin, asbestos and other hazardous materials. A copy of a survey report for a similar coating titled "Pier 1 and Pier 2 Sampling Activities, Honolulu Harbor", dated January 20, 2005, prepared by EnviroServices and Training Center, LLC is attached to the end of this Article.

B. The disturbance or dislocation of hazardous materials may cause lead-containing dust and fumes to be released into the atmosphere, thereby creating a potential health hazard to workers and other personnel within the project area. The Contractor shall apprise all workers, supervisory personnel, subcontractors, and consultants who will be at the job site of the potential health hazards and of proper work procedures which must be followed when disturbing hazardous materials.

C. The Contractor and their subcontractors shall review the hazardous materials surveys and other testing report(s) for this project and shall ensure that its contents are fully understood as to the location and type of hazardous materials present at the jobsite in which the work is to be performed.

D. The Contractor shall inform all his employees, subcontractors, and all other persons engaged in the project of the presence of hazardous materials at the job site in accordance with the requirements of Chapter 110, Article 12-110-2(f)(1) of the Hawaii Administrative Rules, State of Hawaii.

E. All items having any apparent historical or archaeological interest which are discovered in the course of performing the work of this contract shall be left undisturbed and shall be immediately reported to the Harbors Division Construction Engineer so that the proper authorities may be notified.

F. The Contractor shall not dispose of any material into State waters or Harbors property including, but not limited to, fuels, oils, acids, construction debris, or other harmful or hazardous materials. The Contractor shall not dispose of any material into State waters, which will result in an increase of turbidity. It is the responsibility of the Contractor to comply with all applicable Federal, State and County laws for proper handling and disposal of material.

13.2 PAYMENT – Payment for Contractor Use of Premises shall not be measured and paid for separately but shall be considered incidental to the applicable items described in Article X of these Specifications.

EnviroServices & Training Center, LLC
2850 Paa Street, Suite 150 • Honolulu, HI 96819-4441 • Tel: (808) 839-7222 • Fax: (808) 839-4455 • www.gotoetc.com

January 20, 2005

Mr. Arnold Fukumoto
State of Hawaii – Department of Transportation
Harbors Division
79 Nimitz Highway
Honolulu, Hawaii 96813

Subject: **LETTER REPORT**
PIER 1 AND PIER 2 SAMPLING ACTIVITIES
HONOLULU HARBOR

Dear Mr. Fukumoto:

The purpose of this Letter Report is to document the sampling activities recently completed by EnviroServices & Training Center, LLC (ETC) at Pier 1 and Pier 2 at Honolulu Harbor in Honolulu, Oahu, Hawaii (Subject Site).

BACKGROUND
ETC was contracted by the State of Hawaii Department of Transportation Harbors Division to conduct sampling of the coal tar epoxy coating located on the underside of the concrete pier structures of Pier 1 and Pier 2 (Subject Site). ETC coordinated the site visit with Mr. Arnold Fukumoto.

SCOPE OF WORK
ETC performed the following scope of work:

- Collected eight (8) bulk samples of coal tar epoxy coating from various locations throughout the Subject Site;
- Submitted eight (8) bulk samples to Oceanic Analytical Laboratory, Inc. for laboratory analysis of polynuclear aromatic hydrocarbons, polychlorinated biphenyls, arsenic, asbestos, and lead paint;
- Submitted four (4) of the bulk samples to Oceanic Analytical Laboratory, Inc. for laboratory analysis of tributyltin; and
- Provided this Letter Report detailing our methodologies, findings, and areas sampled and appropriate recommendations.

METHODOLOGY

Bulk Samples

ETC personnel collected a total of eight (8) bulk samples of coal tar epoxy coating from the Subject Site. An inflatable boat was used to access the underside of the Subject Site in order to collect the bulk samples. Samples were collected starting at the edge of Pier 2 with sample A-1 and proceeded to the edge of Pier 1, ending with sample A-8.

Each bulk sample collected was first wetted with water and cut out using a chisel and hammer then placed in a labeled glass sample jar. The sampling equipment was cleaned between each sample collection to avoid cross-contamination between samples.

All bulk samples were properly logged and recorded following strict chain of custody procedure and submitted to Oceanic Analytical Laboratory, Inc., for analysis.

RESULTS

Arsenic

Laboratory results did not identify arsenic in the materials sampled. Table 1 lists the results. The laboratory reports are included as an attachment.

TABLE 1
ARSENIC SURVEY RESULTS
PIER 1 AND PIER 2
HONOLULU HARBOR, OAHU, HAWAII

Sample Number	Reporting Limit (mg/kg)	Result (mg/kg)
A-1	7.25	ND
A-2	8.85	ND
A-3	5.00	ND
A-4	4.72	ND
A-5	4.74	ND
A-6	5.00	ND
A-7	5.00	ND
A-8	4.90	ND

*ND = None Detected

Lead

Laboratory results identified lead in five of the samples. Table 2 lists the results. The laboratory reports are included as an attachment.

TABLE 2
LEAD SURVEY RESULTS
PIER 1 AND PIER 2
HONOLULU HARBOR, OAHU, HAWAII

Sample Number	Reporting Limit (mg/kg)	Result (mg/kg)
A-1	29.0	ND
A-2	35.4	ND
A-3	20.0	ND
A-4	94.3	**616**
A-5	94.8	**622**
A-6	100	**354**
A-7	100	**452**
A-8	98.0	**338**

*ND = None Detected above Reporting Limit

Polynuclear Aromatic Hydrocarbons (PAHs)

Laboratory results identified PAHs in all samples. All four PAHs tested for were identified in three of the samples. Benzo(a)pyrene and fluoroethene, were identified in the remaining five samples. Table 3 lists the results. The laboratory reports are included as an attachment.

TABLE 3
POLYNUCLEAR AROMATIC HYDROCARBON (PAH) SURVEY RESULTS
PIER 1 AND PIER 2
HONOLULU HARBOR, OAHU, HAWAII

	Acenapthene		*Benzo(a)pyrene*		*Fluoranthene*		*Napthalene*	
Sample Number	*RL (mg/kg)*	*Result (mg/kg)*	*RL (mg/kg)*	*Result (mg/kg)*	*RL (mg/kg)*	*Result (mg/kg)*	*RL (mg/kg)*	*Result (mg/kg)*
A-1	50.0	**1420**	250	**6730**	250	**13500**	50.0	**1270**
A-2	100	**3370**	100	**7620**	400	**15600**	20.0	**1110**
A-3	50.0	**2910**	250	**7490**	250	**14800**	50.0	**1240**
A-4	20.0	ND	20.0	**31.7**	20.0	**35.5**	20.0	ND
A-5	20.0	ND	20.0	**55.4**	20.0	**95.1**	20.0	ND
A-6	20.0	ND	20.0	**58.9**	20.0	**90.4**	20.0	ND
A-7	20.0	ND	20.0	**51.2**	20.0	**88.6**	20.0	ND
A-8	20.0	ND	20.0	**73.8**	20.0	**88.9**	20.0	ND

*ND = None Detected; RL = Reporting Limit

Polychlorinated Biphenyls (PCBs)

Laboratory results identified two types of PCBs, Arolclor 1248 and Aroclor 1254, in five of the samples. Tables 4A and 4B list the results. The laboratory reports are included as an attachment.

TABLE 4A
POLYCHLORINATED BIPHENYL (PCB) SURVEY RESULTS
PIER 1 AND PIER 2
HONOLULU HARBOR, OAHU, HAWAII

	Aroclor 1016		*Aroclor 1221*		*Aroclor 1232*		*Aroclor 1242*	
Sample Number	*RL (mg/kg)*	*Result (mg/kg)*	*RL (mg/kg)*	*Result (mg/kg)*	*RL (mg/kg)*	*Result (mg/kg)*	*RL (mg/kg)*	*Result (mg/kg)*
A-1	1.0	ND	1.0	ND	1.0	ND	1.0	ND
A-2	1.0	ND	1.0	ND	1.0	ND	1.0	ND
A-3	1.0	ND	1.0	ND	1.0	ND	1.0	ND
A-4	1.0	ND	1.0	ND	1.0	ND	1.0	ND
A-5	1.0	ND	1.0	ND	1.0	ND	1.0	ND
A-6	1.0	ND	1.0	ND	1.0	ND	1.0	ND
A-7	1.0	ND	1.0	ND	1.0	ND	1.0	ND
A-8	1.0	ND	1.0	ND	1.0	ND	1.0	ND

*ND = None Detected; RL = Reporting Limit

TABLE 4B
POLYCHLORINATED BIPHENYL (PCB) SURVEY RESULTS
PIER 1 AND PIER 2
HONOLULU HARBOR, OAHU, HAWAII

	Aroclor1248		*Aroclor 1254*		*Aroclor 1260*	
Sample Number	*RL (mg/kg)*	*Result (mg/kg)*	*RL (mg/kg)*	*Result (mg/kg)*	*RL (mg/kg)*	*Result (mg/kg)*
A-1	1.0	ND	1.0	ND	1.0	ND
A-2	1.0	ND	1.0	ND	1.0	ND
A-3	1.0	ND	1.0	ND	1.0	ND
A-4	1.0	**21.8**	1.0	**19.5**	1.0	ND
A-5	1.0	**9.26**	1.0	**8.81**	1.0	ND
A-6	1.0	**9.44**	1.0	**6.66**	1.0	ND
A-7	1.0	**8.44**	1.0	**5.66**	1.0	ND
A-8	1.0	**8.85**	1.0	**7.14**	1.0	ND

*ND = None Detected; RL = Reporting Limit

Tributyltin

Laboratory results identified tributyltin in two of the samples. Dibutyltin and Monobutyltin, compounds associated with tributyltin, were identified in all four samples. Table 5 lists the results. The laboratory reports are included as an attachment.

TABLE 5
TRIBUTYLTIN SURVEY RESULTS
PIER 1 AND PIER 2
HONOLULU HARBOR, OAHU, HAWAII

	Tributyltin		*Dibutyltin*		*Monobutyltin*	
Sample Number	*RL (µg/kg)*	*Result (µg/kg)*	*RL (µg/kg)*	*Result (µg/kg)*	*RL (µg/kg)*	*Result (µg/kg)*
05013-05C	20.0	**249**	40.0	**668**	40.0	**379**
05013-06C	20.0	ND	40.0	**391**	40.0	**206**
05013-07C	20.0	ND	40.0	**371**	40.0	**458**
05013-08C	20.0	**124**	40.0	**552**	40.0	**276**

*ND = None Detected; RL = Reporting Limit

Asbestos

Laboratory results **did not** identify asbestos-containing material in the materials sampled. The laboratory reports are included as an attachment.

LIMITATIONS

ETC's findings, conclusions, and recommendations are based on research, site observations, and/or analytical data, which were gathered and accessible at the time and location of this project. We make no guarantee or warranty, either expressed or implied, except that our services are consistent with good commercial or customary practices designed to conform with acceptable industry standards. ETC has completed this asbestos project in accordance with the Guidelines, Standards, and Code of Ethics adopted by members of the American Industrial Hygiene Association, and American Conference of Governmental Industrial Hygienists.

This report is exclusively for the use and benefit of the State of Hawaii Department of Transportation. Reuse of the information contained herein by any other party will be at such party's own risk.

Thank you for allowing ETC to serve you. Please contact us at 839-7222 with any questions.

Sincerely,

Michelle O'Malley
Industrial Hygienist

Attachment: Laboratory Results

Oceanic Analytical Laboratory, Inc.

Date: *Jan 19, 2005*

Result Summary

Client:	EnviroServices & Training Center	**Client Sample ID:**	A-1
Work Order:	0501013	**Tag Number:**	
Project:	Pier 1 & 2, 04-4097	**Collection Date:**	12/29/2004 0:00
Lab ID:	0501013-01A	**Matrix:**	SOLID

Analyses	Result	Reporting Limit	Units	Dilution Factor	Date Prepared	Date Analyze	Batch ID	Qual Notes
ICP METALS, TOTAL				**SW 3051**		**SW6010B**		
Arsenic	ND	7.25	mg/Kg	1	1/7/05	1/7/2005 6:11:00 PM	11005	
Lead	ND	29.0	mg/Kg	1				
PAH BY EPA 8270 SIM				**SW3580A**		**SW8270C**		
Acenaphthene	***1420***	50.0	mg/Kg	50	1/6/05	1/6/2005 10:08:32 PM	10982	
Benzo(a)pyrene	***6730***	250	mg/Kg	250		1/7/2005 12:12:02 PM		
Fluoranthene	***13500***	250	mg/Kg	250				
Naphthalene	***1270***	50.0	mg/Kg	50		1/6/2005 10:08:32 PM		
Surr: 2-Fluorobiphenyl	79.7	30-115	%REC	50				
Surr: 4-Terphenyl-d14	74.6	18-137	%REC	50				
Surr: Nitrobenzene-d5	64.9	23-120	%REC	50				
PCBS IN OIL OR SOLID WASTE				**SW3580A**		**SW8082**		
Aroclor 1016	ND	1.00	mg/Kg	1	1/4/05	1/5/2005 3:55:00 PM	10980	
Aroclor 1221	ND	1.00	mg/Kg	1				
Aroclor 1232	ND	1.00	mg/Kg	1				
Aroclor 1242	ND	1.00	mg/Kg	1				
Aroclor 1248	ND	1.00	mg/Kg	1				
Aroclor 1254	ND	1.00	mg/Kg	1				
Aroclor 1260	ND	1.00	mg/Kg	1				
Surr: Decachlorobiphenyl	56.7	50-150	%REC	1				

Qualifiers

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Oceanic Analytical Laboratory, Inc.

Date: *Jan 19, 2005*

Result Summary

Client:	EnviroServices & Training Center	**Client Sample ID:**	A-2
Work Order:	0501013	**Tag Number:**	
Project:	Pier 1 & 2, 04-4097	**Collection Date:**	12/29/2004 0:00
Lab ID:	0501013-02A	**Matrix:**	SOLID

Analyses	Result	Reporting Limit	Units	Dilution Factor	Date Prepared	Date Analyze	Batch ID	Qual Notes
ICP METALS, TOTAL				**SW 3051**		**SW6010B**		
Arsenic	ND	8.85	mg/Kg	1	1/7/05	1/7/2005 6:22:00 PM	11005	
Lead	ND	35.4	mg/Kg	1				
PAH BY EPA 8270 SIM				**SW3580A**		**SW8270C**		
Acenaphthene	***3370***	100	mg/Kg	100	1/6/05	1/7/2005 12:42:28 PM	10982	
Benzo(a)pyrene	***7620***	100	mg/Kg	100				
Fluoranthene	***15600***	400	mg/Kg	400		1/7/2005 1:12:52 PM		
Naphthalene	***1110***	20.0	mg/Kg	20		1/6/2005 10:39:21 PM		
Surr: 2-Fluorobiphenyl	118	30-115	%REC	20				S S06
Surr: 4-Terphenyl-d14	86.2	18-137	%REC	20				
Surr: Nitrobenzene-d5	89.2	23-120	%REC	20				
PCBS IN OIL OR SOLID WASTE				**SW3580A**		**SW8082**		
Aroclor 1016	ND	1.00	mg/Kg	1	1/4/05	1/5/2005 4:26:00 PM	10980	
Aroclor 1221	ND	1.00	mg/Kg	1				
Aroclor 1232	ND	1.00	mg/Kg	1				
Aroclor 1242	ND	1.00	mg/Kg	1				
Aroclor 1248	ND	1.00	mg/Kg	1				
Aroclor 1254	ND	1.00	mg/Kg	1				
Aroclor 1260	ND	1.00	mg/Kg	1				
Surr: Decachlorobiphenyl	60.0	50-150	%REC	1				

Qualifiers

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Oceanic Analytical Laboratory, Inc.

