STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
HONOLULU, HAWAII

SPECIAL PROVISIONS
PROPOSAL
CONTRACT AND BOND

FOR

ASPHALT PAVEMENT PRESERVATION, RESURFACING,

RECONSTRUCTION, AND PAVEMENT STRIPING

AT VARIOUS LOCATIONS

FEDERAL-AID PROJECT NO. STP-0300(236)

ISLAND OF OAHU

FY 2027

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NOTICE TO BIDDERS
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The receiving of bids for **ASPHALT PAVEMENT PRESERVATION, RESURFACING, RECONSTRUCTION, AND PAVEMENT STRIPING AT VARIOUS LOCATIONS, ISLAND OF OAHU, FEDERAL-AID PROJECT NO. STP-0300(236)**, will begin as of the HIePRO Release Date. Bidders shall register and submit complete bids through HIePRO only. Refer to the following HIePRO link for important information on Vendor Registration: https://hiepro.ehawaii.gov/welcome.html.

The solicitation, specifications, proposal, and additional documents designated or incorporated by reference shall be available in HIePRO.

HIePRO OFFER DUE DATE AND TIME is November 20, 2026, at 2:00 p.m., Hawaii Standard Time (HST). **Bidders shall submit and upload the complete proposal to HIePRO prior to the offer due date and time. Proposals received after said due date and time shall not be considered. Any additional support documents explicitly designated as confidential and/or proprietary shall be uploaded as a separate file to HIePRO. Bidders shall not include confidential and/or proprietary documents as part of their proposal. The record of each bidder and their respective proposal shall be open to public inspection. FAILURE TO UPLOAD THE PROPOSAL TO HIePRO SHALL BE GROUNDS FOR REJECTION.**

The scope of work consists of pavement preservation, resurfacing, and/or reconstruction at various locations on the island of Oahu on an open end, “as-needed” basis.

To be eligible for award, bidders shall possess a valid State of Hawaii General Engineering "A" or Specialty Contractors "C-3" or "C-3a" license **prior to the award of contract.**

A virtual pre-bid conference is scheduled for October 23, 2026, at 8:00 a.m., HST. Interested bidders shall contact Ms. Amy Sunahara, Project Manager, directly at amy.my.sunahara@hawaii.gov, no later than two working days prior to the scheduled pre-bid conference to receive the meeting invitation. All prospective bidders and/or their respective representatives are encouraged to attend, however, attendance is not mandatory. All information presented at the pre-bid conference shall be provided for clarification and information only. Any amendments to the solicitation shall be made by formal addendum and posted in HIePRO.

All Request for Information (RFI) questions and Substitution Requests shall be submitted in HIePRO **no later than October 30, 2026, at 2:00 p.m., HST.** RFI questions received after the stated deadline shall not be addressed. Substitution Requests received after the stated deadline shall not be considered. Verbal RFI(s) shall not receive a response. All responses to RFI questions shall be provided for clarification and information only and issued by formal addendum. Any amendments to the solicitation shall be made by formal addendum and posted in HIePRO.

If there is a conflict between the solicitation and information stated in the pre-bid conference, the meeting minutes, and/or the responses to RFI questions, the solicitation shall govern and control, unless as amended by formal addendum.

Campaign contributions by State and County Contractors. Contractors are hereby notified of the applicability of HRS § 11-355 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 HRS § 103D-701 and Hawaii Administrative Rules § 3-126.

The Equal Employment Opportunity Regulations of the Secretary of Labor implementing

Executive Order (EO) 11246 has been revoked as per EO 14173. To the extent any contract document references this EO, or associated provisions, those references are inoperative.

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 Department of Transportation shall affirmatively ensure that the contract entered into pursuant to this advertisement shall 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).

Disadvantaged Business Enterprise (DBE). The U.S. Department of Transportation Regulations entitled "Participation by Disadvantaged Business Enterprise in Department of Transportation Financial Assistance Programs", Title 49, CFR, Part 26, is applicable to this project. Bidders are hereby notified that the Department of Transportation shall enforce compliance with the applicable requirements of the DBE program with respect to this project.

Bidders shall read the following included in the solicitation:

1. "CIVIL RIGHTS COMPLIANCE AND DISADVANTAGED BUSINESS ENTERPRISE SPECIAL PROVISIONS"

Driving While Impaired (DWI) Education. The Hawaii Department of Transportation (HDOT) encourages all organizations contracted with HDOT to have an employee education program preventing DWI. DWI is defined as operating a motor vehicle while impaired by alcohol or other legal or illegal substances. HDOT promotes this type of program to accomplish our mission to provide a safe environment for motorists, bicyclists, and pedestrians utilizing our State highways, and expects its contractors to do so as well.

For additional information, contact Ms. Amy Sunahara, Project Manager, by phone

at (808) 692-7575, or by email at amy.my.sunahara@hawaii.gov.

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

ROBIN K. SHISHIDO
Deputy Director of Transportation for Highways

HIePRO RELEASE DATE: October 16, 2026

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.

CIVIL RIGHTS COMPLIANCE AND DISADVANTAGED BUSINESS ENTERPRISE SPECIAL PROVISIONS

I. GENERAL

This project is subject to Title 49 Code of Federal Regulations (CFR), Part 26, entitled "Participation by Disadvantaged Business Enterprise in Department of Transportation Financial Assistance Programs," hereinafter referred to as the "DBE Regulations" and is incorporated and made a part of this contract herein by this reference, as revised by the United States Department of Transportation's (USDOT) DBE Interim Final Rule (IFR) issued October 3, 2025 (hereinafter referred to as IFR). The following shall be incorporated as part of the contract documents for compliance. If any requirements herein conflict with the general provisions or special provisions applicable to this project, the requirements herein shall prevail unless specifically superseded or amended in the special provisions or by addendum.

II. POLICY

The Hawai'i Department of Transportation's (HDOT) and its political subdivision's Disadvantaged Business Enterprise (DBE) program will operate in a nondiscriminatory manner and without regard to race or sex, while maximizing efficiency of service.

Bidders/offerors, subcontractors, consultants, vendors, suppliers, distributors, manufacturers, trucking companies, service providers, etc. shall fully inform themselves with respect to the requirements of the DBE Regulations.

HDOT's DBE program remains in effect pursuant to 49 CFR Parts 23 and 26. However, consistent with the USDOT's IFR effective October 3, 2025, HDOT has suspended race-conscious measures including DBE contract goals, counting of DBE participation, and associated special provisions, pending the completion of HDOT's DBE certification reevaluation. Where indicated, HDOT reserves the right to reinstate or amend DBE special provisions at a later date, subject to approval by the appropriate USDOT operating administration.

HDOT reserves the right to reimplement, revise, or otherwise modify any reserved provisions, in whole or in part, following its reevaluation period or upon receipt of additional federal guidance. Upon such reimplementation, contractors will be notified in writing and shall comply with the updated requirements as directed by HDOT.

III. NON-DISCRIMINATION POLICY

Each contract signed with a prime contractor (and each subcontract the prime contractor signs with a subcontractor) shall include the following assurance:

"The contractor, sub-recipient, or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26, as revised by the

DBE IFR, in the award and administration of USDOT assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate which may include, but is not limited to: 1) withholding monthly progress payments; 2) assessing sanctions; 3) liquidated damages; and/or 4) disqualifying the contractor from future bidding as non-responsible."

The prime contractor agrees to include the above statements in any subsequent contracts that it enters into with other contractors and shall require those contractors to include similar statements in further agreements.

IV. BIDDER/OFFEROR RESPONSIBILITIES (RESERVED)

V. PROPOSAL REQUIREMENTS (RESERVED)

VI. COUNTING DBE PARTICIPATION TOWARDS CONTRACT GOAL (RESERVED)

VII. USE OF JOINT CHECKS UNDER THE DBE PROGRAM (RESERVED)

VIII. DEMONSTRATION OF GOOD FAITH EFFORTS FOR CONTRACT AWARD (RESERVED)

IX. ADMINISTRATIVE RECONSIDERATION (RESERVED)

X. AWARD OF CONTRACT (RESERVED)

XI. REPLACEMENT OF A DBE ON A PROJECT WITH A CONTRACT GOAL (RESERVED)

XII. CONTRACT COMPLIANCE

This contract is subject to contract compliance tracking, and the prime contractor and all subcontractors are required to report payments electronically in the HDOT online Vendor Management System (hereafter referred to as "online tracking system".) The prime contractor shall report the date payment was made by HDOT and shall report payment to all subcontractors for the audit period. The prime contractor and all subcontractors are responsible for responding by any noted response date or due date to any instructions or request for information, and to check the online tracking system on a regular basis to manage contact information and contract records.

The prime contractor is responsible for ensuring all subcontractors have completed all requested items and that their contact information is accurate and up-to-date. HDOT may require additional information related to the contract to be provided electronically through the online tracking system at any time before, during, or after contract award. Information related to contractor access of the online tracking system will be provided to designated point of contact with each contractor upon award of the contract. The online

tracking system is web-based and can be accessed at the following internet address: https://hdot.dbesystem.com/.

XIII. PAYMENT

A. HDOT will make an estimate in writing each month based on the items of work performed and materials incorporated in the work and the value therefore at the unit prices or lump sum prices set forth in the contract. All progress estimates and payments will be approximate only and shall be subject to correction at any time prior to or in the final estimate and payment. HDOT will not withhold any amount from any payment to the contractor, including retainage.

B. The contractor shall pay all subcontractors within 10 calendar days after receipt of any progress payments from HDOT. This clause applies to all subcontractors, and all tiers of subcontracts. As per HRS § 103-10.5 Prompt payment, the contractor will verify that payment or retainage has been released to the subcontractors or its suppliers within the specified time through entries in HDOT's online tracking system during the corresponding monthly audits. Prompt payment will be monitored and enforced through the contractor's reporting of payments to its subcontractors and suppliers in the online tracking system.

   Subcontractors, including lower tier subcontractors and/or suppliers will confirm the timeliness and the payment amounts received utilizing the online tracking system. Discrepancies will be investigated by the DBE Program Office and the project engineer. Payments to the subcontractors, including lower tier subcontractors, and including retainage released after the subcontractor or lower tier subcontractor's work has been completed to HDOT's satisfaction, will be reported by the Contractor or the subcontractor.

C. When any subcontractor has satisfactorily completed its work as specified in the subcontract, and there are no bona fide disputes, the contractor shall make prompt and full payment to the subcontractor of all monies due, including retainage, within 10 calendar days after the subcontractor's work is satisfactorily completed. A subcontractor's work is satisfactorily completed when all the tasks called for in the subcontract have been accomplished and documented, as required by HDOT. The contractor must obtain the prior written approval from HDOT before it can continue to withhold retainage from any subcontractor who has completed its portion of the work. This clause applies all subcontractors, and all tiers of subcontracts.

XIV. RECORDS

The contractor shall maintain and keep all records necessary for HDOT to determine compliance with the contractor's compliance obligations. The records shall be available at reasonable times and places for inspection by HDOT and appropriate Federal agencies.

The records to be kept by the contractor shall include:

1. The names, address, phone number, and contact person of consultants, subcontractors, manufacturers, suppliers, distributors, truckers and vendors;
2. The nature of work of each consultant, subcontractor, manufacturer, supplier, distributor, trucker and vendor;
3. The dollar amount contracted with each consultant, subcontractor, manufacturer, supplier, distributor, trucker and vendor; and
4. Cumulative dollar amount of all change orders to the subcontract.

XV. FAILURE TO COMPLY WITH STATED REQUIREMENTS

The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of USDOT assisted contracts. All contractors, subcontractors, manufacturers, suppliers, and distributors are hereby advised that failure to carry out all requirements specified herein shall constitute a material breach of contract that may result in termination of the contract or such other remedy as deemed appropriate by HDOT including but not limited to: 1) withholding monthly progress payments; 2) assessing sanctions; 3) liquidated damages; and/or 4) disqualifying the contractor from future bidding as non-responsible.

CONTRACT PROVISIONS FOR FEDERAL-AID CONSTRUCTION CONTRACTS

I. General
II. Nondiscrimination
III. Davis-Bacon and Related Act Provisions
IV. Contract Work Hours and Safety Standards Act Provisions
V. Subletting or Assigning the Contract
VI. Safety: Accident Prevention
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IX. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion
X. Certification Regarding Use of Contract Funds for Lobbying
XI. Use of United States-Flag Vessels

ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only).

I. GENERAL

1. Historically, contracting agencies using Federal-aid highway funds were required to ensure Form FHWA-1273 was physically incorporated into all contracts and subcontracts. Effective June 10, 2026, this requirement was eliminated [91 FR 25492]. Future use of Form FHWA-1273 is now optional on the part of the contracting agency using Federal-aid highway funds. FHWA continues to make Form FHWA-1273 available as a convenience to contracting agencies. Contracting agencies must continue to ensure compliance with the provisions cited in Form FHWA-1273 in accordance with the provisions regardless of the use of Form FHWA-1273. Accordingly, the contracting agency retains the authority to determine whether the contractor must use Form FHWA-1273 to physically incorporate required contract provisions in each subcontract and in lower tier contracts. Where permitted by the contracting agency, the contractor may choose other ways to include required contract provisions in each subcontract, besides incorporating Form FHWA-1273. Contract provisions in Form FHWA-1273 are not required to be physically included in subcontracts for design services on Federal-aid design-build contracts, or in purchase orders, rental agreements and other agreements for supplies or services.

The applicable provisions of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor or design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in solicitation-for-bids or request-for-proposals documents.

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. 23 U.S.C. 114(b). The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors. 23 U.S.C. 101(a).

II. NONDISCRIMINATION

The contractor and all subcontractors must comply with the following policies: 29 CFR Parts 1625-1627, 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27, including any amendments thereto.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with 29 CFR Parts 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), and Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27, including any amendments thereto.

The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR Part 35 and 29 CFR Part 1630 are incorporated by reference in this contract.

1. Assurances Required:

a. The requirements of 49 CFR Part 26, including any amendments thereto, and the State DOT's FHWA-approved Disadvantaged Business Enterprise (DBE) program are incorporated by reference.

b. The contractor, subrecipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR part 26, including any amendments thereto, in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate, which may include, but is not limited to:

(1) Withholding monthly progress payments;
(2) Assessing sanctions;
(3) Liquidated damages; and/or
(4) Disqualifying the contractor from future bidding as non-responsible.

c. The Title VI and nondiscrimination provisions of U.S. DOT Order 1050.2A at Appendixes A and E, including any amendments thereto, are incorporated by reference. 49 CFR Part 21.

III. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding $2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size), in accordance with 29 CFR 5.5. The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. 23 U.S.C. 113. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. 23 U.S.C. 101. Where applicable law requires that projects be treated as a project on a Federal-aid highway, the provisions of this subpart will apply regardless of the location of the project. Examples include: Surface Transportation Block Grant Program projects funded under 23 U.S.C. 133 [excluding recreational trails projects], the Nationally Significant Freight and Highway Projects funded under 23 U.S.C. 117, and National Highway Freight Program projects funded under 23 U.S.C. 167.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 “Contract provisions and related matters” with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages (29 CFR 5.5)

a. *Wage rates and fringe benefits.* All laborers and mechanics employed or working upon the site of the work (or otherwise working in construction or development of the project under a development statute), will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of basic hourly wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. As provided in paragraphs (d) and (e) of 29 CFR 5.5, the appropriate wage determinations are effective by operation of law even if they have not been attached to the contract. Contributions made or costs reasonably anticipated for bona fide fringe benefits under the Davis-Bacon Act (40 U.S.C. 3141(2)(B)) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.e. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics must be paid the appropriate wage rate and fringe benefits on the wage determination for the classification(s) of work actually performed, without regard to skill, except as provided in paragraph 4. of this section. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: *Provided,* That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classifications and wage rates conformed under paragraph 1.c. of this section) and the Davis-Bacon poster (WH–1321) must be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b. *Frequently recurring classifications.* (1) In addition to wage and fringe benefit rates that have been determined to be prevailing under the procedures set forth in 29 CFR part 1, a wage determination may contain, pursuant to § 1.3(f), wage and fringe benefit rates for classifications of laborers and mechanics for which conformance requests are regularly submitted pursuant to paragraph 1.c. of this section, provided that:

(i) The work performed by the classification is not performed by a classification in the wage determination for which a prevailing wage rate has been determined;

(ii) The classification is used in the area by the construction industry; and

(iii) The wage rate for the classification bears a reasonable relationship to the prevailing wage rates contained in the wage determination.

(2) The Administrator will establish wage rates for such classifications in accordance with paragraph 1.c.(1)(iii) of this section. Work performed in such a classification must be paid at no less than the wage and fringe benefit rate listed on the wage determination for such classification.

c. *Conformance.* (1) The contracting officer must require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract be classified in conformance with the wage determination. Conformance of an additional classification and wage rate and fringe benefits is appropriate only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is used in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) The conformance process may not be used to split, subdivide, or otherwise avoid application of classifications listed in the wage determination.

(3) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the

classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken will be sent by the contracting officer by email to *DBAconformance@dol.gov*. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30–day period that additional time is necessary.

(4) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer will, by email to *DBAconformance@dol.gov*, refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30–day period that additional time is necessary.

(5) The contracting officer must promptly notify the contractor of the action taken by the Wage and Hour Division under paragraphs 1.c.(3) and (4) of this section. The contractor must furnish a written copy of such determination to each affected worker or it must be posted as a part of the wage determination. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 1.c.(3) or (4) of this section must be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

d. *Fringe benefits not expressed as an hourly rate.* Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor may either pay the benefit as stated in the wage determination or may pay another bona fide fringe benefit or an hourly cash equivalent thereof.

e. *Unfunded plans.* If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, *Provided,* That the Secretary of Labor has found, upon the written request of the contractor, in accordance with the criteria set forth in § 5.28, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

f. *Interest.* In the event of a failure to pay all or part of the wages required by the contract, the contractor will be required to pay interest on any underpayment of wages.

2. Withholding (29 CFR 5.5)

a. *Withholding requirements.* The contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for the full amount of wages and monetary relief, including interest, required by the clauses set forth in this section for violations of this contract, or to satisfy any such liabilities required by any other Federal contract, or federally assisted contract subject to Davis-Bacon labor standards, that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to Davis-Bacon labor standards requirements and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld. In the event of a contractor's failure to pay any laborer or mechanic, including any apprentice or helper working on the site of the work all or part of the wages required by the contract, or upon the contractor's failure to submit the required records as discussed in paragraph 3.d. of this section, the contracting agency may on its own initiative and after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

b. *Priority to withheld funds.* The Department has priority to funds withheld or to be withheld in accordance with paragraph 2.a. of this section or Section IV, paragraph 3.a., or both, over claims to those funds by:

(1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;

(2) A contracting agency for its reprocurement costs;

(3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;

(4) A contractor's assignee(s);

(5) A contractor's successor(s); or

(6) A claim asserted under the Prompt Payment Act, 31 U.S.C. 3901–3907.

3. Records and certified payrolls (29 CFR 5.5)

a. *Basic record requirements* (1) *Length of record retention.* All regular payrolls and other basic records must be maintained by the contractor and any subcontractor during the course of the work and preserved for all laborers and mechanics working at the site of the work (or otherwise working in construction or development of the project under a development statute) for a period of at least 3 years after all the work on the prime contract is completed.

(2) *Information required.* Such records must contain the name; Social Security number; last known address, telephone number, and email address of each such worker; each worker's correct classification(s) of work actually performed; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in 40 U.S.C. 3141(2)(B) of the Davis-Bacon Act); daily and weekly number

of hours actually worked in total and on each covered contract; deductions made; and actual wages paid.

(3) *Additional records relating to fringe benefits.* Whenever the Secretary of Labor has found under paragraph 1.e. of this section that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in 40 U.S.C. 3141(2)(B) of the Davis-Bacon Act, the contractor must maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits.

(4) *Additional records relating to apprenticeship.* Contractors with apprentices working under approved programs must maintain written evidence of the registration of apprenticeship programs, the registration of the apprentices, and the ratios and wage rates prescribed in the applicable programs.

b. *Certified payroll requirements* (1) *Frequency and method of submission.* The contractor or subcontractor must submit weekly, for each week in which any DBA- or Related Acts-covered work is performed, certified payrolls to the contracting agency. The prime contractor is responsible for the submission of all certified payrolls by all subcontractors. A contracting agency or prime contractor may permit or require contractors to submit certified payrolls through an electronic system, as long as the electronic system requires a legally valid electronic signature; the system allows the contractor, the contracting agency, and the Department of Labor to access the certified payrolls upon request for at least 3 years after the work on the prime contract has been completed; and the contracting agency or prime contractor permits other methods of submission in situations where the contractor is unable or limited in its ability to use or access the electronic system.

(2) *Information required.* The certified payrolls submitted must set out accurately and completely all of the information required to be maintained under paragraph 3.a.(2) of this section, except that full Social Security numbers and last known addresses, telephone numbers, and email addresses must not be included on weekly transmittals. Instead, the certified payrolls need only include an individually identifying number for each worker (*e.g.,* the last four digits of the worker's Social Security number). The required weekly certified payroll information may be submitted using Optional Form WH–347 or in any other format desired. Optional Form WH–347 is available for this purpose from the Wage and Hour Division website at *https://www.dol.gov/sites/dolgov/files/WHD/legacy/files/wh347/.pdf* or its successor website. It is not a violation of this section for a prime contractor to require a subcontractor to provide full Social Security numbers and last known addresses, telephone numbers, and email addresses to the prime contractor for its own records, without weekly submission by the subcontractor to the contracting agency.

(3) *Statement of Compliance.* Each certified payroll submitted must be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor, or the contractor's or subcontractor's agent who pays or supervises the payment of the persons working on the contract, and must certify the following:

(i) That the certified payroll for the payroll period contains the information required to be provided under paragraph 3.b. of this section, the appropriate information and basic records are being maintained under paragraph 3.a. of this section, and such information and records are correct and complete;

(ii) That each laborer or mechanic (including each helper and apprentice) working on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR part 3; and

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification(s) of work actually performed, as specified in the applicable wage determination incorporated into the contract.

(4) *Use of Optional Form WH–347.* The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH–347 will satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(3) of this section.

(5) *Signature.* The signature by the contractor, subcontractor, or the contractor's or subcontractor's agent must be an original handwritten signature or a legally valid electronic signature.

(6) *Falsification.* The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under 18 U.S.C. 1001 and 31 U.S.C. 3729.

(7) *Length of certified payroll retention.* The contractor or subcontractor must preserve all certified payrolls during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

c. *Contracts, subcontracts, and related documents.* The contractor or subcontractor must maintain this contract or subcontract and related documents including, without limitation, bids, proposals, amendments, modifications, and extensions. The contractor or subcontractor must preserve these contracts, subcontracts, and related documents during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

d. *Required disclosures and access* (1) *Required record disclosures and access to workers.* The contractor or subcontractor must make the records required under paragraphs 3.a. through 3.c. of this section, and any other documents that the contracting agency, the State DOT, the FHWA, or the Department of Labor deems necessary to determine compliance with the labor standards provisions of any of the applicable statutes referenced by § 5.1, available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and must permit such representatives to interview workers during working hours on the job.

