

ARTICLE X – PROJECT DESCRIPTION

10.1 GENERAL – The work to be done on this project includes furnishing all labor, materials and equipment necessary to repair damaged asphalt pavements at Nawiliwili Harbor, Kauai on an “as-needed” basis. The work shall be accomplished in multiple repair work phases throughout the duration of the contract.

Bidders are advised to examine the existing conditions at the project site to familiarize themselves with the nature and extent of work involved. Appointments may be made with the State Harbors Division Maintenance Engineer for clarification of the work involved and the character and quality of materials specified.

10.2 SCOPE OF WORK – The requirement for various pavement repairs to be furnished by the Contractor will be on an “as-needed” basis as called for in these specifications at the applicable unit price bid during the contract period and in such numbers as may be required by the State.

The State shall notify the Contractor as to the date work must commence on each repair work phase. The State shall notify the Contractor only after a sufficient amount of work has been generated. The Contractor shall be given fourteen (14) calendar days to commence work after the State’s notification.

All work for each repair work phase shall be completed within the working days designated by the approved work schedule.

The major items of work to be done include, but are not limited to the following:

1. Installation of appropriate BMPs.
2. Removing and disposing of existing asphalt pavement and base course materials
3. Applying bituminous tack coat
4. Placing hot mix asphalt base (HMAB) course
5. Placing hot mix asphalt (HMA) pavement
6. Placing pavement markings

Any items not specified herein but necessary for the completion of the system shall be considered incidental, and shall be furnished and installed complete in place.

10.3 WORK ORDERS – The locations and sizes of the various repair types are not shown on the contract plans. Quantities listed in the Proposal Schedule are approximate and are included for bidding purpose.

The Construction Engineer will notify the Contractor when work is to be done during the contract period. The Construction Engineer, Contractor, and Tenant when appropriate will meet at various Nawiliwili Harbor facilities to locate and mark the repair areas, determine the type of repair work to be done, and period of completion of each work phase.

The State will issue Work Orders to the Contractor for each work phase that will include the location, type of repair, quantity, and total payment amount. Payment for work performed by the Contractor will be made by purchase order. The State will provide a purchase order for each work order issued. The purchase order will be provided to the Contractor after work order is issued and prior to the start of construction of each work phase.

Actual payment areas will be obtained from field measurements of work performed in each work phase.

10.4 WORK SCHEDULE AND STORAGE AREA – The work schedule and assignment of storage area(s) shall be discussed and coordinated with the Harbors Division Kauai District Manager and the Construction Engineer and shall be subject to their written approval. Work shall be coordinated so as to minimize interference with pier operations. The Contractor shall turn in a work schedule two (2) weeks prior to actual construction for approval by the Harbors Division Kauai District Manager and the Construction Engineer. The Contractor will be responsible for maintaining the work and storage areas in a neat and orderly condition.

The exact scheduling and 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. As this project is anticipated to have multiple work phases, there will be a separate pre-construction meeting for each work phase. The Contractor shall attend all pre-construction meetings 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. The Contractor shall also take all 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 pier and facilities caused by its operations. 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.

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 the project number, 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>.

10.6 SUBMITTALS – The Contractor shall submit for review and acceptance the following items (Note: PDF digital files may be submitted to the Construction Engineer):

A. Materials:

1. HMAB course mix design
2. HMA pavement mix design
3. Bituminous tack coat material data sheets
4. Retroreflective Traffic Paint

B. Worker Credentials:

Valid Transportation Worker Identification Credential (TWIC) card for all Contractor and Sub-contractor workers

C. BMP Plan

10.7 AS BUILT DRAWINGS – The Contractor shall keep one set of drawings at the job site and make all field changes thereon. After completion of the project, a PDF/A format digital file marked up with all the field changes showing the locations, dimensions, areas, and the type of repair work completed shall be submitted to the Construction Engineer.

10.8 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 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 Construction Engineer and 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 Construction Engineer and the 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 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's Construction Engineer or District Manager. The Harbors Division will consider impacts to the work and schedule as a result of prolonged work stoppages.
- K. 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. 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.