Date: *Jan 19, 2005*

Result Summary

Client:	EnviroServices & Training Center	**Client Sample ID:**	A-3
Work Order:	0501013	**Tag Number:**	
Project:	Pier 1 & 2, 04-4097	**Collection Date:**	12/29/2004 0:00
Lab ID:	0501013-03A	**Matrix:**	SOLID

Analyses	Result	Reporting Limit	Units	Dilution Factor	Date Prepared	Date Analyze	Batch ID	Qual Notes
ICP METALS, TOTAL				**SW 3051 SW6010B**				
Arsenic	ND	5.00	mg/Kg	1	1/7/05	1/7/2005 6:27:00 PM	11005	
Lead	ND	20.0	mg/Kg	1				
PAH BY EPA 8270 SIM				**SW3580A SW8270C**				
Acenaphthene	***2910***	50.0	mg/Kg	50	1/6/05	1/6/2005 11:10:02 PM	10982	
Benzo(a)pyrene	***7490***	250	mg/Kg	250		1/7/2005 1:43:13 PM		
Fluoranthene	***14800***	250	mg/Kg	250				
Naphthalene	***1240***	50.0	mg/Kg	50		1/6/2005 11:10:02 PM		
Surr: 2-Fluorobiphenyl	107	30-115	%REC	50				
Surr: 4-Terphenyl-d14	81.1	18-137	%REC	50				
Surr: Nitrobenzene-d5	68.5	23-120	%REC	50				
PCBS IN OIL OR SOLID WASTE				**SW3580A SW8082**				
Aroclor 1016	ND	1.00	mg/Kg	1	1/4/05	1/5/2005 4:56:00 PM	10980	
Aroclor 1221	ND	1.00	mg/Kg	1				
Aroclor 1232	ND	1.00	mg/Kg	1				
Aroclor 1242	ND	1.00	mg/Kg	1				
Aroclor 1248	ND	1.00	mg/Kg	1				
Aroclor 1254	ND	1.00	mg/Kg	1				
Aroclor 1260	ND	1.00	mg/Kg	1				
Surr: Decachlorobiphenyl	52.9	50-150	%REC	1				

Qualifiers

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Oceanic Analytical Laboratory, Inc.

Date: *Jan 19, 2005*

Result Summary

Client:	EnviroServices & Training Center	**Client Sample ID:**	A-4
Work Order:	0501013	**Tag Number:**	
Project:	Pier 1 & 2, 04-4097	**Collection Date:**	12/29/2004 0:00
Lab ID:	0501013-04A	**Matrix:**	SOLID

Analyses	Result	Reporting Limit	Units	Dilution Factor	Date Prepared	Date Analyze	Batch ID	Qual Notes
ICP METALS, TOTAL				**SW 3051 SW6010B**				
Arsenic	ND	4.72	mg/Kg	1	1/7/05	1/7/2005 6:33:00 PM	11005	
Lead	***616***	94.3	mg/Kg	5		1/11/2005 1:38:00 AM		
PAH BY EPA 8270 SIM				**SW3580A SW8270C**				
Acenaphthene	ND	20.0	mg/Kg	20	1/6/05	1/7/2005 2:12:40 AM	10982	
Benzo(a)pyrene	***31.7***	20.0	mg/Kg	20				
Fluoranthene	***35.5***	20.0	mg/Kg	20				
Naphthalene	ND	20.0	mg/Kg	20				
Surr: 2-Fluorobiphenyl	107	30-115	%REC	20				
Surr: 4-Terphenyl-d14	78.9	18-137	%REC	20				
Surr: Nitrobenzene-d5	84.5	23-120	%REC	20				
PCBS IN OIL OR SOLID WASTE				**SW3580A SW8082**				
Aroclor 1016	ND	1.00	mg/Kg	1	1/4/05	1/6/2005 10:36:00 PM	10980	
Aroclor 1221	ND	1.00	mg/Kg	1				
Aroclor 1232	ND	1.00	mg/Kg	1				
Aroclor 1242	ND	1.00	mg/Kg	1				
Aroclor 1248	***21.8***	1.00	mg/Kg	1				
Aroclor 1254	***19.5***	1.00	mg/Kg	1				
Aroclor 1260	ND	1.00	mg/Kg	1				
Surr: Decachlorobiphenyl	94.5	50-150	%REC	1				

Qualifiers

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Oceanic Analytical Laboratory, Inc.

Date: *Jan 19, 2005*

Result Summary

Client:	EnviroServices & Training Center	**Client Sample ID:**	A-5
Work Order:	0501013	**Tag Number:**	
Project:	Pier 1 & 2, 04-4097	**Collection Date:**	12/29/2004 0:00
Lab ID:	0501013-05A	**Matrix:**	SOLID

Analyses	Result	Reporting Limit	Units	Dilution Factor	Date Prepared	Date Analyze	Batch ID	Qual Notes
ICP METALS, TOTAL				**SW 3051 SW6010B**				
Arsenic	ND	4.74	mg/Kg	1	1/7/05	1/7/2005 6:38:00 AM	11005	
Lead	***622***	94.8	mg/Kg	5		1/11/2005 1:44:00 PM		
PAH BY EPA 8270 SIM				**SW3580A SW8270C**				
Acenaphthene	ND	20.0	mg/Kg	20	1/6/05	1/7/2005 12:11:32 AM	10982	
Benzo(a)pyrene	***55.4***	20.0	mg/Kg	20				
Fluoranthene	***95.1***	20.0	mg/Kg	20				
Naphthalene	ND	20.0	mg/Kg	20				
Surr: 2-Fluorobiphenyl	109	30-115	%REC	20				
Surr: 4-Terphenyl-d14	78.7	18-137	%REC	20				
Surr: Nitrobenzene-d5	84.5	23-120	%REC	20				
PCBS IN OIL OR SOLID WASTE				**SW3580A SW8082**				
Aroclor 1016	ND	1.00	mg/Kg	1	1/4/05	1/6/2005 11:06:00 PM	10980	
Aroclor 1221	ND	1.00	mg/Kg	1				
Aroclor 1232	ND	1.00	mg/Kg	1				
Aroclor 1242	ND	1.00	mg/Kg	1				
Aroclor 1248	***9.26***	1.00	mg/Kg	1				
Aroclor 1254	***8.81***	1.00	mg/Kg	1				
Aroclor 1260	ND	1.00	mg/Kg	1				
Surr: Decachlorobiphenyl	89.0	50-150	%REC	1				

Qualifiers

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Oceanic Analytical Laboratory, Inc.

Date: *Jan 19, 2005*

Result Summary

Client:	EnviroServices & Training Center	**Client Sample ID:**	A-6
Work Order:	0501013	**Tag Number:**	
Project:	Pier 1 & 2, 04-4097	**Collection Date:**	12/29/2004 0:00
Lab ID:	0501013-06A	**Matrix:**	SOLID

Analyses	Result	Reporting Limit	Units	Dilution Factor	Date Prepared	Date Analyze	Batch ID	Qual Notes
ICP METALS, TOTAL				**SW 3051**		**SW6010B**		
Arsenic	ND	5.00	mg/Kg	1	1/7/05	1/7/2005 6:44:00 PM	11005	
Lead	***354***	100	mg/Kg	5		1/11/2005 1:49:00 PM		
PAH BY EPA 8270 SIM				**SW3580A**		**SW8270C**		
Acenaphthene	ND	20.0	mg/Kg	20	1/6/05	1/7/2005 12:41:44 AM	10982	
Benzo(a)pyrene	***58.9***	20.0	mg/Kg	20				
Fluoranthene	***90.4***	20.0	mg/Kg	20				
Naphthalene	ND	20.0	mg/Kg	20				
Surr: 2-Fluorobiphenyl	109	30-115	%REC	20				
Surr: 4-Terphenyl-d14	79.1	18-137	%REC	20				
Surr: Nitrobenzene-d5	85.3	23-120	%REC	20				
PCBS IN OIL OR SOLID WASTE				**SW3580A**		**SW8082**		
Aroclor 1016	ND	1.00	mg/Kg	1	1/4/05	1/6/2005 11:37:00 PM	10980	
Aroclor 1221	ND	1.00	mg/Kg	1				
Aroclor 1232	ND	1.00	mg/Kg	1				
Aroclor 1242	ND	1.00	mg/Kg	1				
Aroclor 1248	***9.44***	1.00	mg/Kg	1				
Aroclor 1254	***6.66***	1.00	mg/Kg	1				
Aroclor 1260	ND	1.00	mg/Kg	1				
Surr: Decachlorobiphenyl	80.2	50-150	%REC	1				

Qualifiers

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Oceanic Analytical Laboratory, Inc.

Date: *Jan 19, 2005*

Result Summary

Client:	EnviroServices & Training Center	**Client Sample ID:**	A-7
Work Order:	0501013	**Tag Number:**	
Project:	Pier 1 & 2, 04-4097	**Collection Date:**	12/29/2004 0:00
Lab ID:	0501013-07A	**Matrix:**	SOLID

Analyses	Result	Reporting Limit	Units	Dilution Factor	Date Prepared	Date Analyze	Batch ID	Qual Notes
ICP METALS, TOTAL				**SW 3051**		**SW6010B**		
Arsenic	ND	5.00	mg/Kg	1	1/7/05	1/7/2005 5:55:00 PM	11005	
Lead	***452***	100	mg/Kg	5		1/11/2005 1:22:00 PM		
PAH BY EPA 8270 SIM				**SW3580A**		**SW8270C**		
Acenaphthene	ND	20.0	mg/Kg	20	1/6/05	1/7/2005 1:12:32 AM	10982	
Benzo(a)pyrene	***51.2***	20.0	mg/Kg	20				
Fluoranthene	***88.6***	20.0	mg/Kg	20				
Naphthalene	ND	20.0	mg/Kg	20				
Surr: 2-Fluorobiphenyl	114	30-115	%REC	20				
Surr: 4-Terphenyl-d14	79.5	18-137	%REC	20				
Surr: Nitrobenzene-d5	85.5	23-120	%REC	20				
PCBS IN OIL OR SOLID WASTE				**SW3580A**		**SW8082**		
Aroclor 1016	ND	1.00	mg/Kg	1	1/4/05	1/7/2005 12:07:00 AM	10980	
Aroclor 1221	ND	1.00	mg/Kg	1				
Aroclor 1232	ND	1.00	mg/Kg	1				
Aroclor 1242	ND	1.00	mg/Kg	1				
Aroclor 1248	***8.44***	1.00	mg/Kg	1				
Aroclor 1254	***5.66***	1.00	mg/Kg	1				
Aroclor 1260	ND	1.00	mg/Kg	1				
Surr: Decachlorobiphenyl	82.0	50-150	%REC	1				

Qualifiers

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Oceanic Analytical Laboratory, Inc.

Date: *Jan 19, 2005*

Result Summary

Client:	EnviroServices & Training Center	**Client Sample ID:**	A-8
Work Order:	0501013	**Tag Number:**	
Project:	Pier 1 & 2, 04-4097	**Collection Date:**	12/29/2004 0:00
Lab ID:	0501013-08A	**Matrix:**	SOLID

Analyses	Result	Reporting Limit	Units	Dilution Factor	Date Prepared	Date Analyze	Batch ID	Qual Notes
ICP METALS, TOTAL				**SW 3051 SW6010B**				
Arsenic	ND	4.90	mg/Kg	1	1/7/05	1/11/2005 2:00:00 PM	11005	
Lead	***338***	98.0	mg/Kg	5		1/11/2005 1:54:00 PM		
PAH BY EPA 8270 SIM				**SW3580A SW8270C**				
Acenaphthene	ND	20.0	mg/Kg	20	1/6/05	1/7/2005 1:41:53 AM	10982	
Benzo(a)pyrene	***73.8***	20.0	mg/Kg	20				
Fluoranthene	***88.9***	20.0	mg/Kg	20				
Naphthalene	ND	20.0	mg/Kg	20				
Surr: 2-Fluorobiphenyl	105	30-115	%REC	20				
Surr: 4-Terphenyl-d14	75.8	18-137	%REC	20				
Surr: Nitrobenzene-d5	81.2	23-120	%REC	20				
PCBS IN OIL OR SOLID WASTE				**SW3580A SW8082**				
Aroclor 1016	ND	1.00	mg/Kg	1	1/4/05	1/7/2005 12:38:00 AM	10980	
Aroclor 1221	ND	1.00	mg/Kg	1				
Aroclor 1232	ND	1.00	mg/Kg	1				
Aroclor 1242	ND	1.00	mg/Kg	1				
Aroclor 1248	***8.85***	1.00	mg/Kg	1				
Aroclor 1254	***7.14***	1.00	mg/Kg	1				
Aroclor 1260	ND	1.00	mg/Kg	1				
Surr: Decachlorobiphenyl	91.0	50-150	%REC	1				

Qualifiers

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

ARTICLE XIV – REMOVAL AND DISPOSAL OF MISCELLANEOUS HAZARDOUS MATERIALS

14.1 EXECUTION - This section includes descriptions of the following:

A. Removal and Disposal of Lead containing materials.

B. Removal and Disposal of Tributyltin containing materials.

C. Removal and Disposal of Polynuclear Aromatic Hydrocarbon (PAH) containing materials.

D. Removal and Disposal of Polychlorinated Biphenyl (PCB) containing materials.

14.2 COORDINATION WITH OTHER SECTIONS - For the results of the State's survey for hazardous materials see Article XIII.

A. References: The publications listed below form a part of this Specification to the extent referenced. The publications are referred to in the text by the basic designation only, and include but are not limited to, the following.

CODE OF FEDERAL REGULATIONS (CFR)

29 CFR 1910.94	Ventilation
29 CFR 1910.120	Hazardous Waste Operations and Emergency Response
29 CFR 1910.1000	Air Contaminants
29 CFR 1926.21	Safety Training and Education
29 CFR 1926.33	Access to Employee Exposure and Medical Record
29 CFR 1926.55	Gases, Vapors, Fumes, Dusts, and Mists
29 CFR 1926.59	Hazard Communication
29 CFR 1926.62	Lead Exposure in Construction
29 CFR 1926.65	Hazard Waste Operations and Emergency Response
29 CFR 1926.103	Respiratory Protection
29 CFR 1926.502(f)	Warning Line Systems
40 CFR 260	Hazardous Waste Management Systems: General
40 CFR 261	Identification and Listing of Hazardous Waste
40 CFR 262	Generators of Hazardous Waste
40 CFR 263	Transporters of Hazardous Waste
40 CFR 264	Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities
40 CFR 265	Interim Status Standard for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities
40 CFR 268	Land Disposal Restriction
40 CFR 761	Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions

49 CFR 172	Hazardous Materials, Tables, and Hazardous Materials Communications Regulations
49 CFR 178	Shipping Container Specification

HAWAII OCCUPATIONAL SAFETY AND HEALTH (HIOSH)

12-114.2	Personal Protective Equipment
12-148.1	Lead
12-122.2	Materials Handling, Storage, Use, and Disposal
12-151	Hazardous Waste Operations and Emergency Response
12-202-33.1	Lead

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

ANSI A10.14 (1991)	Construction and Demolition Operations – Requirements for Safety Belts, Harness, Lanyards and Lifelines for Construction and Demolition Use
ANSI Z88.2	(1992) Respiratory Protection
ANSI Z359.1	(1992) Safety Requirements for Personal Fall Arrest Systems

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 30	(2000) Flammable and Combustible Liquid Code
NFPA 70B	(1998) Electrical Equipment Maintenance
NFPA 70	(1999) National Electrical Code
NFPA 241	(2000) Safeguarding Construction, Alteration, and Demolition Operations
NFPA 326	(1999) Safeguarding Tanks and Containers
NFPA 327	Cleaning or Safeguarding Small Tanks and Containers Without Entry

14.3 DEFINITIONS

A. Definitions as outlined in 29 CFR 1910.120

B. Action Level - Lead: Employee exposure, without regard to use of respirators, to an airborne concentration of lead of 30 micrograms per cubic meter of air averaged over an 8-hour period.