(2) *Sanctions for non-compliance with records and worker access requirements.* If the contractor or subcontractor fails to submit the required records or to make them available, or refuses to permit worker interviews during working hours on the job, the Federal agency may, after written notice to the contractor, sponsor, applicant, owner, or other entity, as the case may be, that maintains such records or that employs such workers, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available, or to permit worker interviews during working hours on the job, may be grounds for debarment action pursuant to § 5.12. In addition, any contractor or other person that fails to submit the required records or make those records available to WHD within the time WHD requests that the records be produced will be precluded from introducing as evidence in an administrative proceeding under 29 CFR part 6 any of the required records that were not provided or made available to WHD. WHD will take into consideration a reasonable request from the contractor or person for an extension of the time for submission of records. WHD will determine the reasonableness of the request and may consider, among other things, the location of the records and the volume of production.

(3) *Required information disclosures.* Contractors and subcontractors must maintain the full Social Security number and last known address, telephone number, and email address of each covered worker, and must provide them upon request to the contracting agency, the State DOT, the FHWA, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or other compliance action.

4. Apprentices and equal employment opportunity (29 CFR 5.5)

a. *Apprentices* (1) *Rate of pay.* Apprentices will be permitted to work at less than the predetermined rate for the work they perform when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship (OA), or with a State Apprenticeship Agency recognized by the OA. A person who is not individually registered in the program, but who has been certified by the OA or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice, will be permitted to work at less than the predetermined rate for the work they perform in the first 90 days of probationary employment as an apprentice in such a program. In the event the OA or a State Apprenticeship Agency recognized by the OA withdraws approval of an apprenticeship program, the contractor will no longer be permitted to use apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(2) *Fringe benefits.* Apprentices must be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringe benefits must be paid in accordance with that determination.

(3) *Apprenticeship ratio.* The allowable ratio of apprentices to journeyworkers on the job site in any craft classification must not be greater than the ratio permitted to the contractor as to the entire work force under the registered program or the ratio applicable to the locality of the project pursuant to paragraph 4.a.(4) of this section. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in paragraph 4.a.(1) of this section, must be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under this section must be paid not less than the applicable wage rate on the wage determination for the work actually performed.

(4) *Reciprocity of ratios and wage rates.* Where a contractor is performing construction on a project in a locality other than the locality in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyworker's hourly rate) applicable within the locality in which the construction is being performed must be observed. If there is no applicable ratio or wage rate for the locality of the project, the ratio and wage rate specified in the contractor's registered program must be observed.

b. *Equal employment opportunity.* The use of apprentices and journeyworkers under this part must be in conformity with 29 CFR part 30, including any amendments thereto.

c. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section III. 23 CFR 230.111(e)(2). The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeyworkers shall not be greater than permitted by the terms of the particular program.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract as provided in 29 CFR 5.5.

6. Subcontracts. The contractor or subcontractor must insert in any subcontracts the clauses set forth in paragraphs (1) through (11) of this section, along with the applicable wage determination(s) and such other clauses or contract modifications as the contracting agency may by appropriate instructions require, and a clause requiring the subcontractors to include these clauses and wage determination(s) in any lower tier subcontracts. The prime contractor is responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this section. In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and may be subject to debarment, as appropriate. 29 CFR 5.5.

7. Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the

contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract as provided in 29 CFR 5.5.

9. Disputes concerning labor standards. As provided in 29 CFR 5.5, disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility. a. By entering into this contract, the contractor certifies that neither it nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of 40 U.S.C. 3144(b) or § 5.12(a).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of 40 U.S.C. 3144(b) or § 5.12(a).

c. The penalty for making false statements is prescribed in the U.S. Code, Title 18 Crimes and Criminal Procedure, 18 U.S.C. 1001.

11. Anti-retaliation. It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the DBA, Related Acts, this part, or 29 CFR part 1 or 3;

b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under the DBA, Related Acts, this part, or 29 CFR part 1 or 3;

c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under the DBA, Related Acts, this part, or 29 CFR part 1 or 3; or

d. Informing any other person about their rights under the DBA, Related Acts, this part, or 29 CFR part 1 or 3.

IV. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

Pursuant to 29 CFR 5.5(b), the following clauses apply to any Federal-aid construction contract in an amount in excess of $100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchpersons and guards.

1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek. 29 CFR 5.5.

2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph 1. of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages and interest from the date of the underpayment. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchpersons and guards, employed in violation of the clause set forth in paragraph 1. of this section, in the sum currently provided in 29 CFR 5.5(b)(2)* for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph 1. of this section.

* $33 as of January 15, 2025 (See 90 FR 1859) as may be adjusted annually by the Department of Labor, pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990.

3. Withholding for unpaid wages and liquidated damages

a. *Withholding process.* The FHWA or the contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for any unpaid wages; monetary relief, including interest; and liquidated damages required by the clauses set forth in this section on this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract subject to the Contract Work Hours and Safety Standards Act that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to the Contract Work Hours and Safety Standards Act and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld.

b. *Priority to withheld funds.* The Department has priority to funds withheld or to be withheld in accordance with Section III paragraph 2.a. or paragraph 3.a. of this section, or both, over claims to those funds by:

(1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;

(2) A contracting agency for its reprocurement costs;

(3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;

(4) A contractor's assignee(s);

(5) A contractor's successor(s); or

(6) A claim asserted under the Prompt Payment Act, 31 U.S.C. 3901–3907.

4. Subcontracts. The contractor or subcontractor must insert in any subcontracts the clauses set forth in paragraphs 1. through 5. of this section and a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor is responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs 1. through 5. In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and associated liquidated damages and may be subject to debarment, as appropriate.

5. Anti-retaliation. It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the Contract Work Hours and Safety Standards Act (CWHSSA) or its implementing regulations in this part;

b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under CWHSSA or this part;

c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under CWHSSA or this part; or

d. Informing any other person about their rights under CWHSSA or this part.

V. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System pursuant to 23 CFR 635.116.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term “perform work with its own organization” in paragraph 1. of this section refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions: (based on longstanding interpretation)

(1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
(2) the prime contractor remains responsible for the quality of the work of the leased employees;
(3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
(4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract. 23 CFR 635.102.

2. Pursuant to 23 CFR 635.116(a), the contract amount upon which the requirements set forth in paragraph 1. of this section is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. Pursuant to 23 CFR 635.116(c), the contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract. (based on long-standing interpretation of 23 CFR 635.116).

5. The 30-percent self-performance requirement of paragraph (1) is not applicable to design-build contracts; however,

contracting agencies may establish their own self-performance requirements. 23 CFR 635.116(d).

VI. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR Part 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract. 23 CFR 635.108.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR Part 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704). 29 CFR 1926.10.

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

VII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR Part 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 11, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

VIII. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT (42 U.S.C. 7606; 2 CFR 200.88; EO 11738)

This provision is applicable to all Federal-aid construction contracts in excess of $150,000 and to all related subcontracts. 48 CFR 2.101; 2 CFR 200.327.

By submission of this bid/proposal or the execution of this contract or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, subcontractor, supplier, or vendor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal Highway Administration and the Regional Office of the Environmental Protection Agency. 2 CFR Part 200, Appendix II.

The contractor agrees to include or cause to be included the requirements of this Section in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements. 2 CFR 200.327.

IX. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost $25,000 or more – as defined in 2 CFR Parts 180 and 1200. 2 CFR 180.220 and 1200.220.

1**. Instructions for Certification – First Tier Participants:**

a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this

covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction. 2 CFR 180.320.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default. 2 CFR 180.325.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances. 2 CFR 180.345 and 180.350.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900-180.1020, and 1200. “First Tier Covered Transactions” refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). “Lower Tier Covered Transactions” refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). “First Tier Participant” refers to the participant who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). “Lower Tier Participant” refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction. 2 CFR 180.330.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the $25,000 threshold. 2 CFR 180.220 and 180.300.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. 2 CFR 180.300; 180.320, and 180.325. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. 2 CFR 180.335. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (https://www.sam.gov/). 2 CFR 180.300, 180.320, and 180.325.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default. 2 CFR 180.325.

* * * * *

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.335;

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property, 2 CFR 180.800;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification, 2 CFR 180.700 and 180.800; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default. 2 CFR 180.335(d).

(5) Are not a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(6) Are not a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability (USDOT Order 4200.6 implementing appropriations act requirements).

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal. 2 CFR 180.335 and 180.340.

* * * * *

3. **Instructions for Certification - Lower Tier Participants:**

(Applicable to all subcontracts, purchase orders, and other lower tier transactions requiring prior FHWA approval or estimated to cost $25,000 or more - 2 CFR Parts 180 and 1200). 2 CFR 180.220 and 1200.220.

a. By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances. 2 CFR 180.365.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900 – 180.1020, and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. “First Tier Covered Transactions” refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). “Lower Tier Covered Transactions” refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). “First Tier Participant” refers to the participant who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). “Lower Tier Participant” refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated. 2 CFR 1200.220 and 1200.332.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the $25,000 threshold. 2 CFR 180.220 and 1200.220.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (https://www.sam.gov/), which is compiled by the General Services Administration. 2 CFR 180.300, 180.320, 180.330, and 180.335.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment. 2 CFR 180.325.

* * * * *

4. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

a. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals:

(1) is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.355;

(2) is a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(3) is a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability. (USDOT Order 4200.6 implementing appropriations act requirements)

b. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal.

* * * * *

X. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed $100,000. 49 CFR Part 20, App. A.

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed $100,000 and that all such recipients shall certify and disclose accordingly.

XI. USE OF UNITED STATES-FLAG VESSELS:

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, or any other covered transaction. 46 CFR Part 381.

This requirement applies to material or equipment that is acquired for a specific Federal-aid highway project. 46 CFR 381.7. It is not applicable to goods or materials that come into inventories independent of an FHWA funded-contract.

When oceanic shipments (or shipments across the Great Lakes) are necessary for materials or equipment acquired for a specific Federal-aid construction project, the bidder, proposer, contractor, subcontractor, or vendor agrees:

1. To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels. 46 CFR 381.7.

2. To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, ‘on-board’ commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b)(1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Office of Cargo and Commercial Sealift (MAR-620), Maritime Administration, Washington, DC 20590. (MARAD requires copies of the ocean carrier's (master) bills of lading, certified onboard, dated, with rates and charges. These bills of lading may contain business sensitive information and therefore may be submitted directly to MARAD by the Ocean Transportation Intermediary on behalf of the contractor). 46 CFR 381.7.

ATTACHMENT A - EMPLOYMENT AND MATERIALS PREFERENCE FOR APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS ROAD CONTRACTS (40 U.S.C. sections 14501(d) and 14701 and the Appalachian Regional Commission Code as authorized under 40 U.S.C. section 14302)
This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 40 U.S.C. 14501 allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

HIGHWAYS DIVISION

HONOLULU, HAWAII

SPECIAL PROVISIONS

These Special Provisions shall supplement and/or amend the applicable provisions of the Hawaii Standard Specifications for Road and Bridge Construction, 2005, hereinafter referred to as the "Standard Specifications".

Amend **Section 101 - TERMS, ABBREVIATIONS, AND DEFINITIONS** to read as follows:

"DIVISION 100 - GENERAL PROVISIONS

SECTION 101 - TERMS, ABBREVIATIONS, AND DEFINITIONS

101.01 Meaning of Terms. The specifications are generally written in the imperative mood. In sentences using the imperative mood, the subject, "the Contractor shall", is implied. In the material specifications, the subject may also be the supplier, fabricator, or manufacturer supplying material, products, or equipment for use on the project. The word "will" generally pertains to decisions or actions of the State.

When a publication is specified, it refers to the most recent date of issue, including interim publications, before the bid opening date for the project, unless a specific date or year of issue is provided.

101.02 Abbreviations. Meanings of abbreviations used in the specifications, on the plans, or in other contract documents are as follows:

AAN	American Association of Nurserymen
AASHTO	American Association of State Highway and Transportation Officials
ACI	American Concrete Institute
ADA	Americans with Disabilities Act
ADAAG	Americans with Disabilities Act Accessibility Guidelines
AGC	Associated General Contractors of America
AIA	American Institute of Architects
AISC	American Institute of Steel Construction
AISI	American Iron and Steel Institute
ANSI	American National Standards Institute
APA	American Plywood Association

ARA	American Railway Association
AREA	American Railway Engineering Association
ASA	American Standards Association
ASCE	American Society of Civil Engineers
ASLA	American Society of Landscape Architects
ASTM	American Society for Testing and Materials
AWG	American Wire Gauge
AWPA	American Wood Preserver's Association
AWS	American Welding Society
AWWA	American Water Works Association
BMP	Best Management Practice
CCO	Contract Change Order
CFR	Code of Federal Regulations
CRSI	Concrete Reinforcing Steel Institute
DCAB	Disability and Communication Access Board, Department of Health, State of Hawaii
DOTAX	Department of Taxation, State of Hawaii
EPA	U.S. Environmental Protection Agency
FHWA	Federal Highway Administration, U.S. Department of Transportation
FSS	Federal Specifications and Standards, General Services Administration, U.S. Department of Defense
HAR	Hawaii Administrative Rules
HDOT	Department of Transportation, State of Hawaii

HIOSH	Occupational Safety and Health, Department of Labor and Industrial Relations, State of Hawaii
HMA	Hot Mix Asphalt
HRS	Hawaii Revised Statutes
ICEA	Insulated Cable Engineers Association (formerly IPCEA)
IMSA	International Municipal Signal Association
IRS	Internal Revenue Service
ITE	Institute of Transportation Engineers
MUTCD	Manual on Uniform Traffic Control Devices for Streets and Highways, FHWA, U.S. Department of Transportation
NCHRP	National Cooperative Highway Research Program
NEC	National Electric Code
NEMA	National Electrical Manufacturers Association
NFPA	National Forest Products Association
NPDES	National Pollutant Discharge Elimination System
OSHA	Occupational Safety and Health Administration/Act, U.S. Department of Labor
SAE	Society of Automotive Engineers
SI	International Systems of Units
UFAS	Uniform Federal Accessibility Standards
UL	Underwriter's Laboratory
USGS	U.S. Geological Survey
VECP	Value Engineering Cost Proposal

101.03 Definitions. Whenever the following words, terms, or pronouns are used in the contract documents, unless otherwise prescribed therein and without regards to the use or omission of uppercase letters, the intent and meaning shall be interpreted as follows:

Addendum (plural - Addenda) - A written or graphic document, including drawings and specifications, issued by the Director during the bidding period. This document modifies or interprets the bidding documents by additions, deletions, clarifications or corrections.

Addition (to the contract sum) **-** Amount added to the contract sum by change order.

Advertisement - A public announcement inviting bids for work to be performed or materials to be furnished.

Amendment - A written document issued to amend the existing contract between the State and Contractor and properly executed by the Contractor and Director.

Award - Written notification to the bidder that the bidder has been awarded a contract.

Bad Weather Day (or Unworkable Day) - A day when weather or other conditions prevent a minimum of four hours of work with the Contractor's normal work force on critical path activities at the site.

Bag - 94 pounds of cement.

Barrel - 376 pounds of cement.

Base Course - The layer or layers of specified material or selected material of a designed thickness placed on a subbase or subgrade to support a surface course.

Basement Material - The material in excavation or embankments underlying the lowest layer of subbase, base, pavement, surfacing or other specified layer.

Bid - See Proposal.

Bidder - An individual, partnership, corporation, joint venture or other legal entity submitting, directly or through a duly authorized representative or agent, a proposal for the work or construction contemplated.

Bidding Documents (or Solicitation Documents) - The published solicitation notice, bid requirements, bid forms and the proposed contract documents including all addenda and clarifications issued prior to receipt of the bid.

Bid Security - The security furnished by the bidder from which the State may recover its damages in the event the bidder breaches its promise to enter into a contract with the State, or fails to execute the required bonds covering the work contemplated, if its proposal is accepted.

Blue Book - EquipmentWatch Cost Recovery (formerly known as EquipmentWatch Rental Rate Blue Book), available from EquipmentWatch, a division of Penton, Inc.

Calendar Day - See Day.

Change Order (or Contract Change Order) - A written order signed by the Engineer issued with or without the consent of the Contractor directing changes in the work, contract time or contract price. The purposes of a change order include, but are not limited to (1) establishing a price or time adjustment for changes in the work; (2) establishing full payment for direct, indirect, and consequential costs, including costs of delay; (3) establishing price adjustment or time adjustment for work covered and affected by one or more field orders; or (4) settling Contractor's claims for direct, indirect, and consequential costs, or for additional contract time, in whole or in part.

Completion - See Substantial Completion and Final Completion.

Completion Date - The date specified by the contract for the completion of all work on the project or of a designated portion of the project.

Comptroller - the Comptroller of the State of Hawaii, Department of Accounting and General Services.

Contract - The written agreement between the Contractor and the State, by which the Contractor shall provide all labor, equipment, and materials and perform the specified work within the contract time stipulated, and by which the State of Hawaii is obligated to compensate the Contractor at the prices set forth in the contract documents.

Contract Certification Date - The Date on which the Deputy Comptroller for the State of Hawaii (or authorized representative) signs the Contract Certification.

Contract Completion Date - The calendar day on which all work on the project, required by the contract, must be completed. See CONTRACT TIME.

Contract Documents - The contract, solicitation, addenda, notice to bidders, Contractor's bid proposal (including wage schedule, list of subcontractors and other documentations accompanying the bid), notice to proceed, bonds, general provisions, special provisions, specifications, drawings, all modifications, all written amendments, change orders, field orders, orders for minor changes in the work, the Engineer's written interpretations and clarifications issued on or after the effective date of the contract.

Contract Item (Pay Item) - A specific unit of work for which there is a price in the contract.

Contract Modification (Modification) - A change order that is mutually agreed to and signed by the parties to the contract.

Contract Price - The amount designated on the face of the contract for the performance of work.

Contract Time (or Contract Duration) - The number of calendar or working days provided for completion of the contract, inclusive of authorized time extensions. Contract time shall commence on the Start Work Date and end on the Substantial Completion Date. If in lieu of providing a number of calendar or working days, the contract requires completion by a certain date, the work shall be completed by that date.

Contracting Officer - See Engineer.

Contractor - Any individual, partnership, firm, corporation, joint venture, or other legal entity undertaking the execution of the work under the terms of the contract with the State.

Critical Path - Longest logical sequence of activities that must be completed on schedule for the entire project to be completed on schedule.

Day - Any day shown on the calendar, beginning at midnight and proceeding up to, but not including, midnight the following day. If no designation of calendar or working day is made, "day" shall mean calendar day.

Department - The Department of Transportation of the State of Hawaii (abbreviated HDOT).

Director - The Director of the HDOT acting directly or through duly authorized representatives.

Plans (or Drawings) - The contract drawings in graphic or pictorial form including the notes, tables and other notations thereon indicating the design, location, character, dimensions, and details of the work.

Engineer - The Highway Administrator, Highways Division, HDOT, or the authorized person delegated to act on the Administrator's behalf.

Equipment - All machinery, tools, and apparatus needed to complete the contract.

Field Order - A written order issued by the Engineer or the Engineer's authorized representative to the Contractor requiring a change or changes to the contract work. A field order may (1) establish a price adjustment or time adjustment; or (2) may declare that no adjustment will be made to contract price or contract time; or (3) may request the Contractor to submit a proposal for an adjustment to the contract price or contract time.

Final Acceptance - The Status of the project when the Engineer finds that the Contractor has satisfactorily completed all contract work in compliance with the contract including all plant establishment requirements, and all the materials have been accepted by the State.

Final Completion - The date set by the Director that all work required by the contract has been completed in full compliance with the contract documents.

Final Inspection - Inspection where all contract items (with the exception of Planting Period and Plant Establishment Period) are accepted by the Engineer. Substantial Completion will be issued by the Engineer based on the satisfactory results of the Final Inspection.

Float - The amount of time between when an activity can start and when an activity must start, i.e., the time available to complete non-critical activities required for the performance of the work without affecting the critical path.

Guarantee - Legally enforceable assurance of the duration of satisfactory performance of quality of a product or work.

Hawaii Administrative Rules - Rules adopted by the State in accordance with Chapter 91 of the Hawaii Revised Statutes, as amended.

Highway (Street, Road, or Roadway) - A public way within a right-of-way designed, intended, and set aside for use by vehicles, bicyclists, or pedestrians.

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

Highways Division - The Highways Division of the Hawaii Department of Transportation constituted under the laws of Hawaii for the administration of highway work.

Holidays - The days of each year which are set apart and established as State holidays pursuant to Chapter 8 of the Hawaii Revised Statutes, as amended.

Inspector - The Engineer's authorized representative assigned to make detailed inspections of contract performance, prescribed work, and materials supplied.

Laboratory - The testing laboratory of the Highways Division or other testing laboratories that may be designated by the Engineer.

Laws - All Federal, State, and local laws, executive orders and regulations having the force of law.

Leveling Course - An aggregate mixture course of variable thickness used to restore horizontal and vertical uniformity to existing pavements or shoulders.

Liquidated Damages - The amount prescribed in Subsection 108.08 - Liquidated Damages for Failure to Complete the Work or Portions of the Work on Time, to be paid to the State or to be deducted from any payments payable to or, which may become payable to the Contractor.

Lump Sum (LS) - When used as a payment method means complete payment for the item of work described in the contract documents.

Material - Any natural or manmade substance or item specified in the contract to be incorporated in the work.

Notice to Bidders - The advertisement for proposals for all work or materials on which bids are required. Such advertisement will indicate the location of the work to be done or the character of the material to be furnished and the time and place for the opening of proposals.

Notice to Proceed - Written notice from the Engineer to the Contractor identifying the date on which the Contractor is to begin procuring materials and required permits and adjusting work forces, equipment, schedules, etc. prior to beginning physical work.

Pavement - The uppermost layer of material placed on the traveled way or shoulders or both. Pavement and surfacing may be interchangeable.

Pavement Structure - The combination of subbase, base, pavement, surfacing or other specified layer of a roadway constructed on a subgrade to support the traffic load.

Payment Bond - The security executed by the Contractor and surety or sureties furnished to the Department to guarantee payment by the Contractor to laborers, material suppliers and subcontractors in accordance with the terms of the contract.

Physical Work - Physical construction activities on the project site or at appurtenant facilities including staging areas. It includes; (i) building or installing any structures or facilities including, but not limited to sign erection; BMP installation; field office site grading and building; (ii) removal, adjustment, or demolition of physical obstructions on site; (iii) any ground breaking activities; and (iv) any utility work. It does not include pre-construction environmental testing (such as water quality baseline measurements) that may be required as part of contract.