All Contractor's personnel requiring access to secure areas of maritime facilities will be required to obtain a Transportation Worker Identification Credential (TWIC). 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 http://www.tsw.dhs.gov/what_we_do/layers/twic/index/shtm.

10.9 BEST MANAGEMENT PRACTICES – 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 the 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 Construction Engineer before work begins. The plan shall satisfy the requirements of ARTICLE XIV -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 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.

10.10 STANDARD SPECIFICATIONS – The term “Standard Specifications” as used in these Technical Provisions of these Specifications, shall mean the “Hawaii Standard Specifications for Road and Bridge Construction, 2005, Department of Transportation Highway Division, Honolulu, Hawaii.”

The Hawaii Standard Specifications for Road and Bridge Construction, 2005, hereinafter referred to as “Standard Specifications” is amended as follows:

A. SECTION 401 – HOT MIX ASPHALT (HMA) PAVEMENT

1. Subsection 401.02 Materials is amended as follows:

- a. Make this item as part of the Standard Specifications:

“Asphalt Binder (PG 64E-22) 702.01B
Use for all surface mixes, except for on Lanai and Molokai, and unless
otherwise specified in the project documents.”

- b. Under (A) General, delete:

In surface and binder courses, aggregate for HMA may include RAP
quantities up to 15 percent of total mix weight.

and replace with:

“In surface and binder courses, aggregate for HMA may include RAP
quantities up to 20 percent of total mix weight.”

2. Subsection 401.03 Construction is amended as follows:

- a. Under (A) Weather Limitations, delete:

(1) On wet surfaces as determined by the Engineer

and replace with:

“(1) On wet surfaces e.g., surface with ponding or running water, surface
that has aggregate that appears beyond surface saturated dry, as
determined by the Engineer.”

- b. Under (F) Compaction, delete:

(1) HMA Pavement Courses One and a Half Inches Thick or Greater.
Where HMA pavement compacted thickness indicated in the Contract
Documents is 1-1/2 inches or greater, compact to not less than 92 percent
nor greater than 97.0 of the maximum specific gravity determined in
accordance with AASHTO T 209, modified by deleting of Supplemental
Procedure for Mixtures Containing Porous Aggregate.

and replace with:

“(1) HMA Pavement Courses One and a Half Inches Thick or Greater.
Where HMA pavement compacted thickness indicated in the Contract
Documents is 1-1/2 inches or greater, compact to not less than 93.0
percent nor greater than 97.0 of the maximum specific gravity determined
in accordance with AASHTO T 209, modified by deleting of
Supplemental Procedure for Mixtures Containing Porous Aggregate.”

- c. Under (2) HMA Pavement Courses Less Than One and a Half Inches Thick, delete:

Initiate rolling using non-vibratory, steel-tired, tandem roller. Roll entire surface with minimum of two roller passes. A roller pass is defined as one trip of the roller in one direction over any one spot.

and replace with:

“Use only non-vibratory, steel-tired, tandem roller. Roller entire surface with minimum of two roller passes. A roller pass is defined as one trip pf the roller in one direction over any one spot.”

B. SECTION 407 – TACK COAT

Subsection 407.03 Construction is amended as follows:

- a. Under (D) Application of Tack Coat, delete:

For multiple lift construction, tack coat application may be waved when upper lift is placed within 12 hours of placing lower lift.

Before placing HMA course, apply tack coat to contact surfaces of curbs, gutters, manholes, other structures, vertical faces of existing pavements, and exposed transverse and longitudinal edges of each course.

and replace with:

“For multiple lift construction, tack coat application will not be waived. Remove all deleterious material to bonding before applying the tack coat to the entire surface to receive the next lift.

Before placing HMA course, apply tack coat to contact surfaces of curbs, gutters, manholes, other structures, vertical faces of existing pavements, and exposed transverse and longitudinal edges of each course. Apply tack coat on all surfaces that will have an asphalt pavement placed on it in a uniform, full coverage manner, e.g., no visible streaks, holidays in the application, no differences in the application rate, i.e., the thickness of the tack coat. The exception to this requirement shall be surfaces that will have pavement joint adhesive applied to it 19 which shall not require any tack coat.”