C. Contractor: For this project, the Contractor is that individual, or entity under contract to the General Contractor to perform the herein listed work.

D. Lead: Metallic lead, inorganic lead compounds, and organic lead soaps. Excludes other forms of organic lead compounds.

E. Lead Control Area: A temporary area or structure or containment, sometimes equipped with HEPA filtered local exhaust, that prevents the spread of lead dust

or debris. Usually critical barriers and physical boundaries are employed to isolate the lead control area and to prevent migration of lead contamination and unauthorized entry of personnel.

F. Polychlorinated Biphenyls (PCBs): PCBs as used in this Specification shall mean PCBs, material containing PCBs and PCB containers, as defined in 40 CFR 761, Section 3, Definitions.

G. PEL (micrograms per cubic meter of air) = 400/# hours worked per day

H. Permissible Exposure Limit (PEL) - PCB: For Aroclor 1242, 1 milligram per cubic meter of air as an 8-hour time weighted average as determined by 29 CFR 1926.55. For Aroclor 1254, 0.5 milligram per cubic meter of air as an 8-hour time weighted average as determined by 29 CFR 1926.55.

14.4 DESCRIPTION OF WORK

A. In performing this project, all possible safeguards, precautions and protective measures should be utilized to prevent exposure of any individual to hazardous materials. The disturbance or dislocation of lead, PCB, PAH or Tributyltin containing materials may cause contaminated dust to be released into the atmosphere, thereby creating a potential health hazard to the workers and the general public. Apprise all workers, supervisory personnel, subcontractors, consultants and authorized visitors who will be at the job site of the seriousness of the hazard and of proper work procedures that must be followed.

B. **The Contractor shall be responsible for testing, handling, transporting and disposal of all existing hazardous materials from the subject property at no cost to the State**.

Contractor to provide all Hazardous Waste (HW) disposal documentation (i.e. Uniform Hazardous Waste Manifest, EPA Form 8700-22; certificates of disposal) to Harbors Engineering for review and acceptance prior to any contaminated debris leaving the project site. For purposes of this specification and proposal, all contaminated construction debris that is regulated for disposal in accordance with (IAW) 40 CFR Part 261 shall hereinafter be referred to as a Hazardous Waste (HW) vice Hazardous Materials (HM).

C. The Contractor shall identify and properly remove, and dispose of all hazardous materials referenced in the Letter Report, Pier 1 and Pier 2 Sampling Activities, Honolulu Harbor, dated January 20, 2005, prepared by EnviroServices & Training Center, LLC including storage containers and their contents.

D. Pollution Control: The Contractor shall not contaminate the air, water, soil or other items with hazardous materials such as cleaning solutions, debris and wastes contaminated by lead, PCBs, PAHs or Tributyltin, etc. The Contractor shall immediately clean the contaminated area and dispose of the waste in compliance

with all Federal, State and local laws, ordinances, rules and regulations at his or her own expense.

E. The Contractor shall be responsible for conducting a site visit to verify all quantities and material locations. **There will be no change orders issued for the abatement of additional hazardous materials discovered in the course of the abatement activities**.

F. The Contractor shall comply with all applicable Federal, State and local laws and regulations.

14.5 REQUIREMENTS

A. Notification: The Contractor shall notify the Harbors Division Construction Engineer 15 days prior to the start of any abatement or renovation work involving hazardous materials.

B. Certification: The Contractor shall use only EPA certified Lead Workers or Supervisors to perform all work that involves lead-containing or lead-contaminated materials.

C. Worker Training: Contractor employees assigned to work at the site must have successfully completed either the 40 hour basic HAZWOPER or the refresher course, as stipulated in 29 CFR 1910.120, within the last year. The Contractor shall be solely responsible for complying with all OSHA 29 CFR 1926.62 and HIOSH 12-148.1 requirements to train each employee. Training shall include, but not be limited to, the hazards of lead; safety and health precautions; and the use and requirements for protective clothing, equipment, and respirators.

D. Supervisor Training: Field managers and supervisors who are directly responsible for, or who supervise employees engaged in hazardous waste site operations, must have successfully completed either the 40 hour basic HAZWOPER and additional 8-hour supervisor training, or the refresher courses, as required by 29 CFR 1910.120, within the last year.

E. Field Experience: Each employee assigned to work at the site must also have a minimum of three days of field experience under the direct supervision of trained, experienced personnel. The field experience, at a minimum, must have included hands-on training in the proper use and calibration of field instruments, waste cleanup, spill control and containment, and general site safety.

F. Medical Surveillance: Employees and subcontractors who are assigned to work at the site are required to have medical clearance satisfying 29 CFR 1910.120 and 1910.134. A physician must have examined the employee or subcontractor within the past twelve months and must certify that the employee or subcontractor is physically fit to wear a respirator and perform work at hazardous waste sites. Individuals, whose medical clearance is not current will not be allowed to work at the site.

G. Respiratory Protection Program: The Contractor shall establish and implement a Respiratory Protection Program as required by ANSI A88.2, 29 CFR 1910.134, 29 CFR 1926.62, and HIOSH 12-148.1.

H. Hazard Communication Program: The Contractor shall establish and implement a Hazard Communication Program as required by 29 CFR 1926.59.

I. Safety Program: Contractor shall establish and implement a Health and Safety Plan which meets the specifications of 29 CFR 1926 Subparts C and D.

J. Applicable Standards and Guidelines: All work under this contract, and any other trade work conducted with the project, shall be done in strict accordance with all applicable Federal, State and local regulations, standards, documents and codes governing the preparation, removal, renovation, treatment, transportation and disposal of lead, PCB, PAH or Tributyltin containing and contaminated materials. The most recent edition of any relevant regulation, standard, document or code shall be applicable.

14.6 SUBMITTALS

A. Contractor to provide all documentation referenced in this part to Harbors Engineering for review and acceptance prior to starting work. Documentation shall include, but not be limited to, the following areas:

1. EPA recognized lead certification for all employees assigned to the project.

2. All relevant medical surveillance records to demonstrate that employees are monitored for lead exposure.

3. Medical clearance for employees to wear respirators.

4. Contractor written Respiratory Protection Program.

5. Contractor written Hazard Communication Program. HAZCOM plan shall address all requirements for HAZCOM 2012.

6. Contractor written site-specific Health and Safety Plan.

7. Training records for all employees in HAZCOM, HAZWOPER, Lead Awareness, Respiratory Protection, and PPE.

8. Work Procedure and Waste Management Plan, to include an air monitoring plan.

B. Manufacturer's Catalog Data: Submit copies of manufacturer's specifications, installation instructions and field test materials for all chemicals and equipment related to miscellaneous hazardous materials, including any other data that may be

required to demonstrate compliance with these Specifications and proposed uses. This includes, but is not limited to, data for respirators.

C. Material Safety Data Sheets: Submit copies of the Material Safety Data Sheets for all chemicals used.

D. Respiratory Protection Program: Submit no later than 10 consecutive working days from notice of award, a copy of the Contractor's Respiratory Protection Program prepared in accordance with all applicable laws. The Contractor shall also submit fit test records on all employees to be used on this project who may be required to wear a respirator.

E. Hazard Communication Program: Submit no later than 10 consecutive working days from notice of award, a copy of the Contractor's Hazard Communication Program prepared in accordance with all applicable laws.

F. Safety Program: Submit no later than 10 consecutive working days from notice of award, a copy of the Contractor's Health and Safety Plan prepared in accordance with all applicable laws.

G. Certification of medical examinations: The Contractor shall submit documentation from a physician that all employees or agents who may be required to wear a respirator have been medically monitored to determine whether they are physically capable of working while wearing the respirator required without suffering adverse health effects.

H. Employee training certifications: Submit documentation within 10 consecutive calendar days of award, satisfactory to the Harbors Division Construction Engineer, that the Contractor's employees, including foreman, supervisors and any other company personnel or agents who may be responsible for any aspects of removal and disposal of miscellaneous hazardous materials, have received training in accordance with Section 1.6 of this specification.

I. Emergency Planning Procedures: Emergency planning shall be developed prior to initiation of work and approved by the Contractor and the Harbors Division Construction Engineer of the State. It shall include, but not be limited to, considerations of fire, explosion, electrical hazards, slips, trips and falls and heat related injuries. The Contractor shall develop written emergency procedures and provide employee emergency training.

J. Work Procedure and Waste Management Plan

1. The Contractor shall develop and submit a detailed written job-specific Work Procedure and Waste Management Plan to establish and implement practices and procedures for the proper testing, handling and disposal of waste generated by the abatement of material containing lead, PCBs, PAHs, Tributyltin or other hazardous materials.

2. The Contractor must obtain the Harbors Division Construction Engineer's approval of the Work Procedure and Waste Management Plan prior to starting any work.

3. The Work Procedure and Waste Management Plan shall effectively and clearly communicate the means for complying with requirements of this Section and EPA regulations and procedures for the classifying, handling, and disposal of solid and liquid waste. Generic statements shall not be used. Specific methods, procedures, and details are required. The plan shall address procedures for handling and disposal of both hazardous and non-hazardous waste.

4. The Work Procedure and Waste Management Plan shall also comply with applicable requirements of all other Federal, State and local waste/hazardous waste regulations.

5. Required components of Work Procedure and Waste Management Plan include:

   a. A sketch showing the location, size, and details of control areas, signage, security, decontamination and support areas including eating, drinking, smoking, and restroom areas;

   b. Procedures, interface of trades, sequencing of work, respirators, protective equipment;

   c. A detailed description of the methods of control of the work to ensure that airborne lead concentrations of 30 micrograms per cubic meter of air are not exceeded;

   d. A detailed description of the methods of control of the work to ensure that lead, PCBs, PAHs, and Tributyltin are not released into the water.

K. Work plan and schedule for waste containment and disposal;

L. List of waste handling equipment to be used in performing the work, to include cleaning, volume reduction, and transport equipment;

M. Names and qualifications (experience and training) of personnel who will be working on-site with hazardous wastes;

N. Estimated quantities of wastes to be generated and disposed of as well as a description of the methods used to identify hazardous wastes encountered with the work;

O. Spill prevention, containment, and cleanup contingency measures to be implemented;

P. Description of procedures to stop work in the event that area monitoring and laboratory analysis indicate air concentrations of lead in excess of the action level;

Q. Methods to eliminate runoff of the water used to minimize dust created by renovation work, and collection and disposal plan for wastewater and debris;

R. Names, EPA Transporter Identification numbers and qualifications of all Sub-contractors that will be transporting, storing, treating, or disposing of the wastes as hazardous waste. Include the facility location, facility operator and a 24-hour point of contact; and

S. EPA Generator ID number for the work site.

T. Notification: Notify the Harbors Division Construction Engineer 10 working days prior to the start of any removal work.

U. TCLP Results: Submit test results to the Harbors Division Construction Engineer within three (3) working days of collection, signed by the testing laboratory employee performing the analysis and the Contractor's Competent Person.

V. Waste Disposal Manifest Forms: Submit copies of all transport manifests, trip tickets and disposal receipts for all hazardous waste removed from the work area and disposed of at a disposal facility during the work process.

14.7 PERSONAL PROTECTIVE EQUIPMENT (PPE)

A. The contractor acknowledges that he alone is responsible for instruction and for enforcement of personal protection requirements and that these specifications provide only a minimum acceptable standard. Safety equipment shall be provided to all workers and shall include, at minimum, the following.

1. Respirators: Select respirators approved by the National Institute for Occupational Safety and Health (NIOSH), Department of Health and Human Services. Respirators shall comply with the requirements of 29 CFR 1926.62 and HIOSH 12-148.1. For this project, respirators shall be worn at all times throughout the removal and renovation process or as deemed necessary by the Contractor's Competent Person.

2. Hard hat meeting the requirements of ANSI Z-89.1-1968.

3. Steel-toed and steel-shank boots meeting the requirements of ANSI Z-41.1-1967.

4. Safety glasses with side shields meeting the requirements of ANSI Z-87.1-1968.

5. Gloves of a composition appropriate to the hazard being handled.

6. Any additional insulating or impermeable clothing to protect against relevant work or weather conditions.

14.8 CONTROL AREA REQUIREMENTS

A. Boundary Requirements

1. Establish a control area to contain renovation operations by demarcating a boundary around the structure to be renovated in accordance with the Contractor's approved Work Procedure and Waste Management Plan. The control area shall be isolated by physical boundaries, such as temporary fencing, boundary tape and rope, to prevent unauthorized entry of personnel. If the work practice relating to hazardous material abatement will create airborne dust, create a containment to prevent migration of airborne dust outside of control area.

2. Post Warning and Danger signs in accordance with 29 CFR 1926. Signs shall be placed at all approaches to lead control area and at the boundary of the control area. Signs shall be posted at all locations where airborne concentrations of hazardous substances may exceed ambient background levels. Locate signs at such a distance that personnel may read the sign and take necessary protective measures to avoid exposure. In addition, post signs with "Authorized Entry Only, Lead Control Area" and "PPE Required" at every entry point.

B. Personal Protection Requirements

1. No one will be permitted in the control area unless they have been given appropriate training, Personal Protective Equipment (PPE) and medical examinations. PPE is required for all employees and persons within the control area.

2. Eating, drinking, smoking and application of cosmetics shall be permitted only in areas designated by the Contractor, approved by the Harbors Division Construction Engineer, and which are free of dust generated by the renovation. Eating, drinking, smoking and application of cosmetics are not permitted in the control area.

3. Where eyes may be exposed to injurious corrosive materials, suitable facilities for quick drenching or flushing of the eyes shall be provided within the work area.

C. Environmental Requirements

1. Minimize the emission of dust and particulates from work with lead, PCB, PAH and Tributyltin contaminated materials and prevent their migration out of the control area. Ensure airborne lead levels outside the lead control area are below the Action Level.

2. Do not release any contaminated material to water. Water includes the ocean, streams, sewer system, and any run-off that may enter the ocean, streams, sewer system or other water source.

3. Perform work without damage to or contamination of the areas adjacent to locations where hazardous material will be disturbed as a result of renovation activities. If any part of the work area is damaged or contaminated during the disturbance of hazardous materials, restore the damaged or contaminated area to its original condition or better, as determined by the Harbors Division Construction Engineer.

D. Exit Procedures Whenever personnel exit the control area, they shall perform the following procedures and shall not leave the work place wearing any clothing or other equipment worn in the control area:

1. Vacuum themselves off with HEPA-filtered vacuum equipment. Use UL-586 labeled HEPA filters;

2. Remove protective clothing in the designated changing area within the lead control area and place them in an approved impermeable disposal bag;

3. Wash hands and face in the designated changing area before exiting to the designated clean area outside of lead control area; and

4. Prevent the migration of mud, dust and/or debris carried on work boots, clothing or equipment from the renovation site into areas beyond the control area.

14.9 WORK PROCEDURE

A. Perform renovation and removal work in accordance with approved Work Procedure and Waste Management Plan.

B. Engineering controls shall be used to minimize airborne dust from work with materials containing lead, PAHs, PCBs, Tributyltin or other hazardous substances. Care shall be taken to avoid pulverizing, scraping, or crumbling debris from such materials.