Pre-Final Inspection - Inspection scheduled when Contractor notifies Engineer that all physical work on the project, with the exception of planting period and plant establishment period, has been completed. Notice from Contractor of substantial completion will suspend contract time until Contractor receives punchlist from Engineer.

Profile Grade - The elevation or gradient of a vertical plane intersecting the top surface of the proposed pavement.

Project Acceptance Date - The calendar day on which the Engineer accepts the project as completed. See Final Completion.

Proposal (Bid) - The executed document submitted by a Bidder in response to a solicitation request, to perform the work required by the proposed contract documents, for the price quoted and within the time allotted.

Public Traffic - Vehicular or pedestrian movement on a public way.

Punchlist - A list compiled by the Engineer specifying work yet to be completed or corrected by the Contractor in order to substantially complete the contract.

Questionnaire - The specified forms on which the bidder shall furnish required information as to its ability to perform and finance the work.

Request for Change Proposal - A written notice from the Engineer to the Contractor requesting that the Contractor provide a price and/or time proposal for contemplated changes preparatory to the issuance of a field order or change order.

Right-of-Way - Land, property, or property interests acquired by a government agency for, or devoted to transportation purposes.

Roadbed - The graded portion of a highway within top and side slopes, prepared as a foundation for the pavement structure and shoulders.

Roadside - The area between the outside edges of the shoulders and the right-of-way boundaries. Unpaved median areas between inside shoulders of divided highways and infield areas of interchanges are included.

Section and Subsection - Section or subsection shall be understood to refer to these specifications unless otherwise specified.

Shop Drawings - All drawings, diagrams**,** illustrations, schedules and other data or information which are specifically prepared or assembled by or for the Contractor and submitted by the Contractor to illustrate some portion of the work.

Shoulder - The portion of the roadway next to the traveled way for: accommodation of stopped vehicles, placement of underground facilities, emergency use, and lateral support of base and surface courses.

Sidewalk - That portion of the roadway primarily constructed for use by pedestrians.

Solicitation - An invitation to bid or request for proposals or any other document issued by the Department to solicit bids or offers to perform a contract. The solicitation may indicate the time and place to receive the bids or offers and the location, nature and character of the work, construction or materials to be provided.

Specifications - Compilation of provisions and requirements to perform prescribed work.

(A) Standard Specifications. Specifications by the State intended for general application and repetitive use.

(B) Special Provisions. Revisions and additions to the standard specifications applicable to an individual project.

Standard Plans - Drawings provided by the State for specific items of work approved for repetitive use.

State - The State of Hawaii, its Departments and agencies, acting through its authorized representative(s).

State Waters – All waters, fresh, brackish, or salt, around and within the State, including, but not limited to, coastal waters, streams, rivers, drainage ditches, ponds, reservoirs, canals, ground waters, and lakes; provided that drainage ditches, ponds, and reservoirs required as a part of a water pollution control system are excluded.

Start Work Date - Date on which Contractor begins physical work on the contract. This date shall also be the beginning of Contract Time.

Structures - Bridges, culverts, catch basins, drop inlets, retaining walls, cribbing, manholes, endwalls, buildings, sewers, service pipes, underdrains, foundation drains, and other such features that may be encountered in the work.

Subbase - A layer of specified material of specified thickness between the subgrade and a base.

Subcontract - Any written agreement between the Contractor and its subcontractors which contains the conditions under which the subcontractor is to perform a portion of the work for the Contractor.

Subcontractor - An individual, partnership, firm, corporation, 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**.**

Subgrade - The top surface of completed earthwork on which subbase, base, surfacing, pavement, or a course of other material is to be placed.

Substantial Completion - The Status of the project when the Contractor has completed the work, except for the planting period and plant establishment period, and each of the following requirements are met:

(1) All traffic lanes (including shoulders, ramps, sidewalks and bike paths) are in their final configuration as designed and the final wearing surface has been installed;

(2) All operational and safety devices have been installed in accordance with the contract documents including guardrails, end treatments, traffic barriers, required signs and pavement markings, drainage, parapet, and bridge and pavement structures;

(3) All required illumination and lighting for normal and safe use and operation is installed and functional in accordance with the contract documents;

(4) All utilities and services are connected and working;

(5) The need for temporary traffic controls or lane closures at any time has ceased, except for lane closures required for routine maintenance;

(6) The building, structure, improvement or facility can be used for its intended purpose.

Substantial Completion Date - The date the Substantial Completion is granted by the Engineer in Writing and Contract Time stops.

Superintendent - The employee of the Contractor who is responsible for all the work and is a Contractor’s agent for communications to and from the State.

Surety - The qualified individual, firm or corporation other than the Contractor, which executes a bond with and for the Contractor to insure its acceptable performance of the contract.

Surfacing - The uppermost layer of material placed on the traveled way or shoulders. This term is used interchangeably with pavement.

Traveled Way - The portion of the roadway for the movement of vehicles, exclusive of shoulders.

Unsuitable Material - Materials that contain organic matter, muck, humus, peat, sticks, debris, chemicals, toxic matter, or other deleterious materials not suitable for use in earthwork.

Utility - A line, facility, or system for producing, transmitting, or distributing communications, power, electricity, heat, gas, oil, water, steam, waste, or storm water.

Utility Owner - The entity, whether private or owned by a State, Federal, or County governmental body, that has the power and responsibility to grant approval for, or undertake construction work involving a particular utility.

Water Pollutant - Dredged spoil, solid refuse, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical waste, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, soil, sediment, cellar dirt and industrial, municipal, and agricultural waste.

Water Pollution - (1) Such contamination or other alteration of the physical, chemical, or biological properties of any state waters, including change in temperature, taste, color, turbidity, or odor of the waters, or **(2)** Such discharge of any liquid, gaseous, solid, radioactive, or other substances into any state waters, as will or is likely to create a nuisance or render such waters unreasonably harmful, detrimental, or injurious to public health, safety, or welfare, including harm, detriment, or injury to public water supplies, fish and aquatic life and wildlife, recreational purposes and agricultural and industrial research and scientific uses of such waters or as will or is likely to violate any water quality standards, effluent standards, treatment and pretreatment standards, or standards of performance for new sources adopted by the Department of Health.

Work - The furnishing of all labor, material, equipment, and other incidentals necessary or convenient for the successful execution of all the duties and obligations imposed by the contract.

Working Day - A calendar day in which a Contractor is capable of working four or more hours with its normal work force, exclusive of:

(1) Saturdays, Sundays, and recognized legal State holidays and such other days specified by the contract documents as non-working days,

(2) Day in which the Engineer suspends work for four or more hours through no fault of the Contractor."

END OF SECTION 101

Make this section a part of the Standard Specifications:

"**SECTION 102 - BIDDING REQUIREMENTS AND CONDITIONS**

102.01 Prequalification of Bidders. Prospective bidders shall be capable of performing the work for which they are bidding.

In accordance with HRS Chapter 103D-310, the Department may require any prospective bidder to submit answers to questions contained in the 'Standard Qualification Questionnaire For Prospective Bidders On Public Works Contracts' furnished by the Department, properly executed and notarized, setting forth a complete statement of the experience of such prospective bidder and its organization in performing similar work and a statement of the equipment proposed to be used, together with adequate proof of the availability of such equipment. Whenever it appears to the Department, from answers to the questionnaire or otherwise, that the prospective bidder is not fully qualified and able to perform the intended work, the Department will, after affording the prospective bidder an opportunity to be heard and if still of the opinion that the bidder is not fully qualified to perform the work, refuse to receive or consider any bid offered by the prospective bidder. All information contained in the answers to the questionnaire shall be kept confidential. Questionnaire so submitted shall be returned to the bidders after serving their purpose.

No person, firm or corporation may bid where (1) the person, firm, or corporation, or (2) a corporation owned substantially by the person, firm, or corporation, or (3) a substantial stockholder or an officer of the corporation, or (4) a partner or substantial investor in the firm is in arrears in payments owed to the State or its political subdivisions or is in default as a surety or failure to do faithfully and diligently previous contracts with the State.

102.02 Contents of Proposal Forms. The Department will furnish prospective bidders with proposal forms posted in HIePRO stating:

(1) The location,

(2) Description of the proposed work,

(3) The approximate quantities,

(4) Items of work to be done or materials to be furnished,

(5) A schedule of items, and

(6) The time in which the work shall be completed.

Papers bound with or attached to the proposal form are part of the proposal. The bidder shall not detach or alter the papers bound with or attached to the proposal when the bidder submits its proposal through HIePRO.

Also, the bidder shall consider other documents including the plans and specifications a part of the proposal form whether attached or not.

102.03 Estimated Quantities. The quantities shown in the contract are approximate and are for the comparison of bids only. The actual quantity of work may not correspond with the quantities shown in the contract. The Department will make payment to the Contractor for unit price items in accordance with the contract for only the following:

(1) Actual quantities of work done and accepted, not the estimated quantities; or

(2) Actual quantities of materials furnished, not the estimated quantities.

The Department may increase, decrease, or omit each scheduled quantities of work to be done and materials to be furnished. When the Department increases or decreases the estimated quantity of a contract item by more than 15% the Department will make payment for such items in accordance with Subsection 104.06 - Methods of Price Adjustment.

102.04 Examination of Contract and Site of Work. The bidder shall examine carefully the site of the proposed work and contract before submitting a proposal.

By the act of submitting a bid for the proposed contract, the bidder warrants that:

(1) The bidder and its Subcontractors have reviewed the contract documents and found them free from ambiguities and sufficient for the purpose intended;

(2) The bidder and its workers, employees and subcontractors have the skills and experience in the type of work required by the contract documents bid upon;

(3) Neither the bidder nor its employees, agents, suppliers, or subcontractors have relied upon verbal representations from the Department, its employees, or agents, including architects, engineers, or consultants, in assembling the bid figure; and

(4) The basis for the bid figure are solely on the construction contract documents.

Also, the bidder warrants that the bidder has examined the site of the work. From its investigations, the bidder acknowledges satisfaction on:

(1) The nature and location of the work;

(2) The character, quality, and quantity of materials;

(3) The difficulties to be encountered; and

(4) The kind and amount of equipment and other facilities needed.

Subsurface information or hydrographic survey data furnished are for the bidders' convenience only. The data and information furnished are the product of the Department's interpretation gathered in investigations made at the specific locations. These conditions may not be typical of conditions at other locations within the project area or that such conditions remain unchanged. Also, conditions found at the time of the subsurface explorations may not be the same conditions when work starts. The bidder shall be solely responsible for assumptions, deductions, or conclusions the bidder may derive from the subsurface information or data furnished.

If the Engineer determines that the natural conditions differ from that originally anticipated or contemplated by the Contractor in the items of excavation, the State may treat the difference in natural conditions, as falling within the meaning of Subsection 104.02 – Changes.

102.05 Preparation of Proposal. The submittal of its proposal shall be on forms furnished by the Department. The bidder shall specify in words or figures:

(1) A unit price for each pay item with a quantity given;

(2) The products of the respective unit prices and quantities;

(3) The lump sum amount; and

(4) The total amount of the proposal obtained by adding the amounts of the several items.

The words and figures shall be in ink or typed. If a discrepancy occurs between the prices written in words and those written in figures, the prices written in words shall govern.

When an item in the proposal contains an option to be made, the bidder shall choose in accordance with the contract for that particular item. Determination of an option will not permit the Contractor to choose again.

The bidder shall sign the proposal properly in ink. A duly authorized representatives of the bidder or by an agent of the bidder legally qualified and acceptable to the Department shall sign, including one or more partners of the bidder and one or more representatives of each entity comprising a joint venture.

When an agent, other than the officer(s) of a corporation authorized to sign contracts for the corporation or a partner of a partnership, signs the proposals, a 'Power of Attorney' shall be on file with the Department or submitted with the proposal. Otherwise, the Department will reject the proposal as irregular and unauthorized.

The bidder shall submit acceptable evidence of the authority of the partner, member(s), or officer(s) to sign for the partnership, joint venture, or corporation respectively with the proposal. Otherwise, the Department will reject the proposal as irregular and unauthorized.

102.06 Irregular Proposals. The Department may consider proposals irregular and may reject the proposals for the following reasons:

(1) The proposal is a form not furnished by the Department, altered, or detached;

(2) The proposal contains unauthorized additions, conditions, or alternates. Also, the proposal contains irregularities that may tend to make the proposal incomplete, indefinite, or ambiguous to its meaning;

(3) The bidder adds provisions reserving the right to accept or reject an award. Also, the bidder adds provisions into a contract before an award;

(4) The proposal does not contain a unit price for each pay item listed except authorized optional pay items; and

(5) Prices for some items are out of proportion to the prices for other items.

(6) If in the opinion of the Director, the bidder and its listed subcontractors do not have the Contactor's licenses or combination of Contractor's licenses necessary to complete the work.

Where the prospective bidder is bidding on multiple projects simultaneously and the proposal limits the maximum gross amount of awards that the bidder can accept at one bid letting, the proposal is not irregular if the limit on the gross amount of awards is clear, and the Department selects the awards that can be given.

102.07 Proposal Guaranty. In as much as the contract to be executed is a price-term, open end, or requirements contract under which the contract price or total amount to be paid the Contractor cannot be determined at the time the contract is executed, the proposal guaranty required shall be five percent (5%) of the total amount bid in accordance with HRS §103D-323 and HAR §3-122-223.

The Department will not consider a proposal of $25,000 or more unless accompanied by:

(1) A deposit of legal tender; or

(2) A valid surety bid bond, underwritten by a company licensed to issue bonds in the State of Hawaii, in the form and composed, substantially, with the same language as provided herewith and signed by both parties; or

(3) A certificate of deposit, share certificate, cashier's check, treasurer's check, teller's check, or official check drawn by, or a certified check accepted by and payable on demand to the State by a bank, savings institution, or credit union insured by the Federal Deposit Insurance Corporation (FDIC) or the National Credit Union Administration (NCUA).

(a) The bidder may use these instruments only to a maximum of $100,000.

(b) If the required security or bond amount totals over $100,000 more than one instrument not exceeding $100,000 each and issued by different financial institutions shall be acceptable.

(c) The instrument shall be made payable at sight to the Department.

(d) If bidder elects options (1) or (3) above for its bid security, said bid security shall be in its original form and shall be submitted before the bid deadline to the Contract Office, Department of Transportation, Aliiaimoku Hale, 869 Punchbowl Street, Room 103, Honolulu, Hawaii 96813. Original surety bid bonds do not need to be submitted to the Contracts Office. Bidders are reminded that a copy of its surety bid bond shall be included with its bid submitted and uploaded to HIePRO.

102.08 Delivery of Proposal. Bidders shall submit and upload the complete proposal to HIePRO prior to the bid opening date and time. Proposals received after said due date and time shall not be considered. Any additional support documents explicitly designated as confidential and/or proprietary shall be uploaded as a separate file to HIePRO. Bidders shall not include confidential

and/or proprietary documents with the proposal. The record of each bidder and respective bid shall be open to public inspection. Original (wet ink, hard copy) proposal documents are not required to be submitted. Contract award shall be based on evaluation of proposals submitted and uploaded to HIePRO.

FAILURE TO UPLOAD THE COMPLETE PROPOSAL TO HIePRO SHALL BE GROUNDS FOR REJECTION OF THE BID.

If there is a conflict between the specification document and the HIePRO solicitation, the specifications shall govern and control, unless otherwise specified.

102.09 Withdrawal or Revision of Proposals. Bids may be modified or withdrawn prior to the bid opening date and time. Withdrawal or revision of proposal shall be completed, and submitted and uploaded to HIePRO prior to the bid opening date and time.

102.10 Public Opening of Proposals. Not applicable.

102.11 Disqualification of Bidders. The Department may disqualify a bidder and reject its proposal for the following reasons:

(1) Submittal of more than one proposal whether under the same or different name.

(2) Evidence of collusion among bidders. The Department will not recognize participants in collusion as bidders for any future work of the Department until such participants are reinstated as qualified bidders.

(3) Lack of proposal guaranty.

(4) Submittal of an unsigned or improperly signed proposal.

(5) Submittal of a proposal without a listing of subcontractors or containing only a partial or incomplete listing of subcontractors.

(6) Submittal of an irregular proposal in accordance with Subsection 102.06 - Irregular Proposals.

(7) Evidence of assistance from a person who has been an employee of the agency within the preceding two years and who participated while in State office or employment in the matter with which the contract is directly concerned, pursuant to HRS Chapter 84-15.

(8) Suspended or debarred in accordance with HRS Chapter 104-25.

(9) Failure to complete the prequalification questionnaire, if applicable.

(10) Failure to attend the mandatory pre-bid meeting, if applicable.

102.12 Material Guaranty. The successful bidder may be required to furnish a statement of the composition, origin, manufacture of materials, and samples.

102.13 Substitution of Materials and Equipment Before Bid Opening. See Subsection 106.13 for Substitution Of Materials and Equipment After Bid Opening.

(A) General. When brand names of materials or equipment are specified in the contract documents, they are to indicate a quality, style, appearance, or performance and not to limit competition. The bidder shall base its bid on one of the specified brand names unless alternate brands are qualified as equal or better in an addendum. As specified in the Notice to Bidders, all requests shall be posted as a question in HIePRO under the "Question and Answer" tab. Supporting documents for specific request shall be emailed to the Project Manager specified in the Notice to Bidders. Request must be posted in HIePRO and supporting documents received by the Project Manager via email no later than the RFI deadline in the Notice to Bidders.

An addendum will be issued to inform all prospective bidders of any accepted substitution in accordance with Subsection 102.16 – Addenda.

(B) Statement of Variances. The statement of variances must list all features of the proposed substitution that differ from the contract documents and must further certify that the substitution has no other variant features. The brochure and information submitted shall be clearly marked showing make, model, size, options, and any other features requested by the Engineer and must include sufficient evidence to evaluate each feature listed as a variance. A request will be denied if submitted without sufficient evidence. If after installing the substituted product, an unlisted variance is discovered, the Contractor shall immediately replace the product with a specified product at no increase in contract price and contract time.

(C) Substitution Denial. Any substitution request not complying with the above requirements will be denied.

102.14 Preferences. Preferences shall not apply to this Project.

102.15 Certification for Safety and Health Program for Bids in excess of $100,000. In accordance with HRS Chapter 396-18, the bidder or offeror, by signing and submitting this proposal, certifies that a written safety and health plan for this project will be available and implemented by the notice to proceed date for this project. Details of the requirements of this plan may be obtained from the State Department of Labor and Industrial Relations, Occupational Safety and Health Division (HIOSH).

102.16 Addenda. Addenda issued shall become part of the contract documents. Addenda to the bid documents will be provided to all prospective bidders via HIePRO. Each addendum shall be an addition to the contract documents. The terms and requirements of the bid documents (i.e., drawings, specifications and other bid and contract documents) cannot be changed prior to the bid opening except by a duly issued addendum."

END OF SECTION 102

Make this section a part of the Standard Specifications:

"SECTION 103 - AWARD AND EXECUTION OF CONTRACT

103.01 Consideration of Proposals. The Department will compare the proposals in terms of the summation of the products of the approximate quantities and the unit bid prices after the submittal date and time established in HIePRO. If a discrepancy occurs between the unit bid price and the bid price, the unit bid price shall govern.

The "Buy America" provisions in the Surface Transportation Assistance Act of 1982 is applicable to Federal-aid projects. Bidders may submit a bid based upon the furnishing and use of domestic steel or foreign steel. Manufacturing processes for domestic steel shall occur in the United States.

The Department reserves the right to reject proposals, waive technicalities or advertise for new proposals, if the rejection, waiver, or new advertisement favors the Department.

103.02 Award of Contract. The award of contract, if it be awarded, will be made within 60 calendar days after the opening of bids, to the lowest responsible and responsive bidder whose proposal complies with all the prescribed requirements. The Department may request the bidders to allow the Department to consider the bids for the issuance of an award beyond the 60-calendar 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. No response to request shall mean the bidder shall no longer be eligible for award.

(1) Requirement for Award. The Bidder, as proof of compliance with the requirements of section 103D-310(c), HRS, upon award of a contract made pursuant to section 103D-302, HRS, shall provide the documents listed below. The documents shall be submitted promptly to the Department. If a valid certificate/clearance is not submitted on a timely basis upon award, the Bidder may be deemed non-responsible. See also Subsection 108.03 – Preconstruction Data Submittal.

(A) Tax Clearance. Pursuant to §103D-310(c), 103-53 and 103D-328, HRS, the bidder shall submit a tax clearance certificate from the State of Hawaii Department of Taxation (DOTAX) and the Internal Revenue Service (IRS), subject to section 103D-328, HRS, current within six months of issuance date.

FORM A6, TAX CLEARANCE CERTIFICATE, is available at

the following website:

https://tax.hawaii.gov/

To receive DOTAX Forms by fax or mail, phone (808) 587-4242 or 1-800-222-3229.

The application for the Tax Clearance Certificate is the responsibility of the bidder. Bidder shall submit directly to the DOTAX or IRS. The approved certificate may then be submitted to the Department.

(B) DLIR Certificate of Compliance. Pursuant to §103D-310(c), HRS, the bidder shall submit a certificate of compliance for Hawaii Employment Security Law (Chapter 383, HRS), Workers' Compensation Law (Chapter 386, HRS), Temporary Disability Insurance (Chapter 392, HRS), and Prepaid Health Care Act (Chapter 393, HRS), from the State of Hawaii Department of Labor and Industrial Relations (DLIR), current within six months of issuance date.

FORM LIR#27, APPLICATION FOR CERTIFICATE OF COMPLIANCE WITH SECTION 3-122-112, HAR, is available at the following website:

http://labor.hawaii.gov/

Contact the DLIR Unemployment Insurance Division at (808) 586-8926 for additional information.

Inquiries regarding the status of a LIR#27 Form may be made by calling the DLIR Disability Compensation Division at (808) 586-9200.

The application for the Certificate of Compliance is the responsibility of the bidder. Bidder shall submit directly to the DLIR. The approved certificate may then be submitted to the Department.

(C) DCCA Certificate of Good Standing. Pursuant to §103D-310(c), HRS, the bidder shall submit a certificate of good standing from the business registration division (BREG) of the State of Hawaii Department of Commerce and Consumer Affairs (DCCA), current within six months of issuance date, to demonstrate it is either:

(1) Incorporated or organized under the laws of the State; or

(2) Registered to do business in the State as a separate branch or division that is capable of fully performing under the contract.

A Hawaii business that is a sole proprietorship, is not required to register with the BREG, and therefore not required to submit a certificate of good standing. Bidders are advised of costs associated with registering and obtaining a Certificate of Good Standing from the DCCA.

To purchase a CERTIFICATE OF GOOD STANDING, go to On-Line Services at the following website:

http://cca.hawaii.gov/

The application for the Certificate of Good Standing is the responsibility of the bidder. Bidder shall submit directly to the DCCA. The approved certificate may then be submitted to the Department.