C. SECTION 702 – BITUMINOUS MATERIALS

Subsection 702.01 Asphalt Cement is amended as follows:

Delete 702.01 Asphalt Cement. Performance-graded asphalt binder shall conform to ASSHTO M 320

and replace with:

“702.01 Asphalt Cement.

702.01A PG 64-16. Performance-graded asphalt binder shall conform to AASHTO M 320.”

702.01B PG 64E-22. Performance Graded (PG) Binder. Performance graded binder shall conform to Performance Graded Asphalt Binder Specifications, AASHTO M 332 and meet the following additional requirement:

AASHTO T 315 Determining the Rheological Properties of Asphalt Binder Using a Dynamic Shear Rheometer (DSR). Phase angle on original binder shall be less than 77 degrees.

702.01C Submittals. Submit, before usage, a Certificate of Compliance, accompanied by substantiating test data, showing conformance with Performance Graded Asphalt Binder Specification. The Engineer will not accept the PG binder without adequate documentation.”

10.11 COMPLETION TIME AND OPTION TO EXTEND – The completion time of this contract shall be for twelve (12) months commencing from the date indicated in the "Notice to Proceed" from the Construction Engineer. There is an option to extend for two (2) additional twelve (12) months, without rebidding, upon mutual agreement in writing prior to the contract expiration date provided the initial bid price remains the same. The maximum contract period is thirty-six (36) months.

10.12 PAYMENT – Payment shall be made through purchase orders for each work order placed with the Contractor during the contract period for which payment will be based on the quantities and unit prices in the Proposal Schedule. The Contractor shall furnish all labor, materials, equipment and other expenses required to complete each item in accordance with the plans and specifications..

Item 1 – Type “A” Repairs. Payment shall be made at the unit price bid per square yard in the Proposal Schedule for Type "A" Repairs. Such payment shall include removing 10-inch deep existing asphalt pavement and base course material by cold planing, disposing of existing asphalt pavement and base course material, compacting the subbase material, applying bituminous tack coat, placing 5-inch thick HMAB course, applying bituminous tack coat, and placing 5-inch thick State Mix No. III or Superpave 19mm HMA pavement, compaction testing, and all other incidental work required to complete this item.

Item 2 – Type “B” Repairs. Payment shall be made at the unit price bid per square yard in the Proposal Schedule for Type "B" Repairs. Such payment shall include removing 3-

inch deep existing asphalt pavement by cold planing, disposing of existing asphalt pavement, cleaning the existing asphalt pavement surfaces, applying bituminous tack coat, and placing 3-inch thick State Mix No. III or Superpave 19mm HMA pavement, compaction testing, and all other incidental work required to complete this item.

Item 3 – Type “C” Repairs. Payment shall be made at the unit price bid per square yard in the Proposal Schedule for Type "C" Repairs. Such payment shall include removing 9-inch deep existing asphalt pavement and base course material by cold planing, disposing of existing asphalt pavement and base course material, compacting the subbase material, applying bituminous tack coat, placing 6-inch thick HMAB course, applying bituminous tack coat, and placing 3-inch thick State Mix No. IV HMA pavement, compaction testing, and all other incidental work required to complete this item.

Item 4 – Type “D” Repairs. Payment shall be made at the unit price bid per square yard in the Proposal Schedule for Type “D” Repairs. Such payment shall include removing and relocating the existing removable bullrails to a temporary location, removing 1-1/2-inch deep existing asphalt pavement by cold planing, disposing of existing asphalt pavement materials, cleaning the existing asphalt pavement surfaces, applying bituminous tack coat, placing new 1-1/2-inch thick State Mix V HMA pavement, compaction testing, returning the removable bullrails to their original locations, and all other incidental work required to complete this item.

Item 5 – Pavement Markings. Payment shall be made at the unit price bid per lineal foot in the Proposal Schedule for Pavement Markings. Such payment shall include laying out control points, cleaning pavement surfaces and placing new pavement markings, and all other incidental work required to complete this item.