C. The use of heat guns or hot knives that reach temperatures above 650 degrees Fahrenheit, on surfaces containing lead, PAHs, PCBs, Tributyltin or other hazardous substances is prohibited.

D. Open flame burning or torching of material containing lead, PAHs, PCBs, Tributyltin or other hazardous substances is prohibited.

E. Use of vacuum equipment without HEPA filters in areas containing material containing lead, PAHs, PCBs, Tributyltin or other hazardous substances is prohibited.

F. Control of Visible Emissions: The Contractor shall control dust emissions from the project site so that no visible dust emissions leave the project work areas during renovation work involving materials containing lead, PAHs, PCBs, Tributyltin or other hazardous substances. Wet methods or other engineering controls shall be used to control the emission of dust and/or debris from the renovation site in accordance with all applicable Federal, State, and local regulations. Emissions in excess of the above shall be cause for immediate shut down of the project until corrective measures are implemented.

G. Control of Emissions to Water: The Contractor shall control dust and debris emissions from the project site so that no emissions enter the ocean, streams, sewer system or other water sources from the project work areas during renovation work involving materials containing lead, PAHs, PCBs, Tributyltin or other hazardous substances.

H. Control of Water Runoff: Water used to control emissions of dust from the renovation or as part of the renovation activities shall not be allowed to flow uncontrolled from a control area, to any adjacent area or to enter the sanitary or storm water sewer system. All water runoff from control areas shall pass through a filter berm to remove particulate matter prior to discharge to water sewer system. The Contractor shall use only sufficient water to adequately control dust. Under no conditions shall wastewater be disposed of in storm drains or dumped on the ground.

14.10 WASTE CHARACTERIZATION

A. TCLP testing of the gross solid renovation debris shall be performed by the Contractor to characterize the debris as either non-hazardous or hazardous waste. Metal items to be demolished and removed shall be recycled.

B. The Contractor shall not concentrate, treat, or intermix wastes from outside this project with the debris and wastes generated by this project.

C. All TCLP test samples shall be collected by the Contractor in accordance with SW 846, “Test Methods for Evaluating Solid Waste – Physical/Chemical Methods.”

D. Submit results of TCLP tests to the Harbors Division Construction Engineer within 3 working days of collection, signed by the testing lab employee performing the analysis and the Contractor’s Competent Person.

14.11 DISPOSAL

A. The Contractor shall be responsible for proper and necessary testing, packaging, transporting, and disposing procedures to remove all miscellaneous drums, containers and other hazardous and non-hazardous waste/materials from the abatement of hazardous materials identified in the Letter Report, Pier 1 and Pier 2 Sampling Activities, Honolulu Harbor, dated January 20, 2005 prepared by EnviroServices & Training Center, LLC. If disposed of at a disposal facility, the Contractor shall provide proper waste disposal and transportation waste manifests from the receiving disposal facility to the Harbors Division Construction Engineer.

14.12 REPORTING

A. The Contractor shall make available to the Harbors Division Construction Engineer all pertinent documents, disposal certificates, waste transportation manifests, laboratory data and field notes necessary for the preparation of the final report.

14.13 PAYMENT - Payment for Removal and Disposal of Miscellaneous Hazardous Materials shall not be measured and paid for separately but shall be considered incidental to the applicable items described in Article X of these Specifications. Project final payment will not be made until a signed copy of the manifest from the treatment or disposal facility certifying the amount of hazardous materials delivered is returned and a copy is furnished to the Harbors Division Construction Engineer.

ARTICLE XV – CONCRETE SPALL REPAIR WORK

15.1 GENERAL

A. Work under this Article includes furnishing all labor, materials and equipment necessary to repair the spalled concrete on precast plank soffits and reinforced concrete beams. Removal and disposal of the existing coal tar epoxy is covered under Article XIV and coating underside surfaces of the pier is covered under Article XVII of these Specifications. Work shall be performed in phases to always maintain a 3 feet walkway at Pier 16 and a travel way at Pier 17.

B. In general, the work includes, but is not necessarily limited to, the following:

1. Sounding concrete to determine extent of concrete spall repairs.
2. Removal of concrete surrounding reinforcing steel in repair areas.
3. Preparing concrete repair area.
4. Replacing severely corroded mild reinforcing steel with replacement reinforcing steel at spall repairs.
5. Installing new reinforcing steel and epoxy grouted bars.
6. Cleaning reinforcing steel and applying reinforcing steel coating.
7. Installing and removing formwork.
8. Placing concrete or patching compound.
9. Removing formwork.

C. All work shall be in accordance with the following sections of the Standard Specifications except as modified or supplemented herein:

Section 503 Concrete Structures

Section 601 Structural Concrete

Section 602 Reinforcing Steel

Section 711 Concrete Curing Materials and Admixtures

Sections on Materials referenced in the above sections are hereby incorporated.

15.2 MATERIALS

A. Concrete

1. Concrete shall be Class f'c = 5000 psi conforming to Section 601 "Structural Concrete" of the Standard Specifications.

2. Maximum aggregate size shall be 3/8 inches and shall be coordinated with concrete preparation procedures for spall repairs.

B. Admixture - Admixture to be used in the concrete shall be approved by the Construction Engineer and shall conform to Section 711 of the Standard Specifications. Contractor shall strictly adhere to the manufacturer's recommendations regarding the use of admixtures including storage, transportation and method of mixing.

CORTEC MCI 2005NS migrating corrosion inhibiting admixture manufactured by Cortec Corporation or approved equal shall be added at the following rates and as recommended by the manufacturer.

CORTEC MCI 2005NS: 1.5 pints per cubic yard of concrete

To combat climate change and reduce the concrete carbon footprint, supplementary cementitious material(s) shall be used to reduce the cement content in the concrete for this project. The following supplementary cementitious material shall be substituted for cement by weight at the following rate and as recommended by the concrete supplier.

Silica Fume: 10% of cement by weight

The maximum water to cementitious materials ratio shall be 0.40 and the mix water shall be reduced as necessary to account for the admixture.

C. New Reinforcing Steel for Weld Splicing - New reinforcing for weld splicing shall be ASTM A706 Grade 60.

D. New Reinforcing Steel - New reinforcing not to be weld spliced shall be ASTM A615, Grade 60.

E. Welds - Welding electrodes shall be low hydrogen E70.

F. Reinforcing Steel Anti-Corrosion Coating – Anti-corrosion coating with a minimum 7 day open time for reinforcing steel shall be Sika Armatec 110 Epocem by Sika, or approved equal.

G. Epoxy Grout - Epoxy for grouting of dowels shall be Set 3G by Simpson Strong-Tie, or approved equal.

H. Migrating Corrosion Inhibitor to be applied to existing prepared concrete surfaces prior to placing repair concrete shall be MCI-2020 V/O manufactured by Cortec Corporation or approved equal.

1. Product shall be delivered to the site in manufacturer's sealed containers until ready for application.

2. Store and dispose of solvent-based materials, and materials used with solvent-based materials, in accordance with requirements of local authorities having jurisdictions.

I. Patching Compound for repairing top surface and formed repairs shall be Sikacrete 211 SCC Plus by Sika, or approved equal.

J. Patching Compound for repairing vertical and overhead repairs in lifts shall be Sikaquick VOH with Later R by Sika, or approved equal.

K. Curing Compound for concrete repairs shall be acceptable to the Harbors Division Construction Engineer.

L. Forms shall conform to Section 503.03.C "Forms" of the Standard Specifications.

M. Snap ties and inserts shall be plastic or stainless steel. All loose reinforcing steel shall be secured with ties at all intersections with adjacent reinforcing steel.

15.3 CONSTRUCTION METHODS

A. Concrete construction shall conform to the American Concrete Institute (ACI) ACI 318R and ACI 546R-14.

B. Surface preparation for spall repair work shall follow the International Concrete Repair Institute (ICRI) Guideline No. 310.1R-2008. The sizes, locations and types of repair work specified on the drawings are intended to be approximate only. The actual amount and type of repair work to be done shall be determined after completion of the removal work. Removal and surface preparation shall be performed in the order listed below.

1. All visible loose and deteriorated concrete shall be removed with suitable pneumatic or hand tools until only sound concrete remains.

2. Such chipped areas and adjoining areas shall be further sounded by tapping with a light hammer. Areas emitting a hollow sound indicating unsound and delaminated concrete with voids shall be further chipped to sound concrete and beyond the extent of the corroded reinforcing.

3. Partially exposed reinforcing steel or steel exposed during the concrete chipping process shall be fully exposed throughout their length within the repair area. There shall be a minimum of 3/4 inch of clear distance between the reinforcing steel and the chipped surface of the existing concrete for placing patching compound or concrete.

4. The edges of the repair shall be saw-cut and chipped as necessary to attain a minimum concrete depth of 3/4 inch and to prevent featheredge conditions.

5. The existing concrete in the repair areas shall be chipped to approximate rectangular dimensions to facilitate the repair work.

6. The patch area shall be cleaned of all dust and debris just prior to patching with high pressure, oil-free compressed air at a minimum of 100 psi with appropriate PPE's and containment.

C. Live Load Limitation

1. Any element being repaired shall not be subjected to live loads during the period starting from the removal of existing concrete until the repair concrete has been allowed to cure for 7 days or obtained a minimum compressive strength of f'c=4,000 psi.

2. Mooring bollards shall be shut down when spall repair work is performed in the vicinity of the bollards.

3. The repair area shall remain barricaded with barriers visible at night from traffic during this period. The Contractor shall provide shoring for severely spalled areas as necessary to prevent damage or collapse.

D. Cleaning Reinforcing Steel - All exposed concrete and reinforcing steel in the repair area shall be needle gunned to remove all scale, loose rust, debris and other bond-inhibiting materials. Any areas not patched more than 48 hours after cleaning shall be recleaned.

E. Replacing Reinforcing Steel - All existing reinforcing bars with less than 80% of their cross-section remaining after cleaning shall be supplemented with welded reinforcing as shown on the plans. New reinforcing steel will be measured by the pound, complete in place. The theoretical unit weight of each size of reinforcing bar used will be based upon Table 602.04-1 of the Standard Specifications.

F. Welding Reinforcing Steel - All welding shall conform to AWS D1.4. All existing bars to be welded with a carbon equivalent (C.E.) above 0.55 percent shall be preheated according to the requirements set forth in AWS D1.4. If the C.E. is unknown, maximum preheat requirement, (500 deg F) for an assumed C.E. greater than 0.75 percent shall be used.

The Contractor shall survey the entire area around the project site to ensure that no hazardous vapors are present. The Contractor shall certify in writing that the project site shall be safe for hot work and free of hazardous vapor. No open flame, hot cutting, welding or other hot work will be permitted without the certification.

G. Reinforcing Steel Coating - All exposed steel shall be liberally coated with anti-corrosion coating per manufacturer's recommendations.

H. Epoxy Grouting - Blow holes completely clean of all concrete debris to allow for adequate bonding of the epoxy. The holes shall be filled with epoxy gel before inserting and turning the supplemental reinforcement to displace the grout.

I. Photographs – The Contractor shall provide digital photographs of underside spall repairs to the Construction Engineer for their review. Photos shall be in color and taken with a digital camera having a 6.0 mega pixel resolution or higher. Each photo shall be identified with the time, date, and location referenced to the plans.

The Contractor shall provide one set of photos per 50 square feet of spall repairs. A set of photos shall contain at least two photos for each of the seven procedures listed below.

1. Existing condition of concrete repair.

2. After all removal of existing concrete has been completed, including spalled and delaminated concrete, concrete surrounding reinforcing steel in repair areas, and sawcut and chipped out concrete at the perimeter of the repair.

3. After cleaning of the reinforcing steel.

4. After replacing severely corroded steel with weld spliced reinforcing steel and installing reinforcing steel dowels.

5. After installing replacement reinforcing steel.

6. After applying reinforcing steel coating.

7. After formwork has been installed.

8. After forms have been removed, or concrete has cured for at least 3 days.

The photos shall be taken on the same day that the procedure has been completed and shall clearly represent typical details of the completed procedure. The photos shall also be emailed to the Harbor Division Construction Engineer on the same day that the photos were taken. Additionally, one set of 4” x 6” sized prints shall be delivered to the Construction Engineer at the completion of the project.

J. Migrating Corrosion Inhibitor – Apply migrating corrosion inhibitor to existing concrete surfaces at repairs prior to placement of repair concrete.

1. Surface Preparation

a. Project Conditions - Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

b. Preparation - Clean surfaces thoroughly prior to installation. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions. The surface should be dry, sound, clean and free of all dirt, oil, grease efflorescence, sealers, coatings and membranes. Cleaning may be done by steam cleaning, water blasting, sandblasting or other methods as necessary.

2. Surface Application

a. All surfaces to be coated shall be properly prepared prior to application.

b. Migrating corrosion inhibitor shall be applied according to manufacturer's specifications at a uniform rate of 150 square feet per gallon.

3. Clean-Up

a. All of the product, oil, etc. shall be cleaned off any portion of the pier beyond the area to be coated. The Contractor shall take precautions to prevent the product from being applied on equipment, vehicles, or cargo in the project area.

b. All unused rags, waste and empty containers shall be removed from the work area at the end of each work day and precautions shall be taken to avoid the danger of fire.

c. The Contractor shall maintain the job site in a neat and orderly condition during the progress of the work. Upon completion, the Contractor shall remove all surplus material, debris, equipment, tools, etc. belonging to it and leave the premises in a neat and orderly condition.

K. Formwork - Formwork shall be installed in accordance with Section 503.03.C - "Forms" of the Standard Specifications. The exact method of formwork requires the Construction Engineer's approval. Forms shall be designed to provide a minimum of three (3) inches of concrete cover over all reinforcing steel, unless noted otherwise. All edges of new concrete repairs shall be chamfered and existing joints shall be maintained.

L. Placing Concrete - Concrete shall be placed in accordance with Section 503.03 - "Construction" of the Standard Specifications. All repair surfaces including forms shall be thoroughly washed with clean water and remain in a saturated surface dry condition prior to placing concrete. Surfaces shall be clean and free of loose and other bond-inhibiting materials. The repair concrete shall be vibrated, rodded or tamped during placement to consolidate the pour and fill all corners of the patch or form and beneath the reinforcing. As an alternate self-

consolidating concrete maybe used. There shall be no cold joints in the field of the repair.

M. Patching Compound - Patching compound shall be used only to fill minor spalls and voids and to fill minor depressions such as those caused by the installation of expansion anchors used for formwork support. The Contractor shall follow the manufacturer's recommendations for mixing and placing patching compound, including application of a slurry coat to prime the substrate and application of the repair material in lifts.

N. Finish - Concrete finish shall be Class I - Ordinary Surface Finish as specified in Section 503.03.M.1 of the Standard Specifications. Provide smooth finish on pier decks for all holes patched. Cementitious compound used to patch holes shall be finished to the level of the concrete surface. Remaining void in asphalt topping pavement shall be filled with asphalt to match existing elevation and composition.

O. Formwork Removal - Formwork for all repairs shall not be removed for a minimum of 24 hours and until concrete has obtained a minimum compressive strength of f'c = 4,000 psi.

P. Concrete Curing – Concrete repairs on the underside of the pier shall be cured a minimum 7 days by leaving the forms in place or covering the surface with a curing compound approved by and acceptable to the Harbors Division Construction Engineer.

Q. Identifying Repairs - Identify all repair work with paint. The color and marking for identification shall be a minimum 6 inch in height and black stenciling unless otherwise directed by the Harbors Division Construction Engineer.