(D) Hawaii Compliance Express (HCE). In lieu of the certificates referenced in subsection A, B, and C, the bidder may make available proof of compliance through a state procurement office designated certification process.

https://vendors.ehawaii.gov/hce/

This contract, to be awarded, is considered a requirement contract, as the pavement reconstruction, cold planing, and resurfacing by the Contractor will be made on an "as-needed" basis during the 12-month contract period. The State gives no assurance as to the number of services it will purchase.

The bidder must maintain an office on the Island of Oahu to be awarded the contract.

103.03 Cancellation of Award. The Department reserves the right to cancel the award of contracts before the execution of said contract by the parties. There will be no liability to the awardee and to other bidders.

103.04 Return of Proposal Guaranty. The Department will return the proposal guaranties, except those of the three lowest bidders, after the Department checks the proposals. The Department will return the proposal guaranties of the remaining two lowest bidders not awarded the contract within five working days following the execution of the contract. The Department will return the successful bidder's proposal guaranty after the successful bidder furnishes a bond and executes the contract.

103.05 Requirement of Contract Bond. At the time of execution of the contract, the successful bidder shall file a good and sufficient performance bond and a payment bond on the forms furnished by the Department conditioned for the full and faithful performance of the contract in accordance with the terms and intent thereof and for the prompt payment to all others for all labor and material furnished

by them to the bidder and used in the prosecution of the work provided for in the contract. The bidder shall limit the acceptable performance and payment bonds to the following:

(a) Legal tender;

(b) Surety bond underwritten by a company licensed to issue bonds in the State of Hawaii; or

(c) A certificate of deposit; share certificate; cashier's check; treasurer's check, teller's check drawn by, or a certified check accepted by and payable on demand to the State by a bank savings institution or credit union insured by the Federal Deposit Insurance Corporation (FDIC) or the National Credit Union Administration (NCUA).

1. The bidder may use these instruments only to a maximum of $100,000.

2. If the required security or bond amount totals over $100,000 more than one instrument not exceeding $100,000 each and issued by different financial institutions shall be acceptable.

Such bonds shall also by the terms inure to the benefit of any and all persons entitled to file claims for labor done or material furnished in the work so as to give them a right of action as contemplated by HRS Section 103D-324.

The contract bond required shall be furnished by the Contractor for the term of the contract (12 months). The bond of the contract shall be submitted to the State, or such additional time as may be granted by the State. Such bond for each extended year may be extensions of the original bond by endorsements thereto.

In as much as the contract to be executed is a price-term, open end, or requirements contract under which the contract price, or total amount to be paid the Contractor cannot be determined at the time the contract is executed, the performance and payment bond amount required for the work shall be as follows:

Proposal	Security Amount
B – Area 2	$15,000,000.00

The above amounts represent the performance and payment bond amounts required for the initial term of the contract. If work orders issued during the initial contract term exceed the original bond requirements, the procurement officer shall require additional performance and payment bonds to cover said work orders.

If the contract is extended beyond the initial term, the State shall require new bonds for each subsequent term. Such performance and payment bonds for each subsequent term, may be extensions of the original bond(s) by endorsements thereto, provided that, as to any claims which may have arisen or may arise while said bonds were in effect, said bonds shall remain in full force and effect.

The State and the Contractor may mutually agree to an adjustment of the bond amount as the scope of work is completed or as negotiated in each work order under the performance of this contract.

103.06 Execution of the Contract. The contract bond and HRS Chapter 104 - Compliance Certificate, similar to a copy of the same annexed hereto, shall be executed by the successful bidder and returned within ten days after the award of the contract or within such further time as the Director may allow after the bidder has received the contract for execution.

The contract shall not bind the Department unless said parties execute the contract and the Director of Finance endorses the bidder's certificate in accordance with HRS Section 103-39.

103.07 Failure to Execute Contract. Failure to execute the contract and file acceptable bonds shall be cause for the cancellation of the award in accordance with Subsection 103.06 - Execution of the Contract. Also, the Contractor forfeits the proposal guaranty which becomes the property of the Department. This is not a penalty, but liquidated damages sustained by the State. The Department may then make award to the next lowest responsible and responsive bidder, or the Department may readvertise and construct the work under contract."

END OF SECTION 103

SECTION 104 – SCOPE OF WORK

Make the following amendment to said Section:

(I) Amend **Subsection 104.01 - Intent of Contract, Duty of Contractor** by adding the following after line 10:

"Refer to Section 110 – INSTALLATION OF ASPHALT PAVEMENT PRESERVATION, RESURFACING, RECONSTRUCTION, ENHANCED PAVEMENT MARKING AND NEW MILLED RUMBLE STRIP AT VARIOUS LOCATIONS for further description of work."

(II) Amend **Section 104.06 - Methods of Price Adjustment** as follows:

"104.06 Methods of Price Adjustment.

(A) Any adjustment in the contract price pursuant to a change or claim shall be made in one or more of the following ways:

(1) By written agreement on a fixed price adjustment before commencement of the pertinent performance.

(2) By unit prices or other price adjustments specified in the contract or subsequently agreed upon before commencement of the pertinent performance.

(3) The Engineer may base the adjustment for a lump sum item on a calculated proportionate unit price. The Engineer will calculate the proportionate unit price by dividing the original contract lump sum price by the actual or original estimated quantity established by the contract documents.

(4) In any other lawful manner as the parties may mutually agree upon before commencement of the pertinent performance.

(5) At the sole option of the Engineer, work may be paid for on a force account basis in accordance with Subsection 109.06 - Force Account Provisions and Compensation.

(6) By the cost variations attributable to the events or situations with adjustment of profit and fee, all as specified in the contract or subsequently agreed upon before commencement of the pertinent performance.

(7) In the absence of agreement by the parties:

(a) For change orders with value not exceeding $50,000 by documented actual costs of the work, allowing for overhead and profit as set forth in Section 109.05 - Allowances for Overhead and Profit. A change order shall be issued within fifteen days of submission by the Contractor of proper documentation of completed force account work, whether periodic (conforming to the applicable billing cycle) or final. The Engineer shall return any documentation that is defective, to the Contractor within fifteen days after receipt, with a statement identifying the defect; or

(b) For change orders with value exceeding $50,000 by a unilateral determination by the Engineer of the costs attributable to the events or situations with adjustment of profit and fee, all as computed by the Engineer in accordance with applicable sections of HAR Chapters 3-123 and 3-126, and Section 109.05 - Allowances for Overhead and Profit. When a unilateral determination has been made, a unilateral change order shall be issued within ten days. Upon receipt of the unilateral change order, if the Contractor does not agree with any of the terms or conditions, or the adjustment or non-adjustment of the contract time or contract price, the Contractor shall file a notice of intent to claim within thirty days after the receipt of the written unilateral change order. Failure to file a protest within the time specified shall constitute agreement on the part of the Contractor with the terms, conditions, amounts, and adjustment or non-adjustment of the contract time or the contract price set forth in the unilateral change order.

A Contractor shall be required to submit cost or pricing data if any adjustment in contract price is subject to the provisions of HAR Chapter 3-122, Subchapter 15. A fully executed change order or other document permitting billing for the adjustment in price under any method listed in Subsections 104.06(1) through 104.06(7) shall be issued within ten days after agreement on the method of adjustment."

(III) Amend **Section 104.11(B) Contractor's Duty to Locate and Protect Utility** by adding the following after line 291:

"**(4)** The Contractor shall contact the Hawaii One Call Center at 811 prior to any excavation in a public right of way or on private property."

(IV) Amend **Section 104 - Scope of Work** by adding the following after line 318:

“104.13 Performance of Work. The Contractor shall perform work satisfactorily in the judgment of the Engineer during the contract period. If it appears at any time that the work contracted to be performed is not satisfactory, the Engineer may require the Contractor to furnish and place in operation such additional force and equipment as the Engineer shall deem necessary to bring the work up to satisfactory status. In case the Contractor fails to comply after five working days from the date of receipt of such a written order from the Engineer, the Engineer may employ a working force and equipment and charge the Contractor for the reasonable cost thereof including depreciation for equipment or he may terminate the contract.

104.14 Contract to be Open-Ended. The requirement for service 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 term of this contract and in such numbers as may be required by the State. The unit price bid indicated by the Contractor shall be applicable and binding under the terms of this contract.

Payment for services will be made by purchase order.”

END OF SECTION 104

SECTION 105 – CONTROL OF WORK

Make the following amendments to said Section:

(I) Amend **105.01 – Authority** to read as follows:

"**105.01 Authority.**

(A) Authority of the Engineer. The Engineer is the representative of the Director and has all the authority of the Director with respect to the contract. The Engineer will make decisions on all questions that may arise regarding the contract, such as, but not limited to:

(1) Interpretation of the contract documents.

(2) Acceptability of the materials furnished, and work performed.

(3) Manner of performance and rate of progress of the work.

(4) Acceptable fulfillment of the contract on the part of the Contractor.

(5) Compensation under the contract.

The Engineer's decisions on questions, claims, and disputes will be final and conclusive subject to Subsection 107.15 – Disputes and Claims.

The Engineer may delegate specific authority to act for the Engineer to a specific person or persons. Such delegation of authority shall be established in writing and shall become effective upon delivery to the Contractor.

(B) Authority of the Inspectors. Inspectors, as a representative of the Engineer or other agencies, will inspect the work done and materials furnished. Such inspection may extend to the preparation, fabrication, or manufacture of the materials to be used. The Inspector does not have authority vested in the Engineer unless specifically delegated in writing. The Inspector may not alter or waive the provisions of the contract, issue instructions contrary to the contract, or act as agent or representative of the Contractor.

Failure of an Inspector at any time to reject non-conforming work shall not be considered a waiver of the State's right to require work in strict conformity with the contract documents as a condition of final acceptance.

(C) Authority of the Consultant and Construction Management. The State may engage consultants and construction managements to perform duties in connection with the work. Unless otherwise specified in writing to the Contractor, such retained consultants and construction managements shall have no greater authority than an Inspector."

(II) Amend **Subsection 105.02 - Submittals** by revising the first paragraph from lines 52 to 61 to read as follows:

"**105.02 Submittals.** The contract contains the description of various items that the Contractor must submit to the Engineer for review and acceptance. The Contractor shall review all submittals for correctness, conformance with the requirements of the contract documents and completeness before submitting them to the Engineer. The submittal shall indicate the contract items and specifications subsections for which the submittal is provided. The submittal shall be legible and clearly indicate what portion of the submittal is being submitted for review. The Contractor shall provide six copies of the required submissions at the earliest possible date."

(III) Amend **Subsection 105.08 (A) - Furnishing Drawings and Special Provisions** to read as follows:

"**(A) Furnishing Drawings and Special Provisions.** The State will furnish the Contractor an electronic set of the special provisions and plans."

(IV) Amend **105.11 – Inspection of the Work and Materials** by adding the following paragraph after line 366:

All materials generated within the project site are considered solid waste. Solid waste shall be disposed of in accordance with Hawaii State Law HAR 11-58.1 and HRS Section 342H to the facility listed on the Solid Waste Disclosure Form. The contractor shall request and receive written approval from the Engineer before reusing any material in any other way than disposal.

(V) Amend **Subsection 105.14(D) – No Designated Storage Area** from lines 421 to 432 to read as follows:

"**(D) No Designated Storage Area.** If no storage area is designated within the contract documents, materials and equipment may be stored anywhere within the State highway right-of-way, provided such storage and access to and from such site, within the sole discretion of the Engineer, does not create a public or traffic hazard or an impediment to the movement of traffic."

(VI) Amend **Subsection 105.16(B) – Substituting Subcontractors** from line 487 to line 494 to read:

(B) Substituting Subcontractors. Under HRS Chapter 103D-302, the Contractor is required to list the names of persons or firms to be engaged by the Contractor as a subcontractor or joint contractor in the performance of the contract. No subcontractor may be added or deleted, unless authorized by the Engineer. Substitutions will be allowed only if the subcontractor:

END OF SECTION 105

-Make the following amendment to said Section:

SECTION 106 – MATERIAL RESTRICTIONS AND REQUIREMENTS

(I) Amend **106.05(B) – Deviations** by revising the third sentence from line 106 to 108 to read as follows:

> "Any deviations will be subject to Subsection 102.14 – Substitution of Materials and Equipment Before Bid Opening.

(II) Replace **106.11 – Steel and Iron Construction Material** lines 238 through 277 with the following:

106.11 Domestic Materials Procurement Preference. Federal-aid contracts are subject to the Domestic Materials Procurement Preference, as established by the Buy America Act (1978 Surface Transportation Assistance Act) and the Build America, Buy America (BABA) Act (2021 Infrastructure Investment and Jobs Act). This requirement applies to the following categories of products and materials that are permanently incorporated into the project.

(1) Iron or Steel Products, 23 CFR § 635.410 (Buy America).

(2) Construction Materials, 2 CFR Part 184 (BABA).

(3) Manufactured Products, 23 CFR § 635.410 (Buy America).

(4) Other materials, including BABA Section 70917(c) materials.

An article, material, or supply should not be considered to fall into multiple categories, except for precast concrete products and ITS and electronic hardware system cabinets and enclosures which are designated as falling into 2 categories: Manufactured Products and Steel or Iron in accordance with 23CFR 635.410(c)(2)(i) and (ii) and 106.11(C). The classification of an article, material, or supply into the categories must be based on its status at the time it is brought to the work site for incorporation into an infrastructure project. In general, the work site is the location of the infrastructure project at which the iron, steel, manufactured products, and construction materials will be incorporated.

(A) Iron and Steel Products. For Federal-aid projects, steel and iron products permanently incorporated into the project shall be melted and manufactured in the United States in accordance with 23 CFR § 635.410 Buy America Requirements.

Steel or iron products means articles, materials, or supplies that consist wholly or predominantly of iron or steel or a combination of both and the cost of the iron and steel content exceeds 50 percent of the total cost of all its components. The cost of iron and steel is the cost of the iron or steel mill products (such as bar, billet, slab, wire, plate, or sheet), castings, or forgings utilized in the manufacture of the product, and a good faith estimate of the cost of iron or steel components.

Manufacturing includes any process that modifies the chemical content, physical shape or size, or final finish of a product. The manufacturing process begins with initial melting and mixing and continues through fabrication (cutting, drilling, welding, bending, etc.) and coating. Coating includes epoxy coating, galvanizing, aluminizing, painting, and any other coating that protects or enhances the value of steel or iron.

(B) Construction Materials. Construction materials mean articles, materials, or supplies that consist of only one of the items listed below, except as provided in Subsection 106.11(C) – Manufactured Products subparagraphs (1) and (2). All manufacturing processes, as defined in 2 CFR § 184.6 for these construction materials, must occur in the United States.

(1) Non-ferrous metals.

(2) Plastic and polymer-based products such as:

(a) Polyvinylchloride.

(b) Composite building materials.

(c) Polymers used in fiber optic cables.

(3) Glass (including optic glass).

(4) Fiber optic cable (including drop cable).

(5) Optical fiber.

(6) Lumber.

(7) Engineered wood.

(8) Drywall.

BABA Section 70917(c) materials, as defined in 2 CFR § 184.3, do not require domestic sourcing or domestic material certification. BABA Section 70917(c) materials means:

(1) Cement and cementitious materials.

(2) Aggregates such as stone, sand, or gravel.

(3) Aggregate binding agents or additives.

(C) Manufactured Products. Buy America requirements apply to manufactured products. Manufactured products are defined as articles, materials, or supplies that have been processed into a specific form and shape or combined with other articles, materials, or supplies to create a product with different properties than the individual articles, materials, or supplies. For Federal-aid projects, all manufactured products must be produced in the United States.

For projects let on or after October 1, 2025, manufactured products shall be manufactured, including final assembly, in the United States.

For projects let on or after October 1, 2026, manufactured products shall be manufactured, including final assembly, in the United States. The cost of the components of the manufactured product that are mined, produced, or manufactured in the United States shall be greater than 55 percent of the total cost of all components of the manufactured product.

(1) Precast Concrete – Precast Concrete products that are classified as manufactured products, components of precast concrete products that consist wholly or predominantly of iron or steel or a combination of both, shall also meet the requirements of Subsection 106.11(A) – Iron and Steel Products.

(2) Intelligent Transportation and Electronic Hardware Systems – Intelligent transportation systems and other electronic hardware systems that are installed in the highway right of way or other real property and classified as manufactured products. The cabinets or other enclosures of such systems that consist wholly or predominantly of iron or steel or a combination of both shall also meet the requirements of Subsection 106.11(A) – Iron and Steel Products.

(D) Contractor Domestic Materials Preference (DMP) Form. The Prime Contractor shall provide a Contractor Domestic Materials Preference Form using the E-Construction platform. A DMP form must be submitted for iron, steel, construction materials, and manufactured products delivered to the project and permanently incorporated into the work. The Prime Contractor shall provide supporting documentation to assure the article, material, or supply meets the Domestic Materials Procurement Preference requirements as established in the Buy America Act (1978 Surface Transportation Assistance Act) and the Build America, Buy America (BABA) Act (2021 Infrastructure Investment and Jobs Act).

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS

Contractor Domestic Materials Preference (DMP) Form

(Required by Subsection 106.11)

Project Name:	
Project Number:	
Prime Contractor:	

Type of Material: ☐ Iron or Steel Product ☐ Construction Material ☐ Manufactured Product

Specify Main Type of Construction Material: ☐ Non-ferrous Metal ☐ Plastic & polymer-based products ☐ Glass ☐ Fiber optic cable ☐ Optical fiber ☐ Lumber ☐ Engineered wood ☐ Drywall

Description of Material or Product:

Pay Item No.:
Pay Item Name:
Description:

The following certification establishes the acceptance of materials or products according to the Contract Provisions, 2 CFR Part 184 and 23 CFR § 635.410.

☐ **Iron or Steel Product:** The materials furnished under this certification were produced in the United States, including all manufacturing processes, from the initial melting stage through the application of coatings.

☐ **Construction Material:** All manufacturing processes for the materials furnished under this certification occurred in the United States.

☐ **Manufactured Product:** The products furnished under this certification were produced in the United States.

The Prime Contractor shall provide supporting documentation to assure the article, material, or supply meets requirements. I understand that submitting false statements and/or information may result in civil and criminal penalties.

Prime Contractor's Authorized Representative Signature	Date
Printed Name	Title

******NOTE****** Contractor DMP Form must be filled out in ACC and submitted in ACC Forms module. Reference the form in the materials submittal.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS

Domestic Materials Reference Guide

Iron and Steel Products

- "Produced in the United States" means all manufacturing processes — from initial melting through application of coatings — must occur within the United States.

Construction Materials

For the materials listed below, all manufacturing processes must take place in the United States:

1. Non-Ferrous Metals (e.g., aluminum, copper): Smelting, melting thru shaping, coating, and assembly must all occur in the U.S.
2. Plastic and Polymer-Based Products: Every step — from mixing the raw plastic materials all the way to creating the final product — must occur in the U.S.
3. Glass: From raw material melting through annealing, cooling, and cutting, all processes must occur the U.S.
4. Fiber Optic Cable (including drop cable): All steps — starting with ribboning (if needed), then buffering, stranding the fibers together, and adding the outer jacket must occur in the US. Plus, the fiber optic cable must also meet the same U.S. manufacturing standards for making glass and optical fiber, but it doesn't have to follow the standards for non-ferrous metals, plastics and polymer- based products, or any others.
5. Optical Fiber: From the first step of making the preform (the solid glass rod) all the way through pulling it into thin fiber (the "draw" process), all must occur in the U.S.
6. Lumber: From debarking through treatment and planing, all processes must occur in the U.S.
7. Drywall: Blending gypsum and additives through panel cutting and drying must occur in the U.S.
8. Engineered Wood Products: Combining materials and creating the final form must occur in the U.S.

Manufactured Products

To qualify as "produced in the United States," two conditions must be met:

1. The product must be manufactured (including final assembly) in the U.S.
2. The cost of U.S.-mined, produced, or manufactured components must be greater than 55% of the total cost of all components.

Component cost determination:

- Purchased components: Includes purchase price, transport to manufacturing site, and duties.
- Manufacturer-made components: Include all production and transport costs (excluding profit).

Important Dates:

- For projects let on or after October 1, 2025: Products must be manufactured (including final assembly) in the U.S.
- For projects let on or after October 1, 2026: Products must meet both the U.S. manufacturing requirement and the greater than 55% U.S. components cost requirement. This means the cost of the components of the manufactured product that are mined, produced, or manufactured in the United States shall be greater than 55 percent of the total cost of all components of the manufactured product.
-

******NOTE****** Contractor DMP Form must be filled out in ACC and submitted in ACC Forms module. Reference the form in the materials submittal.

SECTION 107 - LEGAL RELATIONS AND RESPONSIBILITY TO PUBLIC

Make the following amendments to said Section:

(I) Amend **Section 107.01 Insurance Requirements** from lines 5 to 81 to read as follows:

"(A) Obligation of Contractor. Contractor shall not commence any work until it obtains, at its own expense, all required insurance described herein. Such insurance shall be provided by an insurance company authorized by the laws of the State to issue such insurance in the State of Hawaii. Coverage by a "Non-Admitted" carrier is permissible provided the carrier has a Best's Rating of "A-VII" or better. The Contractor shall maintain and ensure all insurance policies are current for the full period of the contract until final acceptance of the work by the State.

The Certificate of Insurance shall contain: a clause that it is agreed that any insurance maintained by the State of Hawaii will apply in excess of, and not contribute with, insurance provided by this policy; and shall be accompanied by endorsement form CG2010 or equivalent naming the State as an additional insured to the policy which status shall be maintained for the full period of the contract until final acceptance of the work by State.

The Contractor shall obtain all required insurance as part of the contract price. Where there is a requirement for the State of Hawaii and its officers and employees to be named as additional insureds under any Contractor's insurance policy, before the State of Hawaii issues the Notice to Proceed, the Contractor shall obtain and submit to the Engineer a Certificate of Insurance and a written policy endorsement that confirms the State of Hawaii and its officers and employees are additional insureds for the specific State project number and project title under such insurance policies. The written policy endorsement must be issued by the insurance company insuring the Contractor for the specified policy type or by an agent of such insurance company who is vested with the authority to issue a written policy endorsement. The insurer's agent shall also submit written confirmation of such authority to bind the insurer. Any delays in the issuance of the Notice to Proceed attributed to the failure to obtain the proof of the State of Hawaii and its officers and employees' additional insured status shall be charged to the Contractor.

A mere Certificate of Insurance issued by a broker who represents the Contractor (but not the Contractor's insurer), or by any other party who is not authorized to contractually name the State as an additional insured under the Contractor's insurance policy, is not sufficient to meet the Contractor's insurance obligations.

Certificates shall contain a provision that coverages being certified will not be cancelled or materially changed without giving the Engineer at least thirty (30) days prior written notice. Contractor will immediately provide written notice to the Director should any of the insurance policies evidenced on its Certificate of Insurance form be cancelled, reduced in scope or coverage, or not renewed upon expiration. Should any policy be canceled before final acceptance of the work by the State, and the Contractor fails to immediately procure replacement insurance as specified, the State, in addition to all other remedies it may have for such breach, reserves the right to procure such insurance and deduct the cost thereof from any money due or to become due to the Contractor.