R. Defective Work - After forms have been removed, the new repaired area shall be tested by tapping with a hammer. Any "hollow" sound emitted shall indicate the presence of voids and shall be sufficient cause for removal of new work and reconstruction. The method of repairing defects shall be subject to the approval of the Construction Engineer. All defects shall be corrected by the Contractor at no additional cost to the State.

15.4 PAYMENT - Payment for Concrete Spall Repair Work shall be made as described in Article X of these Specifications.

ARTICLE XVI – EMBEDDED GALVANIC ANODES

16.1 GENERAL

A. This Section includes furnishing all labor, tools, materials, equipment and services necessary to properly install embedded galvanic anodes.

B. Embedded galvanic anodes are designed to provide localized corrosion protection. When placed at the appropriate spacing along the perimeter of concrete repairs or along the interface between new/existing concrete, the anodes mitigate active corrosion and the formation of new corrosion sites in the adjacent existing concrete.

C. References

1. ACI Repair Application Procedure (RAP) Bulletin 8 – Installation of Embedded Galvanic Anodes

2. ACI Guideline No. 222 – Corrosion of Metals in Concrete

3. ACI 562 – Code Requirements for Evaluation, Repair and Rehabilitation of Concrete Buildings

4. ASTM B418 – Standard Specification for Cast and Wrought Galvanic Zinc Anodes

5. ICRI Guideline 310.1R – Guide for Surface Preparation for the Repair of Deteriorated Concrete resulting from Reinforcing Steel Corrosion

6. ISO 12696 – Cathodic Protection of Steel in Concrete

D. Manufacturer Extended Limited Warranty

1. Contractor shall provide a Limited Warranty with a notarized signature from a corporate officer of the anode manufacturer.

2. The Limited Warranty shall state the following:

   a. The published anode spacing guidelines for anode size and spacing are based on an estimated minimum 20-year anode service life in the environment it is installed.

   b. The galvanic anodes will remain electrochemically active and produce galvanic current in relation to the environment in which it is installed for a minimum of 5 years from the date of anode installation.

   c. The anode unit, including its constitutes, does not include intentionally added substances that may cause corrosion to reinforcing steel over the life of the structure.

d. The galvanic anodes meet all building and repair code requirements.

E. Manufacturer Corrosion Technician

1. The contractor will enlist and pay for a technical representative employed by the galvanic anode manufacturer to provide training and on-site technical assistance during the initial installation of the galvanic anodes. The technical representative shall be a NACE-qualified corrosion technician (NACE CP2 Cathodic Protection Technician or higher).

2. The qualified corrosion technician shall have verifiable experience in the installation and testing of embedded galvanic protection systems for reinforced concrete structures.

3. The contractor shall coordinate its work with the designated corrosion technician to allow for site support during project startup and initial anode installation. The corrosion technician shall provide contractor training and support for development of application procedures, verification of electrical continuity, and project documentation.

16.2 PRODUCTS

A. Embedded Galvanic Anodes

1. Embedded galvanic anodes shall be Anode Type 1A with the following nominal dimensions: 1.3 in x 1.38 in x 5.12 in (33 mm x 35 mm x 130 mm). The anodes shall be pre-manufactured with zinc in compliance with ASTM B418 Type II cast around an integral, unspliced, uncoated, non-galvanized double loop steel tie wire and encased in a highly alkaline cementitious shell with a pH of 14 or greater.

2. The galvanic anodes shall be alkali-activated and shall contain no intentionally added chloride, bromide or other constituents that are corrosive to reinforcing steel as per ACI 562. The anode size and spacing shall deliver a minimum current density to the steel adjacent to the repair of 17.2 mA/ft^2 (1.6 mA/m^2) for the 20-year design life taking into account an anode aging factor calculated from previous field installations and the in-service environment.

3. Embedded galvanic anodes shall be Galvashield® XP4 available from Vector Corrosion Technologies (www.vector-corrosion.com) USA (813) 830-7566 or approved equal.

4. Galvanic anode shall include verification of the following information:

a. The zinc anode is alkali-activated with an alkaline cementitious shell with a pH of 14 or greater.

b. The galvanic anode shall contain no intentionally added constituents corrosive to reinforcing steel, e.g. chloride, bromide, etc.

c. The anode manufacturer shall provide documented performance data from field installations showing that the anodes have remained active for a minimum of 20 years in service and meet the ISO 12696 Cathodic Prevention Standard.

d. Project design calculations showing that the minimum specified current density to reinforcing steel adjacent to the repair will be achieved 20 years after installation. The design calculations shall take into consideration expected in-service temperature and humidity conditions in the environment in which the anodes are to be placed in service and use a galvanic anode aging factor derived from field monitoring for at least one anode aging step (time until the current halves).

e. The galvanic anode shall have been used in a minimum of ten projects of similar size and application.

f. The galvanic anode units shall be supplied with solid zinc core (ASTM B418) cast around uncoated, non-galvanized, non-spliced steel tie wires for wrapping around the reinforcing steel and twisting to provide a durable steel to steel connection between the tie wire and the reinforcing steel.

g. The anode manufacturer shall provide third party product evaluation, such as from Concrete Innovations Appraisal Service, BBA, etc.

B. Concrete

1. Repair mortars, concrete and bonding agents shall be ionically conductive and cement-based. Non-conductive repair materials such as epoxy, urethane, or magnesium phosphate shall not be permitted. Concretes with significant polymer modification and/or silica fume content may have high resistivity. Insulating materials such as epoxy bonding agents shall not be used unless otherwise called for in the design.

2. If repair materials have a saturated bulk resistivity of 50,000 ohm-cm or greater, pack Galvashield® Embedding Mortar or another repair mortar with a resistivity of 15,000 ohm-cm or less between the anode and the substrate to provide an ionically conductive path to the substrate.

C. Storage – Deliver, store, and handle all materials in accordance with manufacturer's instructions. Anode units shall be stored in dry conditions in the original unopened containers in a manner to avoid exposure to extremes of temperature and humidity.

16.3 CONSTRUCTION

A. Prepare concrete and reinforcing steel per Article XV.

1. Verify electrical continuity of all reinforcing steel, including supplemental steel, as per Section 16.3.C.

2. Do not coat the reinforcing steel with anti-corrosion coating within 1 inch of the anode and do not apply coating to any surface of the anode or the steel tie wires.

B. Galvanic Anode Installation

1. Install anode units and repair material immediately following preparation and cleaning of the steel reinforcement.

2. Galvanic anodes shall be installed along the perimeter of the repair at a maximum spacing of 17 in. (432 mm).

3. Place the galvanic anodes as close as possible to the interface with the parent concrete while still providing sufficient clearance between anodes and substrate to allow the repair material to fully encase the anode.

a. Place the anode such that the preformed BarFit™ groove fits along a single bar or at the intersection between two bars and secure to each clean bar.

b. If less than 1 in. (25 mm) of concrete cover is expected, place anode beneath the bar and secure to clean reinforcing steel or increase the size of the repair cavity to accommodate the anodes.

4. Wrap the tie wires around the clean reinforcing steel at least one full turn in opposite directions and bring the two free ends together and twist tight to create a secure electrical connection that will not allow anode movement during concrete placement.

C. Electrical Continuity

1. Confirm electrical connection between anode tie wire and reinforcing steel by measuring DC resistance (ohm Ω) or DC potential (mV) with a multi-meter. Electrical connection is acceptable if the DC resistance measured with the multi-meter is 1 Ω or less or the DC potential is 1 mV or less.

2. Confirm electrical continuity of the exposed reinforcing steel within the repair area. Electrical continuity shall be established by tying discontinuous steel to continuous steel using steel tie wire when necessary. Electrical continuity within the repair area is acceptable if the DC

resistance measured with multi-meter is 1 Ω or less or the potential is 1 mV or less.

D. Concrete or Mortar Replacement

1. If the repair procedures require the concrete surface to be saturated with water, do not damage the anode nor allow the anode units to be soaked for greater than 20 minutes.

2. Complete the repair with the repair material, taking care not to damage, loosen or leave voids around the anode.

16.4 PAYMENT - Payment for embedded galvanic anodes shall be made as specified in Article X of these specifications.

ARTICLE XVII – EPOXY COATING SYSTEM

17.1 GENERAL

A. Work to be done under this Article includes preparing and coating the entire underside of Pier 17 and repaired areas and surfaces of beams at the underside of Pier 17 as shown on the plans in the project location, with an epoxy coating system.

B. **Work included in this Article must be completed by a valid State of Hawaii Specialty Contractor licensed "C-33" Painting and Decorating Contractor. The "C-33" Painting and Decorating Contractor must be listed on page P-4 of the Proposal at the time of bidding.**

17.2 MATERIALS

A. Product shall be delivered to the site in manufacturer's sealed containers until ready for application. Store and dispose of solvent-based materials, and materials used with solvent-based materials, in accordance with requirements of local authorities having jurisdictions. The coating shall be the following or approved equal:

1. High Solids Epoxy Coating – High Solids Epoxy Coating shall be Amerlock 400 manufactured by PPG Protective and Marine Coatings or approved equal. Color shall be off white/gray and submitted to the Construction Engineer for approval.

17.3 SURFACE PREPARATION

A. Project Conditions - Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

B. Surfaces to be coated shall include all repaired surfaces and beams and flanges as shown on the plans. Coating shall be applied on the bottom face of the fascia beam, but not on the outboard vertical face of the fascia beam.

C. Preparation - Clean surfaces thoroughly prior to installation. Prepare surfaces similar to SSPC-SP-2 or SSPC-SP-3 or using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions. The surface should be dry, sound, clean and free of all dirt, oil, grease efflorescence, dust, sax, soaps, powdery residue, form release agents, curing compounds, laitance and other foreign matter and be structurally sound. Cleaning may be done by steam cleaning, water blasting, sandblasting or other methods as necessary.

D. All surfaces to be coated shall be properly prepared prior to coating and shall be inspected for approval by the Harbors Division Construction Engineer before coating will be allowed. In addition, a technical representative of the coating manufacturer shall be present to verify the surface preparation, application and dry film thickness of the coatings.

17.4 SURFACE APPLICATION

A. Allow new concrete to cure a minimum of 28 days or per manufacturer's recommendation. Allow migrating corrosion inhibitor to absorb into existing concrete per manufacturer's recommendations.

B. Apply two (2) coats of Amerlock 400 at a dry film thickness of 4-6 mils per coat for a total dry film thickness of 10 mils. Coating shall be applied in a method to ensure the material does not enter the water.

C. The prime coat shall be applied on the same day that the surface is prepared. It may take more than a single application to obtain the required thickness. If a coat requires more than a single application, it shall be done no later than the following day.

D. The time interval between each coat shall be no more than 24 hours or as recommended by the manufacturer. For intervals exceeding 24 hours, all surfaces shall be rinsed with fresh water or tested for acceptable chloride levels by the technical representative of the product manufacturer. Each coat shall be of a lighter color than the later coat to be coated upon it.

E. Finish work shall be uniform and of approved color. The finish shall completely cover, be smooth and be free from runs, sags, drips, waves, laps or brush marks. Edges of coating adjoining other surfaces of materials shall be sharp and clean without overlapping.

F. Coating shall be allowed to cure completely. Any marred surfaces or damages to the coating finish shall be corrected by proper preparation and recoating.

G. All methods and procedures shall comply with OSHA and HIOSH requirements and be approved by the Construction Engineer.

17.5 CLEAN-UP

A. All coating, oil, etc. shall be cleaned off fenders, chains, or any portion of the pier beyond the coating area. The Contractor shall take precautions to prevent the coating from being applied on equipment, vehicles, or cargo in the project area.

B. All unused rags, waste and empty containers shall be removed from the work area at the end of each work day and precautions shall be taken to avoid the danger of fire.

C. The Contractor shall maintain the job site in a neat and orderly condition during the progress of the work. Upon completion, the Contractor shall remove all surplus material, debris, equipment, tools, etc. belonging to it and leave the premises in a neat and orderly condition.

17.6 PAYMENT – Payment for Epoxy Coating System shall be made as described in Article X of these specifications.

ARTICLE XVIII - PROJECT PHOTOGRAPHS

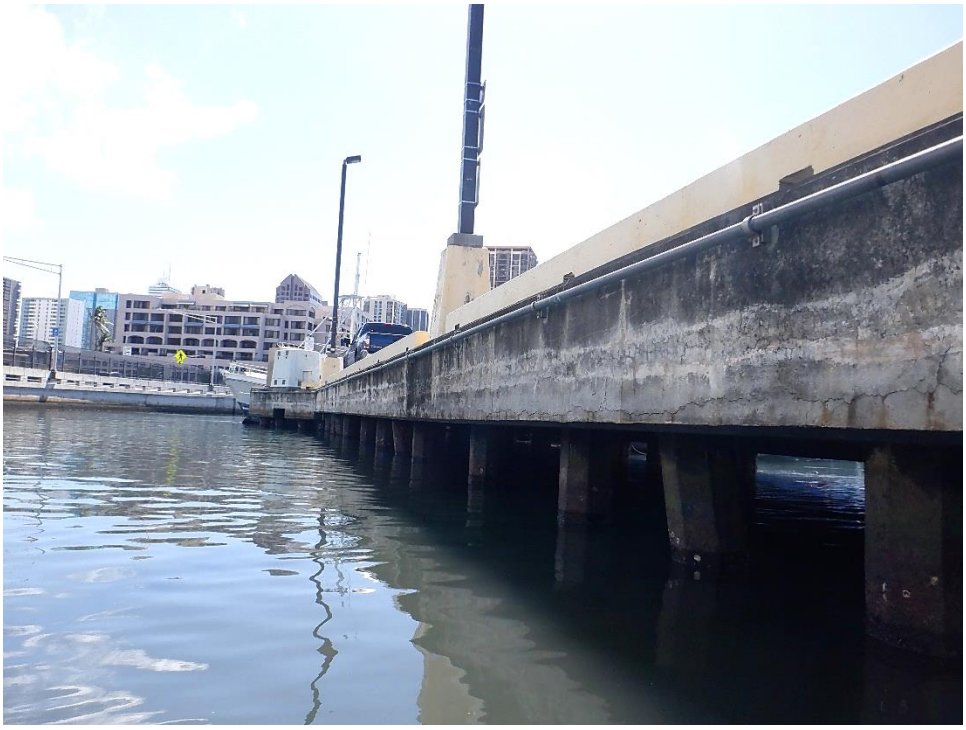

Photo 1: Project Area

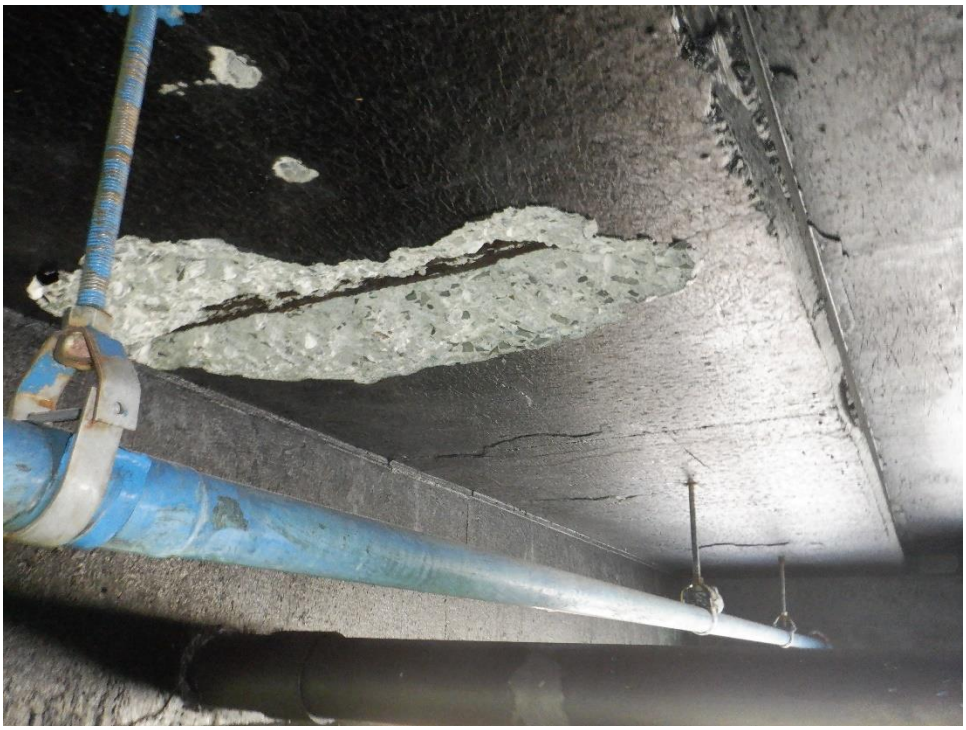

Photo 2: Typical Precast Plank Soffit Spall at Pier 16

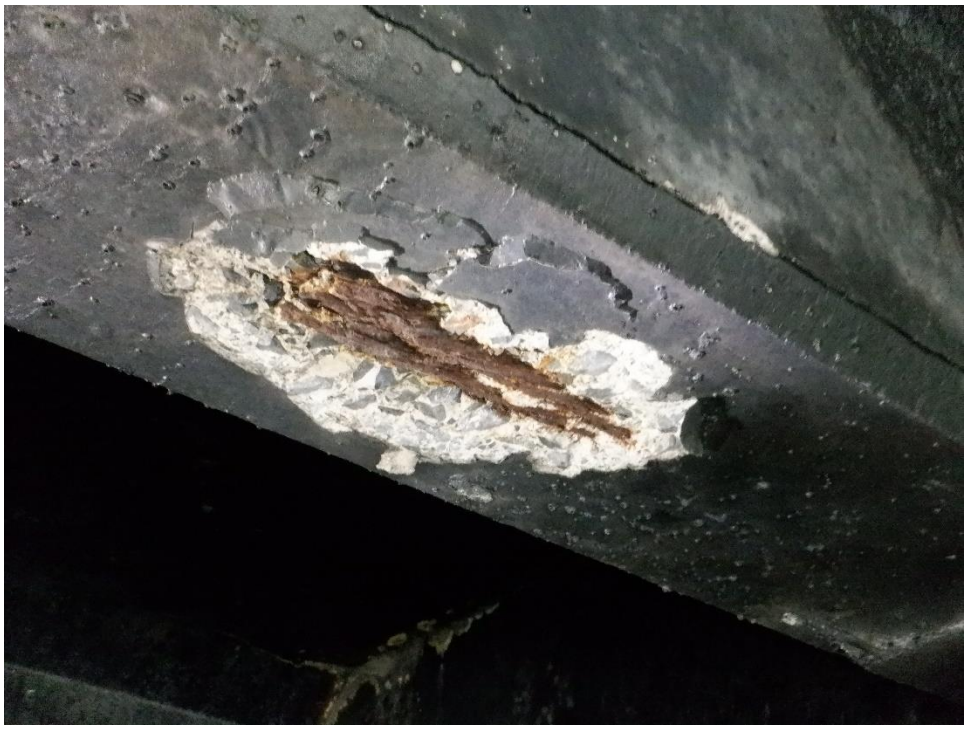

Photo 3: Typical Precast Tee Beam Spall at Pier 16

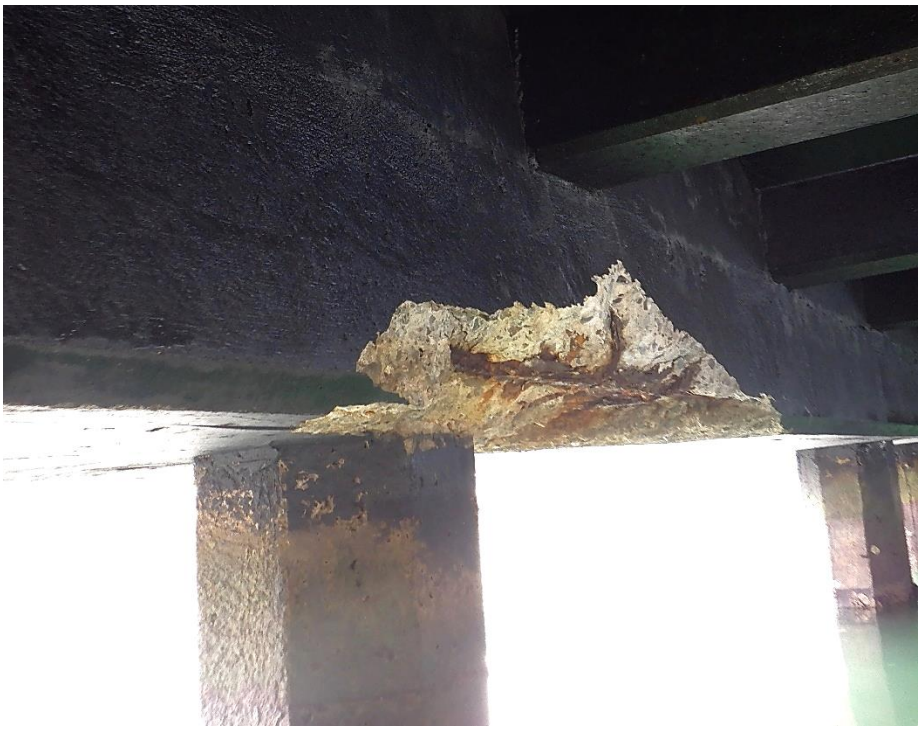

Photo 4: Typical Fascia Beam Spall at Pier 16

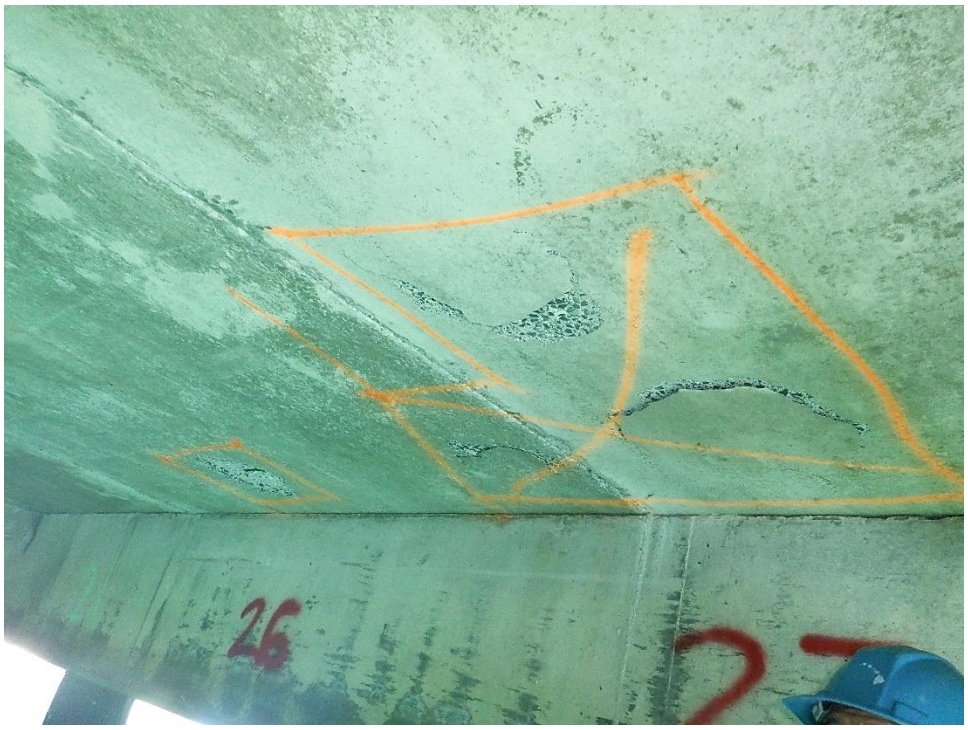

Photo 5: Typical Precast Plank Soffit Spalls at Pier 17

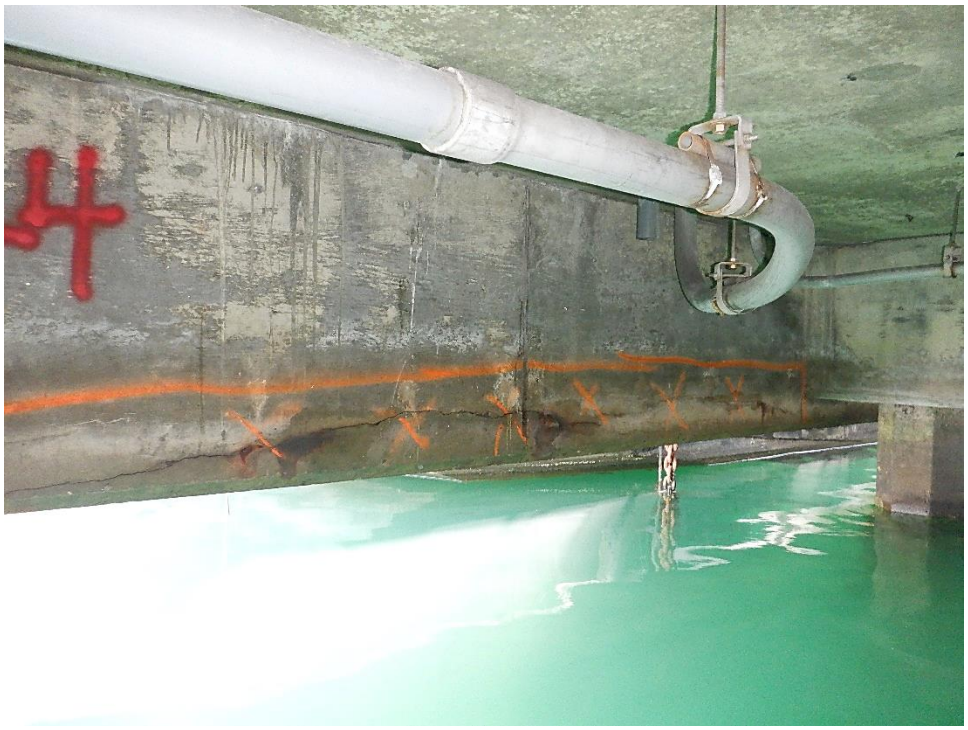
Photo 6: Typical Fascia Beam Spall at Pier 17

Requirements of Chapter 104, HRS
Wages and Hours of Employees on Public Works Law

Chapter 104, HRS, applies to every public works construction project over $2,000, regardless of the method of procurement or financing (purchase order, voucher, bid, contract, lease arrangement, warranty, SPRB).

Rate of Wages for Laborers and Mechanics

- Minimum prevailing wages (basic hourly rate plus fringe benefits), as determined by the Director of Labor and Industrial Relations and published in wage rate schedules, shall be paid to the various classes of laborers and mechanics working on the job site. [§104-2(a), (b), Hawaii Revised Statutes (HRS)]

- If the Director of Labor determines that prevailing wages have increased during the performance of a public works contract, the rate of pay of laborers and mechanics shall be raised accordingly. [§104-2(a) and (b), HRS; §12-22-3(d) Hawaii Administrative Rules (HAR)]

Overtime

- Laborers and mechanics working on a Saturday, Sunday, or a legal holiday of the State or more than eight hours a day on any other day shall be paid overtime compensation at not less than one and one-half times the basic hourly rate plus the cost of fringe benefits for all hours worked. If the Director of Labor determines that a prevailing wage is defined by a collective bargaining agreement, the overtime compensation shall be at the rates set by the applicable collective bargaining agreement [§§104-1, 104-2(c), HRS; §12-22-4.1, HAR]

Weekly Pay

- Laborers and mechanics employed on the job site shall be paid their full wages at least once a week, without deduction or rebate, except for legal deductions, within five working days after the cutoff date. [§104-2(d), HRS]

Posting of Wage Rate Schedules

- Wage rate schedules with the notes for prevailing wages and special overtime rates, shall be posted by the contractor in a prominent and easily accessible place at the job site. A copy of the entire wage rate schedule shall be given to each laborer and mechanic employed under the contract, except when the employee is covered by a collective bargaining agreement. [§104-2(d), HRS]

Withholding of Accrued Payments

- If necessary, the contracting agency may withhold accrued payments to the contractor to pay to laborers and mechanics employed by the contractor or subcontractor on the job site any difference between the wages required by the public works contract or specifications and the wages received. [§104-2(e), HRS]

Certified Weekly Payrolls and Payroll Records

- A certified copy of all payrolls shall be submitted weekly to the contracting agency. [§104-3(a), HRS; §12-22-10, HAR]

- The contractor is responsible for the submission of certified copies of the payrolls of all subcontractors. The certification shall affirm that the payrolls are correct and complete, that the wage rates listed are not less than the applicable rates contained in the applicable wage rate schedule, and that the classifications for each laborer or mechanic conform with the work the laborer or mechanic performed. [§104-3(a), HRS; §12-22-10, HAR]

- Payroll records shall be maintained by the contractor and subcontractors for three years after completion of construction. The records shall contain: [§104-3(b), HRS; §12-22-10, HAR]
  - the name and home address of each employee
  - the last four digits of social security number
  - a copy of the apprentice's registration with DLIR
  - the employee's correct classification
  - rate of pay (basic hourly rate + fringe benefits)
  - itemized list of fringe benefits paid
  - daily and weekly hours worked
  - weekly straight time and overtime earnings
  - amount and type of deductions
  - total net wages paid
  - date of payment

- Records shall be made available for examination by the contracting agency, the Department of Labor and Industrial Relations (DLIR), or any of its authorized representatives, who may also interview employees during working hours on the job. [§§104-3(c), 104-22(a), HRS; §12-22-10, HAR]

Termination of Work on Failure to Pay Wages

- If the contracting agency finds that any laborer or mechanic employed on the job site by the contractor or any subcontractor has not been paid prevailing wages or overtime, the contracting agency may, by written notice to the contractor, terminate the contractor's or subcontractor's right to proceed with the work or with the part of the work in which the required wages or overtime compensation have not been paid. The contracting agency may complete this work by contract or otherwise, and the contractor or contractor's sureties shall be liable to the contracting agency for any excess costs incurred. [§104-4, HRS]

Apprentices

- Apprentice wage rates apply to contractors who are a party to a bona fide apprenticeship program which has been registered with the DLIR. In order to be paid apprentice rates, apprentices must be parties to an agreement either registered with or recognized as a USDOL nationally approved apprenticeship program by the DLIR, Workforce Development Division, (808) 586-8877, and the apprentice must be individually registered by name with the DLIR. [§12-22-6(1) and (2), HAR]

- The number of apprentices on any public work in relation to the number of journeyworkers in the same craft classification as the apprentices employed by the same employer on the same public work may not exceed the ratio allowed under the apprenticeship standards registered with or recognized by the DLIR. A registered or recognized apprentice receiving the journeyworker rate will not be considered a journeyworker for the purpose of meeting the ratio requirement. [§12-22-6(3), HAR]

Enforcement

- To ensure compliance with the law, DLIR and the contracting agency will conduct investigations of contractors and subcontractors. If a contractor or subcontractor violates the law, the penalties are: [§104-24, HRS]

  - First Violation — Equal to 25% of back wages found due or $250 per offense up to $2,500, whichever is greater.
  - Second Violation — Equal to amount of back wages found due or $500 for each offense up to $5,000, whichever is greater.
  - Third Violation — Equal to two times the amount of back wages found due or $1,000 for each offense up to $10,000, whichever is greater; and
    Suspension from doing any new work on any public work of a governmental contracting agency for three years.