Nothing contained in these insurance requirements is to be construed as limiting the extent of Contractor's responsibility for payment of damages resulting from its operations under this contract, including the Contractor's obligation to pay liquidated damages, nor shall it affect the Contractor's separate and independent duty to defend, indemnify and hold the State harmless pursuant to other provisions of this contract. In no instance will the State's exercise of an option to occupy and use completed portions of the work relieve the Contractor of its obligation to maintain the required insurance until the date of final acceptance of the work.

All insurance described herein shall be primary and cover the insured for all work to be performed under the contract, all work performed incidental thereto or directly or indirectly connected therewith, including but not limited to traffic detour work, barricades, warnings, diversions, lane closures, and other work performed outside the work area and all change order work.

The Contractor shall, from time to time, furnish the Engineer, when requested, satisfactory proof of coverage of each type of insurance required covering the work. Failure to comply with the Engineer's request may result in suspension of the work, and shall be sufficient grounds to withhold future payments due the Contractor and to terminate the contract for Contractor's default.

(B) Types of Insurance. Contractor shall purchase and maintain insurance described below which shall provide coverage against claims arising out of the Contractor's operations under the contract, whether such operations be by the Contractor itself or by any subcontractor or by anyone directly or indirectly employed by any of them or by anyone for whose acts any of them may be liable.

(1) Workers' Compensation. The Contractor shall obtain worker's compensation insurance for all persons whom they employ in carrying out the work under this contract. This insurance shall be in strict conformity with the requirements of the most current and applicable State of Hawaii Worker's Compensation Insurance laws in effect on the date of the execution of this contract and as modified during the duration of the contract.

(2) Auto Liability. The Contractor shall obtain Auto Liability Insurance covering all owned, non-owned and hired autos with a Combined single Limit of not less than $1,000,000 per occurrence for bodily injury and property damage with the State of Hawaii named as additional insured. Refer to SPECIAL CONDITIONS for any additional requirements.

(3) General Liability. The Contractor shall obtain General Liability insurance with a limit of not less than $2,000,000 per occurrence and in the Aggregates for each of the following:

(a) Products - Completed/Operations Aggregate,

(b) Personal & Advertising Injury, and

(c) Bodily Injury & Property Damage

The General Liability insurance shall include the State as an Additional Insured. The required limit of insurance may be provided by a single policy or with a combination of primary and excess policies. Refer to SPECIAL CONDITIONS for any additional requirements.

(4) Builders Risk For All Work. The Contractor shall take out a policy of builder's risk insurance for the full replacement value of the project work; from a company licensed or otherwise authorized to do business in the State of Hawaii; naming the State as an additional insured under each policy; and covering all work, labor, and materials furnished by such Contractor and all its subcontractors against loss by fire, windstorm, tsunamis, earthquakes, lightning, explosion, other perils covered by the standard Extended Coverage Endorsement, vandalism, and malicious mischief. Refer to SPECIAL CONDITIONS for any additional requirements."

END OF SECTION 107

Amend **Section 108** – **PROSECUTION AND PROGRESS** to read as follows:

"SECTION 108 – PROSECUTION AND PROGRESS

108.01 Notice to Proceed (NTP). A Notice To Proceed will be issued to the Contractor.

Separate Start Work Dates will be issued to the Contractor for each work order created. The Start Work Date issued for the work order will begin charging of time specified to complete the work order. Time specified to complete the work order will be followed in accordance with Subsection 108.05 – Contract Time. Liquidated damages for each work order will be enforced in accordance with Subsection 108.08 – Liquidated Damages for Failure to Complete the Work or Portions of the Work on Time.

In the event that the Contractor fails to start physical work within the time specified, the Engineer may terminate the contract in accordance with Subsection 108.11 – Termination of Contract for Cause.

During the period between the issuance of a work order and the Start Work Date the Contractor should adjust work forces, equipment, schedules, and procure materials and required permits, prior to beginning physical work.

Any physical work done prior to the Start Work Date will be considered unauthorized work. If the Engineer does not direct that the unauthorized work be removed, it shall be paid for after the Start Work Date and only if it is acceptable.

The Contractor shall notify the Engineer at least 24 hours before restarting physical work after a suspension of work pursuant to Subsection 108.10 – Suspension of Work.

Once physical work has begun, the Contractor shall work expeditiously and pursue the work diligently to completion with the contract time. If a portion of the work is to be done in stages, the Contractor shall leave the area safe and usable for the user agency and the public at the end of each stage.

108.02 Prosecution of Work. Unless otherwise permitted by the Engineer, in writing, the Contractor shall not commence with physical construction unless sufficient materials and equipment are available for either continuous construction or completion of a specified portion of the work.

108.03 Preconstruction Submittals. The awardee shall submit to the Engineer for information and review the pre-construction submittals within 21 calendar days from award. Until the items listed below are received and found acceptable by the Engineer, the Contractor shall not start physical work unless otherwise authorized to do so in writing and subject to such conditions set by the

Engineer. Charging of Contract Time will not be delayed, and additional contract time will not be granted due to Contractor delay in submitting acceptable preconstruction submittals. No progress payment will be made to the Contractor until the Engineer acknowledges, in writing, receipt of the following preconstruction submittals acceptable to the Engineer:

(1) List of the Superintendent and other Supervisory Personnel, and their contact information.

(2) Name of person(s) authorized to sign for the Contractor.

(3) Work Schedule including hours of operation.

(4) Initial Progress Schedule (See Subsection 108.06 – Progress Schedule).

(5) Water Pollution and Siltation Control Submittals, including Site-Specific Best Management Practice Plan.

(6) Solid Waste Disposal form.

(7) Tax Rates.

(8) Insurance Rates.

(9) Certificate of Insurance, satisfactory to the Engineer, indicating that the Contractor has in place all insurance coverage required by the contract documents.

(10) Schedule of agreed prices.

(11) List of suppliers.

(12) Traffic Control Plan, if applicable.

108.04 Character and Proficiency of Workers. The Contractor shall at all times provide adequate supervision and sufficient labor and equipment for prosecuting the work to full completion in the manner and within the time required by the contract. The superintendent and all other representatives of the Contractor shall act in a civil and honest manner in all dealings with the Engineer, all other State officials and representatives, and the public, in connection with the work.

All workers shall possess the proper license, certification, job classification, skill, training, and experience necessary to properly perform the work assigned to them.

The Engineer may direct the removal of any worker(s) who does not carry out the assigned work in a proper and skillful manner or who is disrespectful, intemperate, violent, or disorderly. The worker shall be removed forthwith by the Contractor and will not work again without the written permission of the Engineer.

108.05 Contract Time.

(A) Calculation of Contract Time. When the contract time is on a working day basis, the total contract time allowed for the performance of the work will be the number of working days shown in the contract plus any additional working days authorized in writing as provided hereinafter. The count of elapsed working days to be charged against contract time, will begin from the Start Work Date and will continue consecutively to the date of Substantial Completion. When multiple shifts are used to perform the work, the State will not consider the hours worked over the normal eight working hours per day or night as an additional working day.

When the contract is on a calendar day basis, the total contract time allowed for the performance of the work will be the number of days shown in the contract plus any additional days authorized in writing as provided hereinafter. The count of elapsed days to be charged against contract time will begin from the Start Work Date and will continue consecutively to the date of Substantial Completion. The Engineer will exclude days elapsing between the orders of the Engineer to suspend work and resume work for suspensions not the fault of the Contractor.

(B) Modifications of Contract Time. Whenever the Contractor believes that an extension of contract time is justified, the Contractor shall serve written notice on the Engineer not more than five working days after the occurrence of the event that causes a delay or justifies a contract time extension. Contract time may be adjusted for the following reasons or events, but only if and to the extent the critical path has been affected:

(1) Changes in the Work, Additional Work, and Delays Caused by the State. If the Contractor believes that an extension of time is justified on account of any act or omission by the State and is not adequately provided for in a field order or change order, it must request the additional time as provided above. At the request of the Engineer, the Contractor must show how the critical path will be affected and must also support the time extension request with schedules, as well as statements from its subcontractors, suppliers, or manufacturers, as necessary. Claims for compensation for any

altered or additional work will be determined pursuant to Subsection 104.02 – Changes.

Additional time to perform the extra work will be added to the time allowed in the contract without regard to the date the change directive was issued, even if the contract completion date has passed. A change requiring time issued after contract time has expired will not constitute an excusal or waiver of pre-existing Contractor delay.

(2) Delay for Permits. For delays in the routine application and processing time required to obtain necessary permits, including permits to be obtained from State agencies, the Engineer may grant an extension provided that the permit takes longer than 30 days to acquire and the delay is not caused by the Contractor, and provided that as soon as the delay occurs, the Contractor notifies the Engineer in writing that the permits are not available. Permits required by the contract that take less than 30 days to acquire from the time which the appropriate documents are granted shall be acquired between Notice to Proceed and Start Work Date or accounted for in the contractor's progress schedule. Time extensions will be the exclusive relief granted on account of such delays.

(3) Delays Beyond Contractor's Control. For delays caused by acts of God, a public enemy, fire, inclement weather days or adverse conditions resulting therefrom, earthquakes, floods, epidemics, quarantine restrictions, labor disputes impacting the Contractor or the State, freight embargoes and other reasons beyond the Contractor's control, the Contractor may be granted an extension of time provided that:

(a) In the written notice of delay to the Engineer, the Contractor describes possible effects on the completion date of the contract. The description of delays shall:

1. State specifically the reason or reasons for the delay and fully explain in a detailed chronology how the delay affects the critical path.

2. Include copies of pertinent documentation to support the time extension request.

3. Cite the anticipated period of delay and the time extension requested.

4. State either that the above circumstances have been cleared and normal working conditions restored as of a certain day or that the above circumstances will continue to prevent completion of the project.

(b) The Contractor shall notify the Engineer in writing when the delay ends. Time extensions will be the exclusive relief granted and no additional compensation will be paid the Contractor for such delays.

(4) Delays in Delivery of Materials or Equipment. For delays in delivery of materials or equipment, which occur as a result of unforeseeable causes beyond the control and without fault of the Contractor, its subcontractor(s) or supplier(s), time extensions shall be the exclusive relief granted and no additional compensation will be paid the Contractor on account of such delay. The delay shall not exceed the difference between the originally scheduled delivery date and the actual delivery date. The Contractor may be granted an extension of time provided that it complies with the following procedures:

(a) The Contractor's written notice to the Engineer must describe the delays and state the effect such delays may have on the critical path.

(b) The Contractor, if requested, must submit to the Engineer within five days after a firm delivery date for the material and equipment is established, a written statement regarding the delay. The Contractor must justify the delay as follows:

1. State specifically all reasons for the delay. Explain in a detailed chronology the effect of the delay on the critical path.

2. Submit copies of purchase order(s), factory invoice(s), bill(s) of lading, shipping manifest(s), delivery tag(s), and any other documents to support the time extension request.

3. Cite the start and end date of the delay and the time extension requested.

(5) Delays for Suspension of Work. When the performance of the work is totally suspended for one or more days (calendar or working days, as appropriate) by order of the Engineer in accordance

with Subsections 108.10(A)(1), 108.10(A)(2), or 108.10(A)(5) the number of days from the effective date of the Engineer's order to suspend operations to the effective date of the Engineer's order to resume operations shall not be counted as contract time and the contract completion date will be adjusted. During periods of partial suspensions of the work, the Contractor will be granted a time extension only if the partial suspension affects the critical path. If the Contractor believes that an extension of time is justified for a partial suspension of work, it must request the extension in writing at least five working days before the partial suspension will affect the critical operation(s) in progress. The Contractor must show how the critical path was increased based on the status of the work and must also support its claim if requested, with statements from its subcontractors. A suspension of work will not constitute a waiver of pre-existing Contractor delay.

(6) Contractor Caused Delays. No time extension will be granted under the following circumstances:

(a) Delays within the Contractor's control in performing the work caused by the Contractor, subcontractor, supplier, or any combination thereof.

(b) Delays within the Contractor's control in arrival of materials and equipment caused by the Contractor, subcontractor, supplier, or any combination thereof, in ordering, fabricating, and delivery.

(c) Delays requested for changes which do not affect the critical path.

(d) Delays caused by the failure of the Contractor to make submittals in a timely manner for review and acceptance by the Engineer, such as but not limited to shop drawings, descriptive sheets, material samples, and color samples except as covered in Subsection 108.05(B)(3) – Delays Beyond Contractor's Control and 108.05(B)(4) – Delays in Delivery of Materials or Equipment.

(e) Delays caused by the failure to submit sufficient information and data in a timely manner in the proper form in order to obtain necessary permits related to the work.

(f) Failure to follow the procedure within the time allowed by contract to request a time extension.

(g) Failure of the Contractor to provide evidence sufficient to support the time extension request.

(7) Reduction in Time. If the State deletes or modifies any portion of the work, an appropriate reduction of contract time may be made in accordance with Subsection 104.02 - Changes.

108.06 Progress Schedules.

(A) Forms of Schedule. All schedules shall be submitted using the specific computer program designated in the bid documents. If no such scheduling software program is designated, then all schedules shall be submitted using the latest version of Microsoft Project by Microsoft or approved equivalent software program.

Schedule submittals shall be as follows:

(1) For Contracts $2,000,000 or less or For Contract Time 100 Working Days or 140 Calendar Days or Less. For contracts of $2,000,000 or less or for contract time of 100 working days or 140 calendar days or less, the progress schedule will be a Time Scaled Logic Diagram (TSLD). The Contractor shall submit a TSLD submittal package meeting the following requirements and having these essential and distinctive elements:

(a) The major features of work, such as but not limited to BMP installation, grubbing, roadway excavation, structure excavation, structure construction, shown in the chronological order in which the Contractor proposes to work that feature or work and its location on the project. The schedule shall account for normal inclement weather, unusual soil or other conditions that may influence the progress of the work, schedules, and coordination required by any utility, off or on-site fabrications, and other pertinent factors that relate to progress;

(b) All features listed or not listed in the contract documents that the Contractor considers a controlling factor for the timely completion of the contract work.

(c) The time span and sequence of the activities or events for each feature, and its interrelationship and interdependencies in time and logic to other features in order to complete the project.

(d) The total anticipated time necessary to complete work required by the contract.

(e) A chronological listing of critical intermediate dates or time periods for features or milestones or phases that can affect timely completion of the project.

(f) Major activities related to the location on the project.

(g) Non-construction activities, such as submittal and acceptance periods for shop drawings and material, procurement, testing, fabrication, mobilization, and demobilization or order dates of long lead material.

(h) Set schedule logic for out of sequence activities to retain logic. In addition, open ends shall be non-critical.

(i) Show target bars for all activities.

(j) Vertical and horizontal sight lines both major and minor shall be used as well as a separator line between groups. The Engineer will determine frequency and style.

(k) The file name, print date, revision number, data and project title and number shall be included in the title block.

(l) Have columns with the appropriate data in them for activity ID, description, original duration, remaining duration, early start, early finish, total float, percent complete, resources. The resource column shall list who is responsible for the work to be done in the activity. These columns shall be to the left of the bar chart.

(2) For Contracts Which Have A Contract Amount More Than $2,000,000 Or Having A Contract Time Of More Than 100 Working Days Or 140 Calendar Days. For contracts which have a contract amount more than $2,000,000 or contract time of more than 100 working days or 140 calendar days, the Contractor shall submit a Timed-Scaled Logic Diagram (TSLD) meeting the following requirements and having these essential and distinctive elements:

(a) The information and requirements listed in Subsection 108.06(A)(1) – For Contracts $2,000,000 or Less or For Contract Time 100 Working Days or 140 Calendar Days or Less.

(b) Additional reports and graphics available from the software as requested by the Engineer.

(c) Sufficient detail to allow at least weekly monitoring of the Contractor and subcontractor's operations.

(d) The time scaled schematic shall be on a calendar or working days basis. What will be used shall be determined by how the contract keeps track of time. It will be the same. Plot the critical calendar dates anticipated.

(e) Breakdown of activity, such as forming, placing reinforcing steel, concrete pouring and curing, and stripping in concrete construction. Indicate location of work to be done in such detail that it would be easily determined where work would be occurring within approximately 200 feet.

(f) Latest start and finish dates for critical path activities.

(g) Identify responsible subcontractor, supplier, and others for their respective activity.

(h) No individual activity shall have duration of more than 20 calendar days unless requested and approved by the Engineer.

(i) All activities shall have work breakdown structure codes and activity codes. The activity codes shall have coding that incorporates information for phase, location, who is responsible for doing work and type of operation and activity description.

(j) Incorporate all physical access and availability restraints.

(B) Inspection and Testing. All schedules shall provide reasonable time and opportunity for the Engineer to inspect and test each work activity.

(C) Engineer's Acceptance of Progress Schedule. The submittal of, and the Engineer's receipt of any progress schedule, shall not be deemed an agreement to modify any terms or conditions of the contract. Any modifications to the contract terms and conditions that appear in or may be inferred from an acceptable schedule will not be valid or enforceable unless and until the Engineer exercises discretion to issue an appropriate change order. Nor shall any submittal or receipt imply the Engineer's approval of the schedule's breakdown, its individual elements, any critical path that may be shown, nor shall it obligate the State to make its personnel available outside normal working hours or the working hours established by the

Contract in order to accommodate such schedule. The Contractor has the risk of all elements (whether or not shown) of the schedule and its execution. No claim for additional compensation, time, or both, shall be made by the Contractor or recognized by the Engineer for delays during any period for which an acceptable progress schedule or an updated progress schedule as required by Subsection 108.06(E) – Contractor's Continuing Schedule Submittal Requirements had not been submitted. Any acceptance or approval of the schedule shall be for general format only and shall not be deemed an agreement by the State that the construction means, methods, and resources shown on the schedule will result in work that conforms to the contract requirements or that the sequences or durations indicated are feasible.

(D) Initial Progress Schedule. The Contractor shall submit an initial progress schedule. The initial progress schedule shall consist of the following:

(1) Four sets of the TSLD schedule.

(2) All the software files and data to re-create the TSLD in a computerized software format as specified by the Engineer.

(3) A listing of equipment that is anticipated to be used on the project. Including the type, size, make, year of manufacture, and all information necessary to identify the equipment in the Rental Rate Blue Book for Construction Equipment.

(4) An anticipated manpower requirement graph plotting contract time and total manpower requirement. This may be superimposed over the payment graph.

(5) A Method Statement that is a detailed narrative describing the work to be done and the method by which the work shall be accomplished for each major activity. A major activity is an activity that:

(a) Has a duration longer than five days.

(b) Is a milestone activity.

(c) Is a contract item that exceeds $10,000 on the contract cost proposal.

(d) Is a critical path activity.

(e) Is an activity designated as such by the Engineer.

Each Method Statement shall include the following items needed to fulfill the schedule:

(a) Quantity, type, make, and model of equipment.

(b) The manpower to do the work, specifying worker classification.

(c) The production rate per eight-hour day, or the working hours established by the contract documents needed to meet the time indicated on the schedule. If the production rate is not for eight hours, the number of working hours shall be indicated.

(6) Two sets of color time-scaled project evaluation and review technique charts ("PERT") using the activity box template of Logic – Early Start or such other template designated by the Engineer.

If the contract documents establish a sequence or order for the work, the initial progress schedule shall conform to such sequence or order.

(E) Contractor's Continuing Schedule Submittal Requirements. After the acceptance of the initial TSLD and when construction starts, the Contractor shall submit four plotted progress schedules, two PERT charts, and reports on all construction activities every two weeks (bi-weekly). This scheduled bi-weekly submittal shall also include an updated version of the project schedule in a computerized software format as specified by the Engineer. The submittal shall have all the information needed to re-create that time period's TSLD plot and reports. The bi-weekly submittal shall include, but not limited to, an update of activities based on actual durations, all new activities and any changes in duration or start or finish dates of any activity.

The Contractor shall submit with every update, in report form acceptable to the Engineer, a list of changes to the progress schedule since the previous schedule submittal. The Engineer may change the frequency of the submittal requirements but may not require a submittal of the schedule to be more than once a week. The Engineer may decrease the frequency of the submittal of the bi-weekly schedule.

The Contractor shall submit updates of the anticipated work completion graph, equipment listing, manpower requirement graph or method statement when requested by the Engineer. The Contractor shall submit such updates within 4 calendar days from the date of the request by the Engineer.

The Engineer may withhold progress payment until the Contractor is in compliance with all schedule update requirements.

(F) Float. All float appearing on a schedule is a shared commodity. Float does not belong to or exist for the exclusive use or benefit of either the State or the Contractor. The State or the Contractor has the opportunity to use available float until it is depleted. Float has no monetary value.

(G) Scheduled Meetings. The Contractor shall meet on a bi-weekly basis with the Engineer to review the progress schedule. The Contractor shall have someone attending the meeting that can answer all questions on the TSLD and other schedule related submittals.

(H) Accelerated Schedule; Early Completion. If the Contractor submits an accelerated schedule (shorter than the contract time), the Engineer's review and acceptance of an accelerated schedule does not constitute an agreement or obligation by the State to modify the contract time or completion date. The Contractor is solely responsible for and shall accept all risks and any delays, other than those that can be directly and solely attributable to the State, that may occur during the work, until the contract completion date. The contract time or completion date is established for the benefit of the State and cannot be changed without an appropriate change order or Substantial Completion granted by the State. The State may accept the work before the completion date is established, but is not obligated to do so.

If the TSLD indicates an early completion of the project, the Contractor shall, upon submittal of the schedule, cooperate with the Engineer in explaining how it will be achieved. In addition, the Contractor shall submit the above explanation in writing which shall include the State's part, if any, in achieving the early completion date. Early completion of the project shall not rely on changes to the Contract Documents unless approved by the Engineer.

(I) Contractor Responsibilities. The Contractor shall promptly respond to any inquiries from the Engineer regarding any schedule submission. The Contractor shall adjust the schedule to address directives from the Engineer and shall resubmit the TSLD package to the Engineer until the Engineer finds it acceptable.

The Contractor shall perform the work in accordance with the submitted TSLD. The Engineer may require the Contractor to provide additional work forces and equipment to bring the progress of the work into conformance with the TSLD at no increase in contract price or contract time whenever the Engineer determines that the progress of the work does not insure completion within the specified contract time.

108.07 Weekly Meeting. In addition to the bi-weekly schedule meetings, the Contractor shall be available to meet once a week with the Engineer at the time and place as determined by the Engineer to discuss the work and its progress including but not limited to, the progress of the project, potential problems, coordination of work, submittals, erosion control reports, etc. The Contractor's personnel attending shall have the authority to make decisions and answer questions.

The Contractor shall bring to weekly meetings a detailed work schedule showing the next three weeks' work. Number of copies of the detailed work schedule to be submitted will be determined by the Engineer. The three-week schedule is in addition to the TSLD and shall in no way be considered as a substitute for the TSLD or vice versa. The three-week schedule shall show:

(a) All construction events, traffic control and BMP related activities in such detail that the Engineer will be able to determine at what location and type of work will be done for any day for the next three weeks. This is for the State to use to plan its manpower requirements for that time period.

(b) The duration of all events and delays.

(c) The critical path clearly marked in red or marked in a manner that makes it clearly distinguishable from other paths and is acceptable to the Engineer.

(d) Critical submittals and requests for information (RFI's).

(e) The project title, project number, date created, period the schedule covers, Contractor's name and creator of the schedule on each page.

Two days prior to each weekly meeting, the Contractor shall submit a list of outstanding submittals, RFIs and issues that require discussion.

108.08 Liquidated Damages for Failure to Complete the Work or Portions of the Work on Time. The actual amount of damages resulting from the Contractor's failure to complete the contract in a timely manner is difficult to accurately determine. Therefore, the amount of such damages shall be liquidated damages as set forth herein and in the special provisions. The State may, at its discretion, deduct the amount from monies due or that may become due under the contract.

When the Contractor fails to reach substantial completion of the work for which liquidated damages are specified, within the time or times fixed in the contract or any extension thereof, in addition to all other remedies for breach that may be available to the State, the Contractor shall pay liquidated damages to the State, in the amount of $5,000.00 per working day.

(A) Liquidated Damages Upon Termination. If the State terminates on account of Contractor's default, liquidated damages may be charged against the defaulting Contractor and its surety until final completion of work.

(B) Liquidated Damages for Failure to Complete the Punchlist. The Contractor shall complete the work on any punchlist created after the pre-final inspection, within the contract time or any extension thereof.

When the Contractor fails to complete the work on such punchlist within the contract time or any extension thereof, the Contractor shall pay liquidated damages to the State of 20 percent of the amount of liquidated damages established for failure to substantially complete the work within contract time. Liquidated damages shall not be assessed for the period between:

(1) Notice from the Contractor that the project is substantially complete and the time the punchlist is delivered to the Contractor.

(2) The date of the completion of punchlist as determined by the Engineer and the date of the successful final inspection, and

(3) The date of the Final Inspection that results in Substantial Completion and the receipt by the Contractor of the written notice of Substantial Completion.

(C) Actual Damages Recoverable If Liquidated Damages Deemed Unenforceable. In the event a court of competent jurisdiction holds that any liquidated damages assessed pursuant to this contract are unenforceable, the State will be entitled to recover its actual damages for Contractor's failure to complete the work, or any designated portion of the work within the time set by the contract.

108.09 Rental Fees for Unauthorized Lane Closure or Occupancy. In addition to all other remedies available to the State for Contractor's breach of the terms of the contract, the Engineer will assess the rental fees in the amount of $500 for every one- to fifteen-minute increment for each roadway lane closed to public use or occupied beyond the time periods authorized in the contract or by the Engineer. The maximum amount assessed per day shall be $5,000. The State may, at its discretion, deduct the amount from monies due or that may become due under the contract. The rental fee may be waived in whole or part if the Engineer determines that the unauthorized period of lane closure or occupancy was due to factors beyond the control of the Contractor. Equipment breakdown is not a cause to waive liquidated damages.

FOR OAHU ONLY:

In addition to all other remedies available to the State for Contractor's breach of the terms of the contract, the Engineer will assess the rental fees in the amount of $1,500 (for Highways on Oahu) for every one-to fifteen-minute increment for each roadway lane closed to public use or occupied beyond the time periods authorized in the contract or by the Engineer. The maximum amount assessed per day shall be $15,000. The Engineer may assess liquidated damages for failure of the Contractor, for any reason, to maintain open lanes to the public in the amount of $2,500 (for Freeways on Oahu) for every one-to-fifteen-minute increment for each lane not open to the public. For Freeways, the maximum amount assessed per day shall be $25,000. The State may, at its discretion, deduct the amount from monies due or that may become due under the contract. The rental fee may be waived in whole or part if the Engineer determines that the unauthorized period of lane closure or occupancy was due to factors beyond the control of the Contractor. Equipment breakdown is not a cause to waive liquidated damages.

108.10 Suspension of Work.

(A) Suspension of Work. The Engineer may, by written order, suspend the performance of the work, either in whole or in part, for such periods as the Engineer may deem necessary, for any cause, including but not limited to:

(1) Weather or soil conditions considered unsuitable for prosecution of the work.

(2) Whenever a redesign that may affect the work is deemed necessary by the Engineer.

(3) Unacceptable noise or dust arising from the construction even if it does not violate any law or regulation.

(4) Failure on the part of the Contractor to:

(a) Correct conditions unsafe for the general public or for the workers.

(b) Carry out orders given by the Engineer.

(c) Perform the work in strict compliance with the provisions of the contract.

(d) Provide adequate supervision on the jobsite.

(5) The convenience of the State.

(B) Partial and Total Suspension. Suspension of work on some but not all items of work shall be considered a "partial suspension". Suspension of work on all items shall be considered "total suspension". The period of suspension shall be computed from the date set out in the written order for work to cease until the date of the order for work to resume.

(C) Reimbursement to Contractor. In the event that the Contractor is ordered by the Engineer in writing as provided herein to suspend all work under the contract for the reasons specified in Subsections 108.10(A)(2), 108.10(A)(3), or 108.10(A)(5) of the "Suspension of Work" paragraph, the Contractor may be reimbursed for actual direct costs incurred on work at the jobsite, as authorized in writing by the Engineer, including costs expended for the protection of the work. An allowance of 5 percent for indirect categories of delay costs will be paid on any reimbursed direct costs, including extended branch and home-office overhead and delay impact costs. No allowance will be made for anticipated profits. Payment for equipment which is ordered to standby during such suspension of work shall be made as described in Subsection 109.06(H) - Idle and Standby Equipment.

(D) Cost Adjustment. If the performance of all or part of the work is suspended for reasons beyond the control of the Contractor except an adjustment shall be made for any increase in cost of performance of this contract (excluding profit) necessarily caused by such suspension, and the contract modified in writing accordingly.

However, no adjustment to the contract price shall be made for any suspension, delay, or interruption:

(1) For weather related conditions.

(2) To the extent that performance would have been so suspended, delayed, or interrupted by any other cause, including the fault or negligence of the Contractor.

(3) Or, for which an adjustment is provided for or excluded under any other provision of this Contract.

(E) Claims for Adjustment. Any adjustment in contract price made shall be determined in accordance with Subsections 104.02 – Changes and 104.06 – Methods of Price Adjustment.

Any claims for such compensation shall be filed in writing with the Engineer within 30 days after the date of the order to resume work or the claim will not be considered. The claim shall conform to the requirements of Subsection 107.15(D) – Making of a Claim. The Engineer will take the claim under consideration, may make such investigations as are deemed

necessary and will be the sole judge as to the equitability of the claim. The Engineer's decision will be final.

(F) No Adjustment. No provision of this clause shall entitle the Contractor to any adjustments for delays due to failure of its surety, the cancellation or expiration of any insurance coverage required by the contract documents, for suspensions made at the request of the Contractor, for any delay required under the contract, for suspensions, either partial or whole, made by the Engineer under Subsection 108.10(A)(4) of the "Suspension of work" paragraph.

108.11 Termination of Contract for Cause.

(A) Default. If the Contractor refuses or fails to perform the work, or any separable part thereof, with such diligence as will assure its completion within the time specified in this contract, or any extension thereof, or commits any other material breach of this contract, and further fails within seven days after receipt of written notice from the Engineer to commence and continue correction of the refusal or failure with diligence and promptness, the Engineer may, by written notice to the Contractor, declare the Contractor in breach and terminate the Contractor's right to proceed with the work or the part of the work as to which there has been delay or other breach of contract. In such event, the State may take over the work, perform the same to completion, by contract or otherwise, and may take possession of, and utilize in completing the work, the materials, appliances, and plants as may be on the site of the work and necessary, therefore. Whether or not the Contractor's right to proceed with the work is terminated, the Contractor and the Contractor's sureties shall be liable for any damage to the State resulting from the Contractor's refusal or failure to complete the work within the specified time.

(B) Additional Rights and Remedies. The rights and remedies of the State provided in this contract are in addition to any other rights and remedies provided by law.

(C) Costs and Charges. All costs and charges incurred by the State, together with the cost of completing the work under contract, will be deducted from any monies due or which would or might have become due to the Contractor had it been allowed to complete the work under the contract. If such expense exceeds the sum which would have been payable under the contract, then the Contractor and the surety shall be liable and shall pay the State the amount of the excess.

In case of termination, the Engineer will limit any payment to the Contractor to the part of the contract satisfactorily completed at the time of termination. Payment will not be made until the work has satisfactorily been completed and all required documents, including the tax clearance required

by Subsection 109.11 – Final Payment are submitted by the Contractor. Termination shall not relieve the Contractor or Surety from liability for liquidated damages.

(D) Erroneous Termination for Cause. If, after notice of termination of the Contractor's right to proceed under this section, it is determined for any reason that good cause did not exist to allow the State to terminate as provided herein, the rights and obligations of the parties shall be the same as, and the relief afforded the Contractor shall be limited to, the provisions contained in Subsection 108.12 – Termination for Convenience.

108.12 Termination For Convenience.

(A) Terminations. The Director may, when the interests of the State so require, terminate this contract in whole or in part, for the convenience of the State. The Director will give written notice of the termination to the Contractor specifying the part of the contract terminated and when termination becomes effective.

(B) Contractor's Obligations. The Contractor shall incur no further obligations in connection with the terminated work and on the date set in the notice of termination the Contractor shall stop work to the extent specified. The Contractor shall also terminate outstanding orders and subcontracts as they relate to the terminated work. The Contractor shall settle the liabilities and claims arising out of the termination of subcontracts and orders connected with the terminated work subject to the State's approval. The Engineer may direct the Contractor to assign the Contractor's right, title, and interest under terminated orders or subcontracts to the State. The Contractor must still complete the work not terminated by the notice of termination and may incur obligations as necessary to do so.

(C) Right to Construction and Goods. The Engineer may require the Contractor to transfer title and to deliver to the State in the manner and to the extent directed by the Engineer, the following:

(1) Any completed work.

(2) Any partially completed construction, goods, materials, parts, tools, dies, jigs, fixtures, drawings, information, and contract rights (hereinafter called "construction material") that the Contractor has specifically produced or specially acquired for the performance of the terminated part of this contract.

(3) The Contractor shall protect and preserve all property in the possession of the Contractor in which the State has an interest. If the Engineer does not elect to retain any such property, the Contractor shall use its best efforts to sell such property and

construction materials for the State's account in accordance with the standards of HRS Chapter 490:2-706.

(D) Compensation.

(1) The Contractor shall submit a termination claim specifying the amounts due because of the termination for convenience together with cost or pricing data, submitted to the extent required by HAR Subchapter 15, Chapter 3-122. If the Contractor fails to file a termination claim within one year from the effective date of termination, the Engineer may pay the Contractor, if at all, an amount set in accordance with Subsection 108.12(D)(3).

(2) The Engineer and the Contractor may agree to a settlement provided the Contractor has filed a termination claim supported by cost or pricing data submitted as required and that the settlement does not exceed the total contract price plus settlement costs reduced by payments previously made by the State, the proceeds of any sales of construction, supplies, and construction materials under Subsection 108.12(C)(3), and the proportionate contract price of the work not terminated.

(3) Absent complete agreement, the Engineer will pay the Contractor the following amounts less any payments previously made under the contract:

(a) The cost of all contract work performed prior to the effective date of the notice of termination work plus a 5 percent markup on the actual direct costs, including amounts paid to subcontractor, less amounts paid or to be paid for completed portions of such work; provided, however, that if it appears that the Contractor would have sustained a loss if the entire contract would have been completed, no markup shall be allowed or included and the amount of compensation shall be reduced to reflect the anticipated rate of loss. No anticipated profit or consequential damage will be due or paid.

(b) Subcontractors shall be paid a markup of 10 percent on their direct job costs incurred to the date of termination. No anticipated profit or consequential damage will be due or paid to any subcontractor. These costs must not include payments made to the Contractor for subcontract work during the contract period.

(c) The total sum to be paid the Contractor shall not exceed the total contract price reduced by the amount of any sales of construction supplies, and construction materials.

(4) Cost claimed, agreed to, or established by the State shall be in accordance with HAR Chapter 3-123.

108.13 Pre-Final and Final Inspections.

(A) Inspection Requirements. Before the Engineer undertakes a final inspection of any work, a pre-final inspection must first be conducted. The Contractor shall notify the Engineer that the work has reached substantial completion and is ready for pre-final inspection.

(B) Pre-Final Inspection. Before notifying the Engineer that the work has reached substantial completion, the Contractor shall inspect the project and test all installed items with all of its subcontractors as appropriate. The Contractor shall also submit the following documents as applicable to the work:

(1) All written guarantees required by the contract.

(2) Two accepted final field-posted drawings as specified in Section 648 – Field-Posted Drawings;

(3) Complete weekly certified payroll records for the Contractor and Subcontractors.

(4) Certificate of Plumbing and Electrical Inspection.

(5) Certificate of building occupancy as required.

(6) Certificate of Soil and Wood Treatments.

(7) Certificate of Water System Chlorination.

(8) Certificate of Elevator Inspection, Boiler and Pressure Pipe Inspection.

(9) Maintenance Service Contract and two copies of a list of all equipment installed.

(10) Current Tax clearance. The contractor will be required to submit an additional tax clearance certificate when the final payment is made.

(11) And any other final items and submittals required by the contract documents.

(C) Procedure. When in compliance with the above requirements, the Contractor shall notify the Engineer in writing that the project has reached substantial completion and is ready for pre-final inspection.

The Engineer will then make a preliminary determination as to whether or not the project is substantially complete and ready for pre-final inspection. The Engineer may, in writing, postpone until after the pre-final inspection the Contractor's submittal of any of the items listed in Subsection 108.13(B) – Pre-Final Inspection, herein, if in the Engineer's discretion it is in the interest of the State to do so.

If, in the opinion of the Engineer, the project is not substantially complete, the Engineer will provide the Contractor a punchlist of specific deficiencies in writing which must be corrected or finished before the work will be ready for a pre-final inspection. The Engineer may add to or otherwise modify this punchlist from time to time. The Contractor shall take immediate action to correct the deficiencies and must repeat all steps described above including written notification that the work is ready for pre-final inspection.

After the Engineer is satisfied that the project appears substantially complete a final inspection shall be scheduled within ten working days after receipt of the Contractor's latest letter of notification that the project is ready for final inspection.

If, as a result of the pre-final inspection, the Engineer determines the work is not substantially complete, the Engineer will inform the Contractor in writing as to specific deficiencies which must be corrected before the work will be ready for another pre-final inspection. If the Engineer finds the work is substantially complete but finds deficiencies that must be corrected before the work is ready for final inspection, the Engineer will prepare in writing and deliver to the Contractor a punchlist describing such deficiencies.

At any time before final acceptance, the Engineer may revoke the determination of substantial completion if the Engineer finds that it was not warranted and will notify the Contractor in writing the reasons therefore together with a description of the deficiencies negating the declaration.

When the date of substantial completion has been determined by the State, liquidated damages for the failure to complete the punchlist, if due to the State will be assessed in pursuant to Subsection 108.08(B) - Liquidated Damages for Failure to Complete the Punchlist.

(D) Punchlist; Clean Up and Final Inspection. Upon receiving a punchlist after pre-final inspection, the Contractor shall promptly devote all

required time, labor, equipment, materials and incidentals to correct and remedy all punchlist deficiencies. The Engineer may add to or otherwise modify this punchlist until substantial completion of the project.

Before final inspection of the work, the Contractor shall clean all ground occupied by the Contractor in connection with the work of all rubbish, excess materials temporary structures and equipment, shall remove all graffiti and defacement of the work and all parts of the work and the worksite must be left in a neat and presentable condition to the satisfaction of the Engineer.

Final inspection will occur within ten working days after the Contractor notifies the Engineer in writing that all punchlist deficiencies remaining after the pre-final inspection have been completed and the Engineer concurs. If the Engineer determines that deficiencies still remain at the final inspection, the work will not be accepted and the Engineer will notify the Contractor, in writing, of the deficiencies which shall be corrected and the steps above repeated.

If the Contractor fails to correct the deficiencies and complete the work by the established or agreed date, the State may correct the deficiencies by whatever method it deems appropriate and deduct the cost from any payments due the Contractor.

108.14 Substantial Completion and Final Acceptance.

(A) Substantial Completion. When the Engineer finds that the Contractor has satisfactorily completed all work for the project in compliance with the contract, with the exception of the planting period and the plant establishment period, the Engineer will notify the Contractor, in writing, of the project's substantial completion, effective as of the date of the final inspection. The substantial completion date shall determine end of contract time and relieve contractor of any additional accumulation of liquidated damages for failure to complete the punchlist.

(B) Final Acceptance. When the Engineer finds that the Contractor has satisfactorily completed all contract work in compliance with the contract including all plant establishment requirements, and all the materials have been accepted by the State, the Engineer will issue a Final Acceptance Letter. The Final Acceptance date shall determine the commencement of all guaranty periods subject to Subsection 108.16 – Contractor's Responsibility for Work; Risk of Loss or Damage.

108.15 Use of Structure or Improvement. The State has the right to use the structure, equipment, improvement, or any part thereof, at any time after it is considered by the Engineer as available. In the event that the structure, equipment or any part thereof is used by the State before final acceptance, the Contractor is

not relieved of its responsibility to protect and preserve all the work until final acceptance.

108.16 Contractor's Responsibility for Work; Risk of Loss or Damage. Until the written notice of final acceptance has been received, the Contractor shall take every precaution against loss or damage to any part of the work by the action of the elements or from any other cause whatsoever, whether arising from the performance or from the non-performance of the work. The Contractor shall rebuild, repair, restore and make good all loss or damage to any portion of the work resulting from any cause before its receipt of the written notice of final acceptance and shall bear the risk and expense thereof.

The risk of loss or damage to the work from any hazard or occurrence that may or may not be covered by a builder's risk policy is that of the Contractor and Surety, unless such risk of loss is placed elsewhere by express language in the contract documents.

108.17 Guarantee of Work.

(1) Regardless of, and in addition to, any manufacturers' warranties, all work and equipment shall be guaranteed by the Contractor against defects in materials, equipment or workmanship for one year from the date of final acceptance or as otherwise specified in the contract documents.

(2) When the Engineer determines that repairs or replacements of any guaranteed work and equipment is necessary due to materials, equipment, or workmanship which are inferior, defective, or not in accordance with the terms of the contract, the Contractor shall, at no increase in contract price or contract time, and within five working days of receipt of written notice from the State, commence to all of the following:

(a) Correct all noted defects and make replacements, as directed by the Engineer, in the equipment and work.

(b) Repair or replace to new or pre-existing condition any damages resulting from such defective materials, equipment or installation thereof.

(3) The State will be entitled to the benefit of all manufacturers and installers warranties that extend beyond the terms of the Contractor's guaranty regardless of whether or not such extended warranty is required by the contract documents. The Contractor shall prepare and submit all documents required by the providers of such warranties to make them effective, and submit copies of such documents to the Engineer. If an available extended warranty cannot be transferred or assigned to the State as the ultimate user, the Contractor shall notify the Engineer who may direct that the warranted items be acquired in the name of the State as purchaser.

(4) If a defect is discovered during a guarantee period, all repairs and corrections to the defective items when corrected shall be guaranteed for a new duration equal to the original full guarantee period. The running of the guarantee period shall be suspended for all other work affected by any defect. The guarantee period for all other work affected by any such defect shall restart for its remaining duration upon confirmation by the Engineer that the deficiencies have been repaired or remedied.

(5) Nothing in this section is intended to limit or affect the State's rights and remedies arising from the discovery of latent defects in the work after the expiration of any guarantee period.

108.18 No Waiver of Legal Rights. The following will not operate or be considered as a waiver of any portion of the contract, or any power herein reserved, or any right to damages provided herein or by law:

(1) Any payment for, or acceptance of, the whole or any part of the work.

(2) Any extension of time.

(3) Any possession taken by the Engineer.

A waiver of any notice requirement or of any noncompliance with the contract will not be held to be a waiver of any other notice requirement or any other noncompliance with the contract.

108.19 Final Settlement of Contract.

(A) Closing Requirements. The contract will be considered settled after the project acceptance date and when the following items have been satisfactorily submitted, where applicable:

(1) All written guarantees required by the contract.

(2) Complete and certified weekly payrolls for the Contractor and its subcontractor's.

(3) Certificate of plumbing and electrical inspection.

(4) Certificate of building occupancy.

(5) Certificate for soil treatment and wood treatment.

(6) Certificate of water system chlorination.

(7) Certificate of elevator inspection, boiler and pressure pipe installation.

(8) Tax clearance.

(9) All other documents required by the Contract or by law.

(B) Failure to Meet Closing Requirements. The Contractor shall meet the applicable closing requirements within 60 days from the date of Project Acceptance or the agreed to Punchlist complete date. Should the Contractor fail to comply with these requirements, the Engineer may terminate the contract for cause."

END OF SECTION 108

SECTION 109 – MEASUREMENT AND PAYMENT

Make the following amendment to said Section:

(I) Amend **Subsection 109.05 Allowances for Overhead and Profit** by revising lines 101 to 110 to read as follows:

"**(1)** 20 percent of the direct cost for any work performed by the Contractor's own labor force.

(2) 20 percent of the direct cost for any work performed by each subcontractor's own labor force.

(3) For the Contractor or any subcontractor for work performed by their respective subcontractor or tier subcontractor, 10 percent of the amount due to the performing subcontractor or tier subcontractor."

(II) Amend **Subsection 109.08(B) Payment for Material On Hand** by revising lines 421 to 423 to read as follows:

"**(2)** The materials shall be stored and handled in accordance with Subsection 105.14 – Storage and Handling of Materials and Equipment."

(III) Amend **Subsection 109.11 Final Payment** by revising lines 568 to 576 to read as follows:

"**(3)** A current "Certificate of Vendor Compliance" issued by the Hawaii Compliance Express (HCE). The Certificate of Vendor Compliance is used to certify the Contractor's compliance with

(a) Section 103D-328, HRS (for all contracts $25,000 or more) which requires a current tax clearance certificate issued by the Hawaii State Department of Taxation and the Internal Revenue Service;

(b) Chapters 383, 386, 392, and 393, HRS; and

(c) Subsection 103D-310(c), HRS. The State reserves the right to verify that compliance is current prior to the issuance of final payment. Contractors are advised that non-compliance status will result in final payment being withheld until compliance is attained.

Sums necessary to meet the claims of any governmental agencies may be withheld from the sums due the Contractor until said

claims have been fully and completely discharged or otherwise satisfied."