  ▪ A violation would be deemed a second violation if it occurs within two years of the **first notification of violation**, and a third violation if it occurs within three years of **the second notification of violation**. [§104-24, HRS; §12-22-25(b), HAR]

  ▪ **Suspension**: For a first or second violation, the department shall immediately suspend a contractor who fails to pay wages or penalties until all wages and penalties are paid in full. For a third violation, the department shall penalize and suspend the contractor as described above, **except that if the contractor continues to violate the law, then the department shall immediately suspend the contractor for a mandatory three years. The contractor shall remain suspended until all wages and penalties are paid in full.** [§§104-24, 104-25, HRS]

- **Suspension**: Any contractor who fails to make payroll records accessible or provide requested information within 10 days, or fails to keep or falsifies any required record, shall be assessed a penalty including suspension as provided in Section 104-22(b) and 104-25(a)(3), HRS. [§104-3(c), HRS; §12-22-26, HAR]

- If any contractor interferes with or delays any investigation, the contracting agency shall withhold further payments until the delay has ceased. Interference or delay includes failure to provide requested records or information within ten days, failure to allow employees to be interviewed during working hours on the job, and falsification of payroll records. The department shall assess a penalty of $10,000 per project, and $1,000 per day thereafter, for interference or delay. [§104-22(b), HRS; §12-22-26, HAR]

- Failure by the contracting agency to include in the provisions of the contract or specifications the requirements of Chapter 104, HRS, relating to coverage and the payment of prevailing wages and overtime, is not a defense of the contractor or subcontractor for noncompliance with the requirements of this chapter. [§104-2(f), HRS]

For additional information, visit the department's website at *http://labor.hawaii.gov/wsd*
or contact any of the following DLIR offices:

Oahu (Wage Standards Division).....(808) 586-8777
Hawaii Island .....(808) 974-6464
Maui and Kauai.....(808) 243-5322

PROPOSAL TO THE STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HARBORS DIVISION

PROJECT:	SUBSTRUCTURE REPAIRS AT PIERS 16 AND 17, HONOLULU HARBOR, OAHU, HAWAII
PROJECT NO.:	S10852
COMPLETION TIME:	All work shall be completed within THREE HUNDRED (300) CALENDAR DAYS from the date indicated in the Notice to Proceed from the Department.
LIQUIDATED DAMAGES:	THREE HUNDRED DOLLARS AND NO/100 ($300.00) for each and every calendar day which the Contractor has delayed the completion of this project.
DESIGN PROJECT MANAGER:	MR. GREGG HIROKAWA DEPARTMENT OF TRANSPORTATION HARBORS DIVISION HALE AWA MOKU 79 S. NIMITZ HIGHWAY HONOLULU, HAWAII 96813 PHONE: (808) 587-1985 EMAIL: gregg.hirokawa@hawaii.gov
ELECTRONIC SUBMITTAL:	The bidder shall submit the proposal in HIePRO. The proposal shall be UPLOADED to HIePRO prior to the bid opening date and time. See SPECIAL PROVISIONS - Section 2.8 PREPARATION AND DELIVERY OF BID - for additional information.

Director of Transportation
869 Punchbowl Street
Honolulu, Hawaii 96813

Dear Sir:

The undersigned Bidder declares the following:

1. It has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with this proposal.

2. It has not been assisted or represented on this matter by any individual who has, in a State capacity, been involved in the subject matter of this contract within the past two years.

3. It has not and will not, either directly or indirectly offered or given a gratuity (i.e. an entertainment or gift) to any State or County employee to obtain a contract or favorable treatment under a contract.

The undersigned Bidder further agrees to the following:

1. If this proposal is accepted, it shall execute a contract with the Department to provide all necessary labor, machinery, tools, equipment, apparatus and any other means of construction, to do all the work and to furnish all the materials specified in the contract in the manner and within the time therein prescribed in the contract, and that it shall accept in full payment therefore the sum of the unit and/or lump sum prices as set forth in the attached proposal schedule for the actual quantities of work performed and materials furnished and furnish satisfactory security in accordance with Section 103D-324, Hawaii Revised Statutes, within 10 days after the award of the contract or within such time as the Director of Transportation may allow after the undersigned has received the contract documents for execution, and is fully aware that non-compliance with the aforementioned terms will result in the forfeiture of the full amount of the bid guarantee required under Section 103D-323, Hawaii Revised Statutes.

2. That the quantities given in the attached proposal schedule are approximate only and are intended principally to serve as a guide in determining and comparing the bids.

3. That the Department does not either expressly or by implication, agree that the actual amount of work will correspond therewith, but reserves the right to increase or decrease the amount of any class or portion of the work, or to omit portions of the work, as may be deemed necessary or advisable by the Director of Transportation, and that all increased or decreased quantities of work shall be performed at the unit prices set forth in the attached proposal schedule except as provided for in the specifications.

4. In case of a discrepancy between unit prices and the totals in said Proposal Schedule, the unit prices shall prevail.

5. Agrees to begin work within 10 working days after the date of notification to commence with the work, which date is in the notice to proceed, and shall finish the entire project within the time prescribed.

6. The Director of Transportation reserves the right to reject any or all bids and to waive any defects when in the Director's opinion such rejections or waiver will be for the best interest of the public.

The Bidder acknowledges receipt of and certifies that it has completely examined the following listed items: the Hawaii Department of Transportation, Air and Water Transportation Facilities Division General Provisions for Construction Projects dated 2016, the Notice to Bidders, the Special Provisions, if any, the Technical Provisions, the Proposal, the Contract and Bond Forms, and the Project Plans.

In accordance with Section 103D-323, Hawaii Revised Statutes, this proposal is accompanied with a bid security in the amount of 5% of the total amount bid, in the form checked below. (Check applicable bid security submitted with bid.)

_____ Surety Bid Bond (Use standard form),

_____ Cash,

_____ Cashier's Check,

_____ Certified Check, or

_____ _____.
(Fill in other acceptable security.)

The undersigned Bidder acknowledges receipt of any addendum issued by the Department by recording in the space below the date of receipt.

Addendum No. 1 _____ Addendum No. 3 _____

Addendum No. 2 _____ Addendum No. 4 _____

In accordance with Section 103D-302, Hawaii Revised Statutes, the undersigned as Bidder, has listed the name of each person or firm, who will be engaged by the Bidder on the project as a Subcontractor or Joint Contractor and the nature of work to be done by each. The Bidder must adequately and unambiguously disclose the unique nature and scope of the work to be performed by each Subcontractor or Joint Contractor. For each listed firm, the Bidder declares the respective firm is a Subcontractor or Joint Contractor and is subject to evaluation as a Subcontractor or Joint Contractor. It is understood that failure to comply with the aforementioned requirements may be cause for rejection of the bid submitted.

Name of Subcontractor	Nature and Scope of Work
1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	

Name of Joint Contractor	Nature and Scope of Work
1.	
2.	
3.	

("None" or if left blank indicates no Subcontractor or Joint Contractor; if more space is needed, attach additional sheets.)

The undersigned hereby certifies that the bid prices contained in the attached proposal schedule have been carefully checked and are submitted as correct and final.

This declaration is made with the understanding that the undersigned is subject to the penalty of perjury under the laws of the United States and is in violation of the Hawaii Penal Code, Section 710-1063, unsworn falsification to authorities, of the Hawaii Revised Statutes, for knowingly rendering a false declaration.

_____
Bidder (Company Name)

By_____
Authorized Signature

_____
Print Name and Title

_____

_____
Business Address

_____ _____
Business Telephone Email

_____
Date

_____
Contact Person (If different from above)

Phone:_____ Email:_____

NOTE:

If Bidder is a CORPORATION, the legal name of the corporation shall be set forth above, the corporate seal affixed, together with the signature(s) of the officer(s) authorized to sign contracts for the corporation. Please attach to this page current (not more than six months old) evidence of the authority of the officer(s) to sign for the corporation.

If Bidder is a PARTNERSHIP, the true name of the partnership shall be set forth above, with the signature(s) of the general partner(s). Please attach to this page current (not more than six months old) evidence of the authority of the partner authorized to sign for the partnership.

If Bidder is an INDIVIDUAL, the bidder's signature shall be placed above.

If signature is by an agent, other than an officer of a corporation or a partner of a partnership, a POWER OF ATTORNEY must be on file with the Department before opening bids or submitted with the bid. Otherwise, the Department may reject the bid as irregular and unauthorized.

PREFERENCES

Bidders agree that preferences shall be taken into consideration to determine the low bidder in accordance with said Sections and the rules promulgated, however, the award of contract will be in the amount of the bid offered exclusive of any preferences.

A. HAWAII PRODUCTS PREFERENCE

In accordance with ACT 174, SLH 2022, effective June 27, 2022, Hawaii Products Preference shall not apply to solicitations for public works construction. Therefore, the Hawaii Products Preference shall not apply to this project.

B. APPRENTICESHIP PROGRAMS PREFERENCE

In accordance with ACT 17, SLH 2009 – Apprenticeship Program, a 5% bid adjustment for bidders that are parties to apprenticeship agreements pursuant to Hawaii Revised Statutes (HRS) Section 103-55.6 may be applied to the bidder's price for evaluation purposes.

Any bidder seeking this preference must be a party to an apprenticeship agreement registered with the Department of Labor and Industrial Relations at the time the offer is made for each apprenticeable trade the bidder will employ to construct the public works projects for which the offer is being made.

The bidder is responsible for complying with all submission requirements for registration of its apprenticeship program before requesting the preference.

( ) Yes, I wish to be considered for the Apprenticeship Programs Preference. I have included Certification Form(s) 1 with my bid.

C. RECYCLED PRODUCT PREFERENCE

Recycled product preference shall not apply to this proposal.

SUBSTRUCTURE REPAIRS AT PIERS 16 AND 17

HONOLULU HARBOR, OAHU, HAWAII

JOB S10852

PROPOSAL SCHEDULE

Item No.	Item Description	Approximate Quantity	Unit	Unit Price	Amount Bid
1	Mobilization and Demobilization	L.S.	L.S.	$ _____	$ _____
2	Precast Plank Soffit Spall Repair (Type P)	350	S.F.	$ _____	$ _____
3	Slab Soffit Spall Repair (Type S or SR)	350	S.F.	$ _____	$ _____
4	Beam Spall Repair (Type B or BR)	1,750	S.F.	$ _____	$ _____
5	Precast Tee Beam Spall Repair (Type T)	50	L.F.	$ _____	$ _____
6	Reinforcing Steel Replacement	1,500	LBS	$ _____	$ _____
7	Zinc Anodes	250	EA.	$ _____	$ _____
8	Epoxy Coating System (Approx. 40,000 SF)	L.S.	L.S.	$ _____	$ _____
9	Existing Coal Tar Epoxy Abatement (Approx. 20,000 SF)	L.S.	L.S.	$ _____	$ _____
TOTAL AMOUNT FOR COMPARISON OF BIDS					$ _____

NOTES:

The bidder shall submit the proposal in HIePRO. The proposal shall be UPLOADED to HIePRO prior to the bid opening date and time. Proposals received after said due date and time shall not be considered. Original (wet ink) proposal documents are not required to be submitted. The award will be made based on proposals uploaded in HIePRO. Any and all other additional documents explicitly designated and labeled as CONFIDENTIAL OR PROPRIETARY shall be UPLOADED SEPARATELY to HIePRO.

Bid to include all Federal, County and other appliable taxes and fees.

The TOTAL AMOUNT FOR COMPARISON OF BIDS will be used to determine the lowest responsible bidder.

Bidders must complete all unit prices and amounts. Failure to do so may be grounds for rejection of bid.

If a discrepancy occurs between unit bid price and the bid price, the unit bid price shall govern.

If the lowest TOTAL AMOUNT FOR COMPARISON OF BIDS exceeds the funds available for this project, the State reserves the right to negotiate with the lowest responsible bidder as permitted under Section 103D-302, Hawaii Revised Statutes, as amended, to reduce the scope of work and award a contract.

Submission of Proposal is a warranty that the bidder has made an examination of the project site and is fully aware of all conditions to be encountered in performing the work and the requirements of the plans and specifications.

No additional compensation will be paid by the State for losses, including overhead and profit, resulting from reduced scope of work.

Contract time shall remain the same whether or not the overall scope of work is decreased.

SURETY BID BOND

Bond No. _____

KNOW TO ALL BY THESE PRESENTS:

That we, _____
(full name or legal title of offeror)

as Offeror, hereinafter called the Principal, and

_____
(name of bonding company)

as Surety, hereinafter called Surety, a corporation authorized to transact business as a Surety in the State of Hawaii, are held and firmly bound unto

_____
(State/county entity)

as Owner, hereinafter called Owner, in the penal sum of

_____
(required amount of bid security)

Dollars ($_____), lawful money of the United States of America, for the payment of which sum well and truly to be made, the said Principal and the said Surety bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS:

The Principal has submitted an offer for

_____
(project by number and brief description)

NOW, THEREFORE:

The condition of this obligation is such that if the Owner shall reject said offer, or in the alternate, accept the offer of the Principal and the Principal shall enter into a contract with the Owner in accordance with the terms of such offer, and give such bond or bonds as may be specified in the solicitation or Contract Documents with good and sufficient surety for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof as specified in the solicitation then this obligation shall be null and void, otherwise to remain in full force and effect.

Signed this _____ day of _____, _____

_____
Name of Principal (Offeror) (Seal)

_____
Signature

_____
Title

_____
Name of Surety (Seal)

_____
Signature

_____
Title

STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

HONOLULU, HAWAII

SAMPLE FORMS

PERFORMANCE BOND (SURETY)
(6/21/07)

KNOW TO ALL BY THESE PRESENTS:

That _____,
(Full Legal Name and Street Address of Contractor)

as Contractor, hereinafter called Principal, and _____

_____
(Name and Street Address of Bonding Company)

as Surety, hereinafter called Surety, a corporation(s) authorized to transact business as a surety in the State of Hawaii, are held and firmly bound unto the _____,
(State/County Entity)

its successors and assigns, hereinafter called Obligee, in the amount of _____

_____
DOLLARS ($_____), to which payment Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the above-bound Principal has signed a Contract with Obligee on _____, for the following project:_____
_____
_____
_____
_____
_____
hereinafter called Contract, which Contract is incorporated herein by reference and made a part hereof.

NOW THEREFORE, the condition of this obligation is such that:

If the Principal shall promptly and faithfully perform, and fully complete the Contract in strict accordance with the terms of the Contract as said Contract may be modified or amended from time to time; then this obligation shall be void; otherwise to remain in full force and effect.

Surety to this Bond hereby stipulates and agrees that no changes, extensions of time, alterations, or additions to the terms of the Contract, including the work to be performed thereunder, and the specifications or drawings accompanying same, shall in any way affect its obligation on this bond, and it does hereby waive notice of any such changes, extensions of time, alterations, or additions, and agrees that they shall become part of the Contract.

In the event of Default by the Principal, of the obligations under the Contract, then after written Notice of Default from the Obligee to the Surety and the Principal and subject to the limitation of the penal sum of this bond, Surety shall remedy the Default, or take over the work to be performed under the Contract and complete such work, or pay moneys to the Obligee in satisfaction of the surety's performance obligation on this bond.