END OF SECTION 109

Make this section part of the standard specifications:

"SECTION 110 – INSTALLATION OF ASPHALT PAVEMENT PRESERVATION, RESURFACING, RECONSTRUCTION, ENHANCED PAVEMENT MARKING AND NEW MILLED RUMBLE STRIP AT VARIOUS LOCATIONS

110.01 Scope of Work. The work shall consist of furnishing all labor, necessary equipment, materials and traffic control, to repair pavement and install pavement markings and milled rumble strips at various locations as requested. Pavement marking installation involves removing existing pavement markings, laying out and installing new pavement striping, crosswalk markings, pavement arrows, pavement words, pavement symbols, delineators, and pavement markers. Milled rumble strip installation involves the installation of milled rumble strips along the centerline and/or edgeline of the road. All work shall be performed within the existing pavement structure. All work shall be performed in a professional manner in accordance with current practices and this document. All asphalt and asphalt concrete base debris shall be removed daily at all locations. See Subsection 110.03 – Area of Coverage.

The Contractor shall work as directed by the Engineer or by the Highways Division's Oahu District Engineer.

The Department agrees to provide at least two weeks of pavement repair, pavement marking, and/or milled rumble strip work for each request.

The Contractor shall possess an "A" General Engineering Contractor's license, or "C-3" Asphalt Paving and Surfacing Contractor's license, or "C-3a" Asphalt Concrete Patching, Sealing, and Striping Contractor's license for the full term of the contract and shall have possessed the license prior to the award of the contract. Failure to meet this requirement shall be cause for disqualification.

Pavement repair shall consist of one of the following:

1. **2" Cold Planing and Resurfacing with Asphalt Pavement.** Cold-plane damaged or deteriorated pavement areas at a depth of two (2) inches and resurface with new 2 inches HMA Pavement, Mix No. IV or Stone Matrix Asphalt (SMA) Pavement or Polymer Modified Asphalt (PMA). The minimum width of the cold planed area shall be nine (9) feet wide to include both vehicle wheel ruts in the reconstructed area. The new resurfaced finish grade shall be the existing road grade. Pavement surface that varies more than 3/16 inch from testing edge of straightedge between two contacts exceeds surface tolerance.

Schedule the work so that the areas are resurfaced before the completion of the day's work.

2. 3" Cold Planing and Resurfacing with Asphalt Pavement. Cold-plane damaged or deteriorated pavement areas at a depth of three (3) inches and resurface with new 3 inches HMA Pavement, Mix No. IV or SMA Pavement. The minimum width of the cold planed area shall be nine (9) feet wide to include both vehicle wheel ruts in the reconstructed area. The new resurfaced finish grade shall be the existing road grade. Pavement surface that varies more than 3/16 inch from testing edge of straightedge between two contacts exceeds surface tolerance.

Schedule the work so that the areas are resurfaced before the completion of the day's work.

3. Reconstruction of Weakened Pavement Areas. Excavate to the depth as directed by the Engineer, backfill the excavated weakened pavement areas with Hot Mix Asphalt Base Course, and resurface with HMA Pavement, Mix No. IV. The new resurfaced finish grade shall be the existing road grade. Pavement surface that varies more than 3/16 inch from testing edge of straightedge between two contacts exceeds surface tolerance.

Prior to placement of the asphalt base course, the exposed subbase or subgrade shall be recompacted to a dense and unyielding condition.

The Contractor may elect to reconstruct the entire depth of the pavement reconstruction with HMA base course in preparation of cold planing as a separate operation, but the State will not pay for the extra HMA base course and excavation.

Schedule the work so that the excavated areas are backfilled before the completion of the day's work.

4. Scarify Existing Pavement. Scarify pavement as directed. The intention of this work is to enhance skid resistance on the highway. Scarifying shall be parallel to the direction of traffic flow, shall be accomplished with a cold planer, and at an amplitude not to exceed one-quarter inch (1/4") or as directed by the Engineer. The pavement shall be scarified as a width of 10 feet or as directed by the Engineer on the travel way only, and all existing pavement markings shall be preserved (in other words, scarify between the yellow and white stripes only). A seal coat of emulsified asphalt, diluted with water at a ratio of 1:1, shall be applied to the scarified areas.

5. Cut Cores in Existing Pavement. Cut four-inch (4") diameter sample cores to the full depth of the existing pavement. The intention of this work is to determine the condition of the underlying pavement structure and base. The number of cores and the location of the sampling shall be as directed. The core holes shall be filled with hot mix AC of the type used in the paving of the section being repaired.

6. Leveling of Existing Pavement. Install HMA Concrete Pavement to level dips, sags, and depressions as directed by the Engineer. The new leveled surface finish grade shall be the existing road grade. Pavement surface that varies more than 3/16 inch from testing edge of straightedge between two contacts exceeds surface tolerance.

7. Slurry Seal. See Section 404 – Slurry Seal.

If the existing pavement marking is required to be removed during pavement repair or other work done under this contract, the Contractor shall install temporary pavement markings. This work shall be considered incidental to the appropriate pavement repairs.

110.02 Contract Period and Option to Extend. The period of the contract shall be for 24 months commencing from the date indicated in the "Notice to Proceed" from the Department. There is an option to extend for three additional 12 month periods, without re-bidding, upon mutual agreement in writing prior to the contract expiration date. The maximum contract period is 60 months.

Failure by the Contractor to execute the amendment to extend the contract within the number of days specified under Section 103.07 - Failure to Execute Contract may be cause for cancellation of the written agreement to extend the contract and may be subject to disqualification from bidding future projects for a two-year period in accordance with Section 102.11 - Disqualification of Bidders.

To compensate for escalation during the maximum contract period the Department will adjust the Unit Prices of all items on the Proposal Schedule by 2% on the start date of an extension period. The price adjustment shall not be applied to contract change orders issued within the current contract year or work orders that have already been issued to the contractor.

The Department shall adjust the applicable prevailing wage determination in accordance with 29 CFR § 1.6(c)(2)(iii) when the option to extend is mutually agreed to in writing prior to the contract expiration date. The current prevailing wage rates, as determined by the U.S. Department of Labor and in effect on the

date of execution of the contract extension, shall apply to work covered under the contract extension.

110.03 Area of Coverage. The project requires the Contractor to repair pavement and install pavement markings and milled rumble strips at various locations within Area 2 on the Island of Oahu. The corresponding routes are shown on the attached map of the island of Oahu (Figure 1). Note: There are numerous side streets with or without route numbers along State highways where State Jurisdiction extends various distances into side streets.

(A) Area 2:

Route 76,	Fort Weaver Road Navy Reservation Gate to Interstate Route H-1
Route 93,	Farrington Highway Palailai Interchange to Kaena Point State Park
Route 93,	Farrington Highway (Makakilo Interchange) Intersection of Fort Barrette Road (901) and Makakilo Drive, 500 feet on both sides of intersection
Route 95,	Kalaeloa Boulevard and Malakole Street Palailai Interchange to Vicinity of Kaiholo Street
Route 750,	Kunia Road Interstate Route H-1 to Wilikina Drive (99)
Route 901,	Fort Barrette Road Barbers Point Naval Reservation to Makakilo Drive Overpass
Route 7101,	Farrington Highway Fort Weaver Road (76) to Waiawa Interchange
Route 7110,	Farrington Highway Fort Weaver Road (76) to Old Fort Weaver Road
Route 7141,	Iroquois Road Fort Weaver Road (76) to West Loch Ammunition Depot
Route 7142,	Waipahu Street Kamehameha Highway (99) to Makai End of H-1 Overpass
*Route H-1,	Kalaeloa Boulevard to Waiawa Interchange

*Note: Night work is required. Refer to Section 110.04 – Safety and Convenience.

110.04 Safety and Convenience. The Contractor shall at all times conduct his work to assure the least possible obstruction to public traffic. The Safety and convenience of the general public and the protection of persons and property is of utmost importance, and the Contractor shall provide appropriate traffic control and safety measures. The Contractor and his employees shall treat members of the

public in a fair and polite manner. Workers shall present a professional appearance and conduct themselves in a professional manner at all times.

All Traffic Control and safety measures shall be done in Conformance with the "Administrative Rules of Hawaii Governing the Use of Traffic Control Devices at Work Sites on or Adjacent to Public Streets and Highways" adopted by the Director of Transportation, and the current U.S. Federal Highway Administration "Manual on Uniform Traffic Control Devices (MUTCD), 2009 Edition. Costs for traffic control shall include set-up and removal of all signs, cones, delineators, barricades, flag persons, police officers, arrow boards, etc., and shall be included in the sign replacement proposal price. See Section 645 – Work Zone Traffic Control.

Do not close traffic lanes or slow down traffic during the following peak hours (unless otherwise approved by the engineer):

Morning Peak Hours	6:00 A.M. to 8:30 A.M.
Afternoon Peak Hours	3:00 P.M. to 6:00 P.M.

Above peak hours are daily except Saturdays, Sundays and holidays.

Morning Peak Hours from 6:00 A.M. to 9:00 A.M. shall be observed for Interstate Routes H-2 and H-3, Likelike and Pali Highways, Nimitz Highway/ Ala Moana Boulevard, and Fort Weaver Road.

Night work is required for Interstate Route H-1 (from Kalaeloa Boulevard to Waiawa Interchange). Allowable lane closure hours will vary depending on work locations and number of lanes to be closed. A noise variance permit is required and shall be obtained by the Contractor.

The Contractor must notify all private property owners in the vicinity where pavement repair is performed in the event that the work may hinder access to their property. The Contractor must also secure permission prior to entering private property to do pavement repair, if any.

The Contractor shall remove debris daily and shall leave the work site in a condition equal to or cleaner than prior to commencing work. The Contractor shall be responsible for all hauling and lawful disposal of debris. Any unauthorized or illegal disposal is grounds for termination of the contract.

110.05 Hours of Operation. The Contractor shall be available to provide the specified services during normal working hours and complete the services within the period specified in the work order or as directed by the Engineer. Normal working days and hours for the project are defined as Monday through Friday, 8:30 A.M. to 3:00 P.M., except for State holidays. Refer to Section 645 – Work Zone Traffic Control. Authorized Highways personnel will contact the Contractor to

schedule work, as needed. All services requested after normal work hours may be charged in accordance with Subsection 107.04 – Overtime and Night Work.

110.06 Disposal of Debris. The Contractor shall be responsible for all hauling and dump fees and shall include the cost of these items in his bid. Any unauthorized or illegal disposal is grounds for termination of the contract.

110.07 Work Orders. The Engineer or his representative shall prepare a work order (Figure 2) for each pavement repair or group of pavement repairs in the same location. Within 48 hours of receiving a work order, the Contractor shall submit a proposed work schedule that demonstrates that work will begin within 2 weeks and be completed by the date indicated on the work order. At certain work sites, erosion control plans or BMP plans will be requested by the Engineer. Submit the signed work order, proposed schedule and BMP plans for approval to the Oahu District Office, 727 Kakoi Street, Honolulu, Hawaii 96819. Work shall not be performed unless the Contractor receives an approval from the Engineer. The Engineer or his representative shall authorize any increases in the total price.

110.08 Basis of Payment. Pavement repairs, pavement marking, and milled rumble strip installation will be made through work orders placed with the Contractor during the contract period for which payment will be based on the quantities placed and the unit bid prices in the proposal schedule which prices shall include payment for all materials, equipment, tools, labor, and incidentals necessary to complete the work.

The Contractor shall submit monthly invoices to the Oahu District Office, 727 Kakoi Street, Honolulu, Hawaii 96819, if services are rendered. (See Subsection 109.08 - Progress Payments).

The contract unit prices shall be full compensation for furnishing all labor, materials (as listed in Section 104 SCOPE OF WORK), tools, equipment, trucks, traffic control, applicable taxes and incidentals to complete the work."

END OF SECTION 110

Amend **Section 209 - TEMPORARY WATER POLLUTION, DUST, AND EROSION CONTROL** to read as follows:

"SECTION 209 - TEMPORARY WATER POLLUTION, DUST, AND EROSION CONTROL

209.01 Description. This section describes the following:

(A) Including detailed plans, diagrams, and written Site-Specific Best Management Practices (BMP); constructing, maintaining, and repairing temporary water pollution, dust, and erosion control measures at the project site, including local material sources, work areas and haul roads; removing and disposing hazardous wastes; control of fugitive dust (defined as uncontrolled emission of solid airborne particulate matter from any source other than combustion); and complying with applicable State and Federal permit conditions.

(B) Work associated with construction stormwater, dewatering, and hydrotesting activities and complying with conditions of the National Pollutant Discharge Elimination System (NPDES) permit(s) authorizing discharges associated with construction stormwater, dewatering, and hydrotesting activities.

(C) Potential pollutant identification and mitigation measures are listed in Appendix A for use in the development of the Contractor's Site-Specific BMP.

Requirements of this section also apply to construction support activities including concrete or asphalt batch plants, rock crushing plants, equipment staging yards/areas, material storage areas, excavated material disposal areas, and borrow areas located outside the State Right-of-Way. For areas serving multiple construction projects, or operating beyond the completion of the construction project in which it supports, the Contractor shall be responsible for securing the necessary permits, clearances, and documents, and following the conditions of the permits and clearances, at no cost to the State.

209.02 Materials. Comply with applicable materials described in Chapters 2 and 3 of the current HDOT "Construction Best Management Practices Field Manual". In addition, the materials shall comply with the following:

(A) Grass. Grass shall be a quick growing species such as rye grass, Italian rye 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 Engineer.

(B) Fertilizer and Soil Conditioners. Fertilizer and soil conditioners shall be a standard commercial grade acceptable to the Engineer. Fertilizer shall conform to Subsection 619.02(H)(1) - Commercial Fertilizer.

(C) Hydro-mulching. Hydro-mulching used as a temporary vegetative stabilization measure shall consist of materials in Subsections 209.02(A) - Grass, and 209.02(B) – Fertilizer and Soil Conditioners. Mulches shall be recycled materials including bagasse, hay, straw, wood cellulose bark, wood chips, or other material acceptable to the Engineer. Mulches shall be clean and free of noxious weeds and deleterious materials. Potable water shall meet the requirements of Subsection 712.01 - Water. Submit alternate sources of irrigation water for the Engineer's acceptance if deviating from 712.01 - Water. Installation and other requirements shall be in accordance with portions of Section 641- Hydro-Mulch Seeding including 641.02(D) - Soil and Mulch Tackifier, 641.03(A) – Seeding, and 641.03(B) - Planting Period. Install non-vegetative controls including mulch or rolled erosion control products while the vegetation is being established. Water and fertilize grass. Apply fertilizer as recommended by the manufacturer. Replace grass the Engineer considers unsuitable or sick. Remove and dispose of trash and debris. Remove invasive species. Mow as needed to prevent site or signage obstructions, fire hazard, or nuisance to the public. Do not remove down stream sediment control measures until the vegetation is uniformly established, including no large bare areas, and provides 70 percent of the density of pre-disturbance vegetation. Temporary vegetative stabilization shall not be used longer than one year.

(D) Silt Fences. Comply with ASTM D6462, Standard Practice for Silt Fence Installation.

Alternative materials or methods to control, prevent, remove and dispose pollution are allowable if acceptable to the Engineer.

209.03 Construction.

(A) Preconstruction Requirements.

(1) Water Pollution, Dust, and Erosion Control Meeting. Schedule a water pollution, dust, and erosion control meeting with the Engineer after Site-Specific BMP is accepted in writing by the Engineer. Meeting shall be scheduled a minimum of 7 calendar days prior to the Start Work Date. Discuss sequence of work, plans and proposals for water pollution, dust, and erosion control.

(2) Water Pollution, Dust, and Erosion Control Submittals. Submit a Site-Specific BMP Plan within 21 calendar days of date of award. Submission of complete and acceptable Site-Specific BMP Plan is the sole responsibility of the Contractor and additional contract

time will not be issued for delays due to incompleteness. Include the following:

(a) Written description of activities to minimize water pollution and soil erosion into State waters, drainage or sewer systems. BMP shall include the following:

1. An identification of potential pollutants and their sources.

2. A list of all materials and heavy equipment to be used during construction.

3. Descriptions of the methods and devices used to minimize the discharge of pollutants into State waters, drainage or sewer systems.

4. Details of the procedures used for the maintenance and subsequent removal of any erosion or siltation control devices.

5. Methods of removing and disposing hazardous wastes encountered or generated during construction.

6. Methods of removing and disposing concrete and asphalt pavement cutting slurry, concrete curing water, and hydrodemolition water.

7. Spill Control and Prevention and Emergency Spill Response Plan.

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

9. Methods of storing and handling of oils, paints and other products used for the project.

10. Material storage and handling areas, and other staging areas.

11. Concrete truck washouts.

12. Concrete waste control.

13. Fueling and maintenance of vehicles and other equipment.

14. Tracking of sediment offsite from project entries and exits.

15. Litter management.

16. Toilet facilities.

17. Other factors that may cause water pollution, dust and erosion control.

(b) Provide plans indicating location of water pollution, dust and erosion control devices; provide plans and details of BMPs to be installed or utilized; show areas of soil disturbance in cut and fill, indicate areas used for construction staging and storage including items (1) through (17) above, storage of aggregate (indicate type of aggregate), asphalt cold mix, soil or solid waste, equipment and vehicle parking, and show areas where vegetative practices are to be implemented. Indicate intended drainage pattern on plans. Include flow arrows. Include separate drawing for each phase of construction that alters drainage patterns. Indicate approximate date when device will be installed and removed.

(c) Construction schedule.

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

(e) Description of fill material to be used.

(f) For projects with an NPDES Permit for Construction Activities, submit information to address all sections in the Storm Water Pollution Prevention Plan (SWPPP).

(g) For projects with an NPDES Permit, information required for compliance with the conditions of the Notice of General Permit Coverage (NGPC)/NPDES Permit.

(h) Site-Specific BMP Review Checklist. The checklist may be downloaded from HDOT's Stormwater Management website at http://stormwaterhawaii.com.

Date and sign Site-Specific BMP Plan. Keep accepted copy on site or at an accessible location so that it can be made

available at the time of an on-site inspection or upon request by the Engineer, HDOT Third-Party Inspector, and/or DOH/EPA Representative. Amendments to the Site-Specific BMP Plan shall be included with original Site-Specific BMP Plan. Modify SWPPP if necessary to conform to revisions. Include date of installation and removal of Site-Specific BMP measures. Obtain written acceptance by the Engineer before implementing revised Site-Specific BMPs in the field.

Follow the guidelines in the current HDOT "Construction Best Management Practices Field Manual", in developing, installing, and maintaining Site-Specific BMPs for all projects. For any conflicting requirements between the Manual and applicable bid documents, the applicable bid documents will govern. Should a requirement not be clearly described within the applicable bid documents, notify the Engineer immediately for interpretation. For the purposes of clarification "applicable bid documents" include the construction plans, standard specifications, special provisions, Permits, and the SWPPP when applicable.

Follow Honolulu's City and County "Rules for Soil Erosion Standards and Guidelines" for all projects on Oahu. Use respective Soil Erosion Guidelines for Maui, Kauai and Hawaii projects.

(B) Construction Requirements. Do not begin work until submittals detailed in Subsection 209.03(A)(2) - Water Pollution, Dust, and Erosion Control Submittals are completed and accepted in writing by the Engineer.

Install, maintain, monitor, repair and replace site-specific BMP measures, such as for water pollution, dust and erosion control; installation, monitoring, and operation of hydrotesting activities; removal and disposal of hazardous waste indicated on plans, concrete cutting slurry, concrete curing water; or hydrodemolition water. Site-Specific BMP measures shall be in place, functional and accepted by HDOT personnel prior to initiating any ground disturbing activities.

If necessary, furnish and install rain gage in a secure location prior to field work including installation of site-specific BMP. Provide rain gage with a tolerance of at least 0.05 inches of rainfall. Install rain gage on project site in an area that will not deter rainfall from entering the gate opening. Do not install in a location where rain water may splash into rain gage. The rain gage installation shall be stable and plumbed. Maintain rain gage and replace rain gage that is stolen, does not function properly or accurately, is worn out, or needs to be relocated. Do not begin field work until rain gage is installed and Site-Specific BMPs are in place. Rain gage data logs shall be

readily available. Submit rain gage data logs weekly to the Engineer.

Address all comments received from the Engineer.

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

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

Limit maximum surface area of earth material exposed at any time to 300,000 square feet. Do not expose or disturb surface area of earth material (including clearing and grubbing) until BMP measures are installed and accepted in writing by the Engineer. Protect temporarily or permanently disturbed soil surface from rainfall impact, runoff and wind before end of the work day.

Immediately initiate stabilizing exposed soil areas upon completion of earth disturbing activities for areas permanently or temporarily ceased on any portion of the site. Earth-disturbing activities have permanently ceased when clearing and excavation within any area of the construction site that will not include permanent structures has been completed. Earth-disturbing activities have temporarily ceased when clearing, grading, and excavation within any area of the site that will not include permanent structures will not resume for a period of 14 or more calendar days, but such activities will resume in the future. The term “immediately” is used in this section to define the deadline for initiating stabilization measures. “Immediately” means as soon as practicable, but no later than the end of the next work day, following the day when the earth-disturbing activities have temporarily or permanently ceased.

For projects with an NPDES Permit for Construction activities:

(1) For construction areas discharging into waters not impaired for nutrients or sediments, complete initial stabilization within 14 calendar days after the temporary or permanent cessation of earth-disturbing activities.

(2) For construction areas discharging into nutrient or sediment impaired waters, complete initial stabilization within 7 calendar days after the temporary or permanent cessation of earth-disturbing activities.

For projects without an NPDES Permit for Construction activities, complete initial stabilization within 14 calendar days after the temporary or permanent cessation of earth-disturbing activities.

Any of the following types of activities constitutes initiation of stabilization:

(1) Prepping the soil for vegetative or non-vegetative stabilization;

(2) Applying mulch or other non-vegetative product to the exposed area;

(3) Seeding or planting the exposed area;

(4) Starting any of the activities in items (1) – (3) above on a portion of the area to be stabilized, but not on the entire area; and

(5) Finalizing arrangements to have stabilization product fully installed in compliance with the deadline for completing initial stabilization activities.

Any of the following types of activities constitutes completion of initial stabilization activities:

(1) For vegetative stabilization, all activities necessary to initially seed or plant the area to be stabilized; and/or

(2) For non-vegetative stabilization, the installation or application of all such non-vegetative measures.

If the Contractor is unable to meet the deadlines above due to circumstances beyond the Contractor's control, and the Contractor is using vegetative cover for temporary or permanent stabilization, the Contractor may comply with the following stabilization deadlines instead as agreed to by the Engineer:

(1) Immediately initiate, and complete within the timeframe shown above, the installation of temporary non-vegetative stabilization measures to prevent erosion;

(2) Complete all soil conditioning, seeding, watering or irrigation installation, mulching, and other required activities related to the planting and initial establishment of vegetation as soon as conditions or circumstances allow it on the site; and

(3) Notify and provide documentation to the Engineer the circumstances that prevent the Contractor from meeting the deadlines above for stabilization and the schedule the Contractor will follow for initiating and completing initial stabilization and as agreed to by the

Engineer.

Follow the applicable requirements of the specifications and special provisions including Section 619 Planting and Section 641 Hydro-Mulch Seeding.

Immediately after seeding or planting the area to be vegetatively stabilized, to the extent necessary to prevent erosion on the seeded or planted area, select, design, and install non-vegetative erosion controls that provide cover (e.g., mulch, rolled erosion control products) to the area while vegetation is becoming established.

Protect exposed or disturbed surface area with mulches, grass seeds or hydromulch. Spray mulches at a rate of 2,000 pounds per acre. Add tackifier to mix at a rate of 85 pounds per acre. Apply grass seeds at a rate of 125 pounds per acre. For hydromulch, use the ingredients and rates required for mulches and grass seeds. Submit recommendations from a licensed Landscape Architect when deviating from the application rates above.

Apply fertilizer to mulches, grass seed or hydromulch per manufacturer's recommendations. Submit recommendations from a licensed Landscape Architect when deviating from the manufacturer's recommendations.

Install velocity dissipation measures when exposing erodible surfaces greater than 15 feet in height.

BMP measures shall be in place and operational at the end of work day or as required by Section 209.03(B) Construction Requirements**.**

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, sidewalk, or other paved area by the end of the same day in which the track-out occurs. Modify stabilized construction entrances to prevent mud from being tracked onto road. Stabilize entire access roads if necessary.

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

Provide temporary slope drains of rigid or flexible conduits to carry runoff from cuts and embankments. Provide portable flume at the entrance. Shorten or extend temporary slope drains to ensure proper function.

Protect ditches, channels, and other drainageways leading away from

cuts and fills at all times by either:

(1) Hydro-mulching the lower region of embankments in the immediate area.

(2) Installing check dams and siltation control devices.

(3) Other methods acceptable to the Engineer.

Provide for controlled discharge of waters impounded, directed, or controlled by project activities or erosion control measures.

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

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

Install or modify Site-Specific BMP measures 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 or a Site-Specific BMP that replaces an accepted Site-Specific BMP that is not satisfactorily performing. Modifications to Site-Specific BMP measures shall be accepted in writing by the Engineer prior to implementation.

Properly maintain all Site-Specific BMP measures.

For projects with an NPDES Permit for Construction Activities:

(1) For construction areas discharging into nutrient or sediment impaired waters, inspect, prepare a written report, and make repairs to BMP measures at the following intervals:

(a) Weekly.

(b) Within 24 hours of any rainfall of 0.25 inch or greater which occurs in a 24-hour period.

(c) When existing erosion control measures are damaged or not operating properly as required by Site-Specific BMP.

(2) For construction areas discharging to waters not impaired for nutrients or sediments, inspect, prepare a written report, and make repairs to BMP measures at the following intervals:

(a) Weekly.

(b) When existing erosion control measures are damaged or not operating properly as required by Site-Specific BMP.

For projects without an NPDES Permit for Construction activities, inspect, prepare a written report, and make repairs to BMP measures at the following intervals:

(a) Weekly.

(b) When existing erosion control measures are damaged or not operating properly as required by Site-Specific BMP.

Temporarily remove, replace or relocate any Site-Specific BMP that must be removed, replaced or relocated due to potential or actual flooding, or potential danger or damage to project or public.

Maintain records of inspections of Site-Specific BMP work. Keep continuous records for duration of the project. Submit copy of Inspection Report to the Engineer within 24 hours after each inspection.

The Contractor's designated representative specified in Subsection 209.03(A)(2)(d) shall address any Site-Specific BMP deficiencies brought up by the Engineer immediately, including weekends and holidays, and complete work to fix the deficiencies by the close of the next work day if the problem does not require significant repair or replacement, or if the problem can be corrected through routine maintenance. Address any Site-Specific BMP deficiencies brought up by the State's Third-Party Inspector in the timeframe above or as specified in the Consent Decree or MS4 NPDES Permit, whichever is more stringent. The Consent Decree timeframe requirement applies statewide. The MS4 NPDES Permit only applies to Oahu. In this section, "immediately" means the Contractor shall take all reasonable measures to minimize or prevent discharge of pollutants until a permanent solution is installed and made operational. If a problem is identified at a time in the day in which it is too late to initiate repair, initiation of repair shall begin on the following work day. When installation of a new pollution prevention control or a significant repair is needed, complete installation or repair no later than 7 calendar days from the time of notification/Contractor discovery. Notify the Engineer and document why it is infeasible to complete the installation or repair within 7 calendar days and complete the work as soon as practicable and as agreed to by the Engineer. Address Site-Specific BMP deficiencies discovered by the Contractor within the timeframe above. The Contractor's failure to satisfactorily address these Site-Specific BMP deficiencies, the Engineer reserves the right to employ outside assistance or use the Engineer's own labor forces to provide

necessary corrective measures. The Engineer will charge the Contractor such incurred costs plus any associated project engineering costs. The Engineer will make appropriate deductions from the Contractor's monthly progress estimate. Failure to apply Site-Specific BMP measures may result in one or more of the following: assessment of liquidated damages, suspension, or cancellation of Contract with the Contractor being fully responsible for all additional costs incurred by the State.

(C) Discharges of Storm Water Associated with Construction Activities. If work includes disturbance of one acre or more, an NPDES Permit authorizing Discharges of Storm Water Associated with Construction Activity (CWB-NOI Form C) or Individual Permit authorizing storm water discharges associated with construction activity is required from the Department of Health Clean Water Branch (DOH-CWB).

Do not begin construction activities until all required conditions of the permit are met and submittals detailed in Subsection 209.03(A)(2) – Water Pollution, Dust, and Erosion Control Submittals are completed and accepted in writing by the Engineer.

(D) Discharges Associated with Hydrotesting Activities. If hydrotesting activities require effluent discharge into State waters or drainage systems, an NPDES Hydrotesting Waters Permit (CWB-NOI Form F) or Individual Permit authorizing discharges associated with hydrotesting from DOH-CWB is required from the DOH-CWB.

Do not begin hydrotesting activities until the DOH-CWB has issued an Individual NPDES Permit or Notice of General Permit Coverage (NGPC). Conduct Hydrotesting operations in accordance with the conditions of the permit or NGPC.

(E) Discharges Associated with Dewatering Activities. If dewatering activities require effluent discharge into State waters or drainage systems, an NPDES Dewatering Permit (CWB-NOI Form G) or Individual Permit authorizing discharges associated with dewatering from DOH-CWB is required from the DOH-CWB.

Do not begin dewatering activities until the DOH-CWB has issued an Individual NPDES Permit or Notice of General Permit Coverage (NGPC). Conduct dewatering operations in accordance with the conditions of the permit or NGPC.

(F) Solid Waste. Submit the Solid Waste Disclosure Form for Construction Sites to the Engineer within 21 calendar days of date of award. Provide a copy of all the disposal receipts from the facility permitted by the Department of Health to receive solid waste to the Engineer monthly. This should also include documentation from any intermediary facility where solid

waste is handled or processed, or as directed by the Engineer.

(G) Construction BMP Training. The Contractor's representative responsible for development of the Site-Specific BMP Plan and implementation of Site-Specific BMPs in the field shall attend the State's Construction Best Management Practices Training. The Contractor shall keep training logs updated and readily available.

209.04 Measurement.

(A) Installation, maintenance, monitoring, and removal of BMP will be paid on a force account basis in accordance with Subsection 109.06 – Force Account Provisions and Compensation.

209.05 Payment. The Engineer will pay for accepted pay items listed below at contract price per pay unit, as shown in the proposal schedule. Payment will be full compensation for work prescribed in this section and contract documents.

The Engineer will pay for each of the following pay items when included in proposal schedule:

Pay Item	**Pay Unit**
Installation, Maintenance, Monitoring, and Removal of BMP	Force Account

An estimated amount for force account is allocated in proposal schedule under 'Installation, Maintenance, Monitoring, and Removal of BMP', but actual amount to be paid will be the sum shown on accepted force account records, whether this sum be more or less than estimated amount allocated in proposal schedule. The Engineer will pay for BMP measures requested by the Engineer that are beyond scope of accepted Site-Specific BMP on a force account basis.

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

For all citations or fines received by the Department for non-compliance, including compliance with NPDES Permit conditions, the Contractor shall reimburse State within 30 calendar days for full amount of outstanding cost State has incurred, or the Engineer will deduct cost from progress payment.

The Engineer will assess liquidated damages up to $27,500 per day for non-compliance of each BMP requirement and all other requirements in this section.

Appendix A

The following list identifies potential pollutant sources and corresponding BMPs used to mitigate the pollutants. Each BMP is referenced to the corresponding section of the current HDOT Construction Best Management Practices Field Manual or appropriate Supplemental Sheets. The Manual may be obtained from the HDOT Statewide Stormwater Management Program Website at *http://www.stormwaterhawaii.com/resources/contractors-and-consultants/* under Construction Best Management Practices Field Manual. Supplemental BMP sheets are located at *http://www.stormwaterhawaii.com/resources/contractors-and-consultants/storm-water-pollution-prevention-plan-swppp/* under Concrete Curing and Irrigation Water.

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Pollutant Source	Appropriate Site-Specific BMP to be Implemented	BMP Requirements
Construction debris, green waste, general litter	• *Separate contaminated clean up materials from construction and demolition (C&D) wastes.* • *Provide waste containers (e.g., dumpster or trash receptacle) of sufficient size and number to contain construction and domestic wastes.* • *Inspect construction waste and recycling areas regularly.* • *Schedule solid waste collection regularly.* • *Schedule recycling activities based on construction/demolition phases.* • *Empty waste containers weekly or when they are two-thirds full, whichever is sooner.* • *Do not allow containers to overflow. Clean up immediately if they do.* • *On work days, clean up and dispose of waste in designated waste containers.* • *See Solid Waste Management Section SM-6 for additional requirements.* • *Provide Storm Drain Inlet Protection and/or Perimeter Sediment Controls as applicable.* • *Collect and dispose of all waste materials in trash dumpsters. Place dumpsters, with secure watertight lids, away from storm water conveyances and drains, in a covered materials storage area.* • *Dispose of construction and non- construction solid waste in accordance with State DOH regs.* • *Load removed non- recyclable vegetation directly onto trucks; cover and transport to a licensed facility*	*See Solid Waste Management Section SM-6. Storm Drain Inlet Protection SC-1, and Perimeter Sediment Controls where applicable.*

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Pollutant Source	***Appropriate Site-Specific BMP to be Implemented***	***BMP Requirements***
Materials associated with the operation and maintenance of equipment, such as oil, fuel, and hydraulic fluid leakage	• *Use off-site wash racks, repair and maintenance facilities, and fueling sites when practical.* • *Designate bermed wash area if cleaning on site is necessary.* • *Place drip pans or drop cloths under vehicles and equipment to absorb spills or leaks.* • *Provide an ample supply of readily available spill cleanup materials.* • *Clean up spills immediately, using dry clean-up methods where possible, and dispose of used materials properly.* • *Do not clean surfaces or spills by hosing the area down.* • *Eliminate the source of the spill to prevent a discharge or a continuation of an ongoing discharge.* • *Inspect on-site vehicles and equipment regularly and immediately repair leaks.* • *Regularly inspect fueling areas and storage tanks.* • *Train employees on proper maintenance and spill practices and procedures and fueling and cleanup procedures.* • *Store diesel fuel, oil, hydraulic fluid, or other petroleum products or other chemicals in water-tight containers and provide cover or secondary containment.* • *Do not remove original product labels and comply with manufacturer's labels for proper disposal.* • *Dispose of containers only after all the product has been used.* • *Dispose of or recycle oil or oily wastes according to Federal, State, and Local requirements.* • *Store soaps, detergents, or solvents under cover or other means to prevent contact with rainwater.* • *See Vehicle and Equipment Cleaning, Maintenance, and Refueling, Sections SM-11, SM-12, and SM-13 and Material Storage and Handling Section SM-2 for additional requirements.*	*See Vehicle and Equipment Cleaning, Maintenance, and Refueling, Sections SM-11, SM-12, and SM-13, and Material Storage and Handling, Section SM-2, and Spill Prevention and Control SM-10.*

Pollutant Source	***Appropriate Site-Specific BMP to be Implemented***	***BMP Requirements***
Soil erosion from the disturbed areas	• *Provide Soil Stabilization, Slope Protection, Storm Drain Inlet Protection SC-1, Perimeter Controls and Sediment Barriers, Sediment Basins and Detention Ponds, Check Dams SC-3 ,Level Spreader EC-6, Paving Operations SM-20, Construction Roads and Parking Area Stabilization SC-10, Controlling Storm Water Flowing Onto and Through the Project, Post-Construction BMPs, and Non-Structural BMPs (Construction BMP Training SM-1, Scheduling SM-14, Location of Potential Sources of Sediment SM-15, Preservation of Existing Vegetation SM-17).* • *Delineate, and clearly mark off, with flags, tape, or other similar marking device all natural buffer areas defined in the SWPPP.* • *Preserve native topsoil where practicable.* • *In areas where vegetative stabilization will occur, restrict vehicle/equipment use in areas to avoid soil compaction or condition soil to promote vegetative growth.* • *For Storm Drain Inlet Protection, clean, or remove and replace, the protection measures as sediment accumulates, the filter becomes clogged, and/or performance is compromised.* • *Where there is evidence of sediment accumulation adjacent to the inlet protection measure, remove the deposited sediment by the end of the same day in which it is found or by the end of the following work day if removal by the same day is not feasible.* • *Sediment basins shall be designed and maintained in accordance with HAR Chapter 11-55.* • *Minimize disturbance on steep slopes (Greater than 15% in grade).* • *If disturbance of steep slopes are unavoidable, phase disturbances and use stabilization techniques designed for steep grades.* • *For temporary drains and swales use velocity dissipation devices within and at the outlet to minimize erosive flow velocities.*	*Soil Stabilization* *1. SM-22 Topsoil Management* *2. EC-12 Seeding and Planting* *3. EC-14 Mulching* *4. EC-11 Geotextiles and Mats* *Slope Protection* *1. EC-12 Seeding and Planting* *2. EC-14 Mulching* *3. EC-11 Geotextiles and Mats* *4. EC-4 Slope Roughening, Terracing, and Rounding* *5. EC-7 Slope Drains and Subsurface Drains* *6. EC-9 Slope Interceptor or Diversion Ditches/Berms* *SC-1 Storm Drain Inlet Protection*

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Pollutant Source	***Appropriate Site-Specific BMP to be Implemented***	*BMP Requirements*
		Perimeter Controls and Sediment Barriers *1. SC-7 Silt Fence or Filter Fabric Fence* *2. SC-2 Vegetated Filter Strips and Buffers* *3. SC-6 Compost Filter Berm/Sock* *4. SC-8 Sandbag Barrier* *5. SC-9 Brush or Rock Filter* *Sediment Basins and Detention Ponds* *1. SC-4 Sediment Trap* *2. SC-5 Sediment Basin* *SC-3 Check Dams* *EC-6 Level Spreader* *SM-20 Paving Operations* *SC-10 Construction Roads and Parking Area Stabilization*

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Pollutant Source	*Appropriate Site-Specific BMP to be Implemented*	*BMP Requirements*
		Controlling Storm Water Flowing onto and Through the Project *1. EC-3 Run-On Diversion* *2. EC-5 Earth Dike, Swales and Ditches* *Post Construction BMPs* *1. EC-2 Flared Culvert End Sections* *2. EC-10 Rip-Rap and Gabion Inflow Protection* *3. EC-8 Outlet Protection and Velocity Dissipation Devices* *4. SM-22 Topsoil Management* *Non-Structural BMPs* *1. SM-1 Construction BMP Training* *2. SM-14 Scheduling* *3. SM-15 Location of Potential Sources of Sediment* *4. SM-17 Preservation of Existing Vegetation*

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Pollutant Source	***Appropriate Site-Specific BMP to be Implemented***	***BMP Requirements***
Sediment from soil stockpiles	• *Locate stockpiles a minimum of 50 feet or as far as practicable from concentrated runoff or outside of any natural buffers identified on the SWPPP.* • *Place bagged materials on pallets and under cover.* • *Provide physical diversion to protect stockpiles from concentrated runoff.* • *Cover stockpiles with plastic or comparable material when practicable.* • *Place silt fence, fiber filtration tubes, or straw wattles around stockpiles.* • *Do not hose down or sweep soil or sediment accumulated on pavement or other impervious surfaces into any storm water conveyance (unless connected to a sediment basin, sediment trap, or similarly effective control), storm drain inlet, or state water.* • *Unless infeasible, contain and securely protect stockpiles from the wind.* • *Provide Storm Drain Inlet Protection and/or Perimeter Sediment Controls as applicable.* *See Stockpile Management Section SM-3 for additional requirements.*	*See Stockpile Management Section SM-3. Storm Drain Inlet Protection SC-1, and Perimeter Sediment Controls where applicable.*
Emulsified asphalt or prime/tack coat	• *Provide training for employees and contractors on proper material delivery and storage practices and procedures.* • *Restrict paving operations during wet weather to prevent paving materials from being discharged.* • *Use asphalt emulsions such as prime coat when possible.* • *Protect drain inlet structures and manholes during application of tack coat, seal coat, slurry seal, and fog seal.* • *Keep ample supplies of drip pans and absorbent materials on site.* • *Inspect inlet protection devices.* • *See Material Storage and Handling Section SM-2 and Paving Operations Section SM-20 for additional requirements.* • *Provide Storm Drain Inlet Protection and/or Perimeter Sediment Controls as applicable.*	*See Material Storage and Handling Section SM-2,* and Stockpile Management Section SM-3, *Paving Operations Section SM-20, Storm Drain Inlet Protection SC-1, and Perimeter Sediment Controls where applicable.*

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Pollutant Source	*Appropriate Site-Specific BMP to be Implemented*	*BMP Requirements*
Materials associated with painting, such as paint and paint wash solvent	• *Hazardous chemicals shall be well-labeled and stored in original containers.* • *Keep ample supply of cleanup materials on site.* • *Dispose container only after all of the product has been used.* • *Remove as much paint from brushes on painted surface.* • *Rinse from water-based paints shall be discharged into the sanitary sewer system where possible. If not, direct all washwater into a leak-proof container or leak-proof pit. The container or pit must be designed so that no overflows can occur due to inadequate sizing or precipitation.* • *Locate on-site wash area a minimum of 50 feet away or as far as practicable from storm drain inlets, open drainage facilities, or water bodies.* • *Do not dump liquid wastes into the storm drainage system.* • *Filter and re-use solvents and thinners.* • *Dispose of oil-based paints and residue as a hazardous waste.* • *Ensure collection, removal, and disposal of hazardous waste complies with regulations.* • *Immediately clean up spills and leaks.* • *Properly store paints, solvents, and epoxy compounds.* • *Properly store and dispose waste materials generated from painting and structure repair and construction activities.* • *Mix paints in a covered and contained area, when possible, to minimize adverse impacts from spills.* • *Do not apply traffic paint or thermoplastic if rain is forecasted.* • *See Material Storage and Handling Use SM-2, Hazardous Materials and Waste Management Section SM-9, Spill Prevention and Control Section SM-10, and Structure Construction and Painting Section SM-21 for additional requirements.* *Provide Storm Drain Inlet Protection and/or Perimeter Sediment Controls as applicable.*	*See Material Storage and Handling Use Section SM-2, Stockpile Management Section SM-3, Hazardous Materials and Waste Management Section SM-9, Waste Management, Spill Prevention and Control Section SM-10, and Structure Construction and Painting Section SM-21, Storm Drain Inlet Protection SC-1, and Perimeter Sediment Controls where applicable.*

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Pollutant Source	*Appropriate Site-Specific BMP to be Implemented*	*BMP Requirements*
Industrial chemicals, fertilizers, and/or pesticides	• *Hazardous chemicals shall be well-labeled and stored in original containers.* • *Keep ample supply of cleanup materials on site.* • *Clean up spills immediately, using dry clean-up methods where possible, and dispose of used materials properly.* • *Do not clean surfaces or spills by hosing the area down.* • *Eliminate the source of the spill to prevent a discharge or a furtherance of an ongoing discharge.* • *Dispose container only after all of the product has been used.* • *Retain a complete set of safety data sheets (formerly MSDS) on site.* • *Store industrial chemicals in water-tight containers and provide either cover or secondary containment.* • *Provide cover when storing fertilizers or pesticides to prevent these chemicals from coming into contact with rainwater.* • *Restrict amount of pesticide prepared to quantity necessary for the current application.* • *Do not apply fertilizers or pesticides during or just before a rain event.* • *Do not apply to stormwater conveyance channels with flowing water.* • *Comply with fertilizer and pesticide manufacturer's recommended usage and disposal instructions. Document departures from manufacturer's specifications in Attachment J.* • *Apply fertilizers at the appropriate time of year for the location, and preferably timed to coincide as closely as possible to the period of maximum vegetation uptake and growth.* • *Follow federal, state, and local laws regarding fertilizer application.* • *Do not dispose of toxic liquid wastes (solvents, used oils, and paints) or chemicals (additives, acids, and curing compounds) in dumpsters allocated for construction debris.*	*See Material Storage and Handling Use Section SM-2, Stockpile Management Section SM-3, and Hazardous Materials and Waste Management Section SM-9, and Spill Prevention and Control SM-10*

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Pollutant Source	*Appropriate Site-Specific BMP to be Implemented*	*BMP Requirements*
	• *Ensure collection, removal, and disposal of hazardous waste complies with regulations. Hazardous waste that cannot be reused or recycled shall be disposed of by a licensed hazardous waste hauler.* *See Material Storage and Handling Use SM-2, and Hazardous Materials and Waste Management Section SM-9 for additional requirements.*	
Hazardous waste (Batteries, Solvents, Treated Lumber, etc.)	• *Do not dispose of toxic materials in dumpsters allocated for construction debris.* • *Ensure collection, removal, and disposal of hazardous waste complies with regulations.* • *Hazardous waste that cannot be reused or recycled shall be disposed of by a licensed hazardous waste hauler.* • *Segregate and recycle wastes from vehicle/equipment maintenance activities such as used oil or oil filters, greases, cleaning solutions, antifreeze, automotive batteries, and hydraulic and transmission fluids.* • *Store waste in sealed containers, which are constructed of suitable materials to prevent leakage and corrosion, and which are labeled in accordance with applicable Resource Conservation and Recovery Act (RCRA) requirements and all other applicable federal, state, and local requirements.* • *All containers stored outside shall be kept away from surface waters and within appropriately sized secondary containment (e.g., spill berms, decks, spill containment pallets). Provide cover if possible.* • *Clean up spills immediately, using dry clean-up methods where possible, and dispose of used materials properly.* • *Do not clean surfaces or spills by hosing the area down.* • *Eliminate the source of the spill to prevent a discharge or a continuation of an ongoing discharge.*	*See Hazardous Materials and Waste Management Section SM-9 and Vehicle and Equipment Maintenance SM-12*

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Pollutant Source	***Appropriate Site-