Signed this _____ day of _____, _____.

(Seal) _____
Name of Principal (Contractor)

* _____
Signature

_____
Title

(Seal) _____
Name of Surety

* _____
Signature

_____
Title

*ALL SIGNATURES MUST BE ACKNOWLEDGED
BY A NOTARY PUBLIC

PERFORMANCE BOND

KNOW TO ALL BY THESE PRESENTS:

That we, _____
(full legal name and street address of Contractor)

as Contractor, hereinafter called Contractor, is held and firmly bound unto the

_____
(State/County entity)

its successors and assigns, as Obligee, hereinafter called Obligee, in the amount

_____DOLLARS $_____),
(Dollar amount of Contract)

lawful money of the United States of America, for the payment of which to the said Obligee, well and truly to be made, Contractor binds itself, its heir, executors, administrators, successors and assigns, firmly by these presents. Said amount is evidenced by:

☐ **Legal Tender;**

☐ **Share Certificate** unconditionally assigned to or made payable at sight to _____
Description:_____;

☐ **Certificate of Deposit**, No. _____, dated _____ issued by _____ drawn on _____ a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to _____;

☐ **Cashier's Check** No. _____, dated _____ drawn on _____ a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to _____;

☐ **Teller's Check** No. _____, dated _____ drawn on _____ a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to _____;

☐ **Treasurer's Check** No. _____, dated _____ drawn on _____ a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to _____;

☐ **Official Check** No. _____, dated _____ drawn on _____ a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to _____;

☐ **Certified Check** No. _____, dated _____ accepted by a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to _____;

WHEREAS:

The Contractor has by written agreement dated _____ entered into a contract with Obligee for the following Project:_____

_____

hereinafter called Contract, which Contract is incorporated herein by reference and made a part hereof.

NOW THEREFORE,

The Condition of this obligation is such that, if Contractor shall promptly and faithfully perform the Contract in accordance with, in all respects, the stipulations, agreements, covenants and conditions of the Contract as it now exists or may be modified according to its terms, and shall deliver the Project to the Obligee, or to its successors or assigns, fully completed as in the Contract specified and free from all liens and claims and without further cost, expense or charge to the Obligee, its officers, agents, successors or assigns, free and harmless from all suits or actions of every nature and kind which may be brought for or on account of any injury or damage, direct or indirect, arising or growing out of the doing of said work or the repair or maintenance thereof or the manner of doing the same or the neglect of the Contractor or its agents or servants or the improper performance of the Contract by the Contractor or its agents or servants or from any other cause, then this obligation shall be void; otherwise it shall be and remain in full force and effect.

AND IT IS HEREBY STIPULATED AND AGREED that suit on this bond may be brought before a court of competent jurisdiction without a jury, and that the sum or sums specified in the said Contract as liquidated damages, if any, shall be forfeited to the Obligee, its successors or assigns, in the event of a breach of any, or all, or any part of, covenants, agreements, conditions, or stipulations contained in the Contract or in this bond in accordance with the terms thereof.

The amount of this bond may be reduced by and to the extent of any payment or payments made in good faith hereunder.

Signed and sealed this _____ day of _____, _____.

(Seal)_____
Name of Contractor

_____
Signature*

_____
Title

*ALL SIGNATURES MUST BE ACKNOWLEDGED
BY A NOTARY PUBLIC

LABOR AND MATERIAL PAYMENT BOND (SURETY)
(6/21/07)

KNOW TO ALL BY THESE PRESENTS:

That _____,
(Full Legal Name and Street Address of Contractor)

as Contractor, hereinafter called Principal, and _____

_____,
(Name and Street Address of Bonding Company)
as Surety, hereinafter called Surety, a corporation(s) authorized to transact business as a surety in the State of Hawaii, are held and firmly bound unto the _____,
(State/County Entity)

its successors and assigns, hereinafter called Obligee, in the amount of _____

_____
_____ Dollars ($_____), to which payment Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the above-bound Principal has signed Contract with the Obligee on _____ for the following project:_____
_____
_____
_____
_____
hereinafter called Contract, which Contract is incorporated herein by reference and made a part hereof.

NOW THEREFORE, the condition of this obligation is such that if the Principal shall promptly make payment to any Claimant, as hereinafter defined, for all labor and materials supplied to the Principal for use in the performance of the Contract, then this obligation shall be void; otherwise to remain in full force and effect.

1. Surety to this Bond hereby stipulates and agrees that no changes, extensions of time, alterations, or additions to the terms of the Contract, including the work to be performed thereunder, and the specifications or drawings accompanying same, shall in any way affect its obligation on this bond, and it does hereby waive notice of any such changes, extensions of time, alterations, or additions, and agrees that they shall become part of the Contract.

2. A "Claimant" shall be defined herein as any person who has furnished labor or materials to the Principal for the work provided in the Contract.

Every Claimant who has not been paid amounts due for labor and materials furnished for work provided in the Contract may institute an action against the Principal and its Surety on this bond at the time and in the manner prescribed in Section 103D-324, Hawaii Revised Statutes, and have the rights and claims adjudicated in the action, and judgment rendered thereon; subject to the Obligee's priority on this bond. If the full amount of the liability of the Surety on this bond is insufficient to pay the full amount of the claims, then after paying the full amount due the Obligee, the remainder shall be distributed pro rata among the claimants.

Signed this _____ day of _____, _____.

(Seal) _____
Name of Principal (Contractor)

* _____
Signature

_____
Title

(Seal) _____
Name of Surety

* _____
Signature

_____
Title

*ALL SIGNATURES MUST BE ACKNOWLEDGED
BY A NOTARY PUBLIC

LABOR AND MATERIAL PAYMENT BOND

KNOW TO ALL BY THESE PRESENTS:

That we, _____
(full legal name and street address of Contractor)

as Contractor, hereinafter called Contractor, is held and firmly bound unto _____
(State/County entity)

its successors and assigns, as Obligee, hereinafter called Obligee, in the amount

_____DOLLARS ($_____)
(Dollar amount of Contract)

lawful money of the United States of America, for the payment of which to the said Obligee, well and truly to be made, Contractor binds itself, its heir, executors, administrators, successors and assigns, firmly by these presents. Said amount is evidenced by:

☐ **Legal Tender;**

☐ **Share Certificate** unconditionally assigned to or made payable at sight to_____
Description:_____

☐ **Certificate of Deposit**, No. _____, dated _____ issued by _____ drawn on _____ a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to _____;

☐ **Cashier's Check** No. _____, dated _____ drawn on _____ a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to _____;

☐ **Teller's Check** No. _____, dated _____ drawn on _____ a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to _____;

☐ **Treasurer's Check** No. _____, dated _____ drawn on _____ a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to _____;

☐ **Official Check** No. _____, dated _____ drawn on _____ a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to _____;

☐ **Certified Check** No. _____, dated _____ accepted by a bank, savings institution or credit union insured by the Federal Deposit Insurance Corporation or the National Credit Union Administration, payable at sight or unconditionally assigned to _____;

WHEREAS:

The Contractor has by written agreement dated _____ entered into a contract with Obligee for the following Project:_____

_____

hereinafter called Contract, which Contract is incorporated herein by reference and made a part hereof.

NOW THEREFORE,

The condition of this obligation is such that, if Contractor shall promptly and faithfully perform the Contract in accordance with, in all respects, the stipulations, agreements, covenants and conditions of the Contract as it now exists or may be modified according to its terms, free from all liens and claims and without further cost, expense or charge to the Obligee, its officers, agents, successors or assigns, free and harmless from all suits or actions of every nature and kind which may be brought for or on account of any injury or damage, direct or indirect, arising or growing out of the doing of said work or the repair or maintenance thereof or the manner of doing the same or the neglect of the Contractor or its agents or servants or the improper performance of the Contract by the Contractor or its agents or servants or from any other cause, then this obligation shall be void; otherwise it shall be and remain in full force and effect.

AND IT IS HEREBY STIPULATED AND AGREED that suit on this bond may be brought before a court of competent jurisdiction without a jury, and that the sum or sums specified in the said Contract as liquidated damages, if any, shall be forfeited to the Obligee, its successors or assigns, in the event of a breach of any, or all, or any part of, covenants, agreements, conditions, or stipulations contained in the Contract or in this bond in accordance with the terms thereof.

AND IT IS HEREBY STIPULATED AND AGREED that this bond shall inure to the benefit of any and all persons entitled to file claims for labor performed or materials furnished in said work so as to give any and all such persons a right of action as contemplated by Sections 103D-324(d) and 103D-324(e), Hawaii Revised Statutes.

The amount of this bond may be reduced by and to the extent of any payment or payments made in good faith hereunder, inclusive of the payments of mechanics' liens which may be filed of record against the Project, whether or not claim for the amount of such lien be presented under and against this bond..

Signed this _____ day of _____, _____.

(Seal)_____
Name of Contractor

_____
Signature*

_____
Title

ALL SIGNATURES MUST BE ACKNOWLEDGED BY A NOTARY PUBLIC

CHAPTER 104, HRS COMPLIANCE CERTIFICATE

The undersigned bidder does hereby certify to the following:

1. Individuals engaged in the performance of the contract on the job site shall be paid:

A. Not less than the wages that the director of labor and industrial relations shall have determined to be prevailing for corresponding classes of laborers and mechanics employed on public works projects; and

B. Overtime compensation at one and one-half times the basic hourly rate plus fringe benefits for hours worked on Saturday, Sunday, or a legal holiday of the State or in excess of eight hours on any other day.

2. All applicable laws of the federal and state governments relating to workers' compensation, unemployment compensation, payment of wages, and safety shall be fully complied with.

DATED at Honolulu, Hawaii, this _____ day of _____, 20___.

«CONTRACTOR»
Name of Corporation, Partnership, or Individual

Signature and Title of Signer

Notary Seal
NOTARY ACKNOWLEDGEMENT

Subscribed and sworn before me this
_____day of_____
Notary signature_____
Notary public, State of _____
My Commission Expires:_____

Notary Seal
NOTARY CERTIFICATION

Doc. Date: _____ #Pages: ____
Notary Name: _____ _____Circuit
Doc. Description: _____

_____
Notary signature_____
Date _____

PROVISIONS TO BE INCLUDED IN CONSTRUCTION PROCUREMENT SOLICITATIONS

1. Definitions for terms used in HRS Chapter 103B as amended by Act 192, SLH 2011:

   a. "Contract" means contracts for construction under 103D, HRS.

   b. "Contractor" has the same meaning as in Section 103D-104, HRS, provided that "contractor" includes a subcontractor where applicable.

   c. "Construction" has the same meaning as in Section 103D-104, HRS.

   d. "General Contractor" means any person having a construction contract with a governmental body.

   e. "Procurement Officer" has the same meaning as in Section 103D-104, HRS.

   f. "Resident" means a person who is physically present in the State of Hawai'i at the time the person claims to have established the person's domicile in the State of Hawai'i and shows the person's intent is to make Hawai'i the person's primary residence.

   g. "Shortage trade" means a construction trade in which there is a shortage of Hawai'i residents qualified to work in the trade as determined by the Department of Labor and Industrial Relations.

2. HRS Chapter 103B as amended by Act 192, SLH 2011–Employment of State Residents Requirements:

   a. A Contractor awarded a contract shall ensure that Hawai'i residents comprise not less than 80% of the workforce employed to perform the contract work on the project. The 80% requirement shall be determined by dividing the total number of hours worked on the contract by Hawai'i residents, by the total number of hours worked on the contract by all employees of the Contractor in the performance of the contract. The hours worked by any Subcontractor of the Contractor shall count towards the calculation for this section. The hours worked by employees within shortage trades, as determined by the Department of Labor and Industrial Relations (DLIR), shall not be included in the calculation for this section.

EXHIBIT 1

b. Prior to award of a contract, an Offeror/Bidder may withdraw an offer/bid without penalty if the Offeror/Bidder finds that it is unable to comply with HRS Chapter 103B as amended by Act 192, SLH 2011.

c. Prior to starting any construction work, the Contractor shall submit the subcontract dollar amount for each of its Subcontractors.

d. The requirements of this section shall apply to any subcontract of $50,000 or more in connection with the Contractor; that is, such Subcontractors must also ensure that Hawai'i residents comprise not less than 80% of the Subcontractor's workforce used to perform the subcontract.

e. The Contractor and any Subcontractor whose subcontract is $50,000 or more shall comply with the requirements of HRS Chapter 103B as amended by Act 192, SLH 2011.

1) Certification of compliance shall be made in writing under oath by an officer of the General Contractor and applicable Subcontractors and submitted with the final payment request.

2) The certification of compliance shall be made under oath by an officer of the company by completing a "Certification of Compliance for Employment of State Residents" form and executing the Certificate before a licensed notary public.

3) In addition to the certification of compliance as indicated above, the Contractor and Subcontractors shall maintain records such as certified payrolls for laborers and mechanics who performed work at the site and time sheets for all other employees who performed work on the project. These records shall include the names, addresses and number of hours worked on the project by all employees of the Contractor and Subcontractor who performed work on the project to validate compliance with HRS Chapter 103B as amended by Act 192, SLH 2011. The Contractor and Subcontractors shall retain these records and provide access to the State for a minimum period of four (4) years after the final payment, except that if any litigation, claim, negotiation, investigation, audit or other action involving the records has been started before the expiration of the four-year period, the Contractor and Subcontractors shall retain the records until completion of the action and resolution of all issues that arise from it, or until the end of the four-year period, whichever occurs later. Furthermore, it shall be the Contractor's responsibility to enforce compliance with this provision by any Subcontractor.

f. A General Contractor or applicable Subcontractor who fails to comply with this section shall be subject to any of the following sanctions:

1) With respect to the General Contractor, withholding of payment on the contract until the Contractor or its Subcontractor complies with HRS Chapter 103B as amended by Act 192, SLH 2011.

2) Proceedings for debarment or suspension of the Contractor or Subcontractor under Hawai'i Revised Statues §103D-702.

3. Conflict with Federal Law: This section shall not apply if the application of this section is in conflict with any federal law, or if the application of this section will disqualify the State from receiving Federal funds or aid.

CERTIFICATION OF COMPLIANCE
FOR
EMPLOYMENT OF STATE RESIDENTS
HRS CHAPTER 103B, AS AMENDED BY ACT 192, SLH 2011

Project Title: _____

Agency Project No: _____

Contract No.: _____

As required by Hawai'i Revised Statutes Chapter103B, as amended by Act 192, Session Laws of Hawaii 2011–Employment of State Residents on Construction Procurement Contracts, I hereby certify under oath, that I am an officer of _____ and
(Name of Contractor or Subcontractor Company)
for the Project Contract indicated above, _____ was in
(Name of Contractor or Subcontractor Company)
compliance with HRS Chapter 103B, as amended by Act 192, SLH 2011, by employing a workforce of which not less than eighty percent are Hawai'i residents, as calculated according to the formula in the solicitation, to perform this Contract.

☐ I am an officer of the **Contractor** for this contract.

☐ I am an officer of a **Subcontractor** for this contract.

CORPORATE SEAL

_____
(Name of Company)

_____
(Signature)

_____
(Print Name)

_____
(Print Title)

Subscribed and sworn to me before this
_____ day of _____, 2011.

_____
Notary Public, 1st Circuit, State of Hawai'i
My commission expires: _____

Doc. Date: _____ # of Pages_____ 1st Circuit
Notary Name: _____
Doc. Description: _____
_____
_____

_____
Notary Signature Date
NOTARY CERTIFICATION

EXHIBIT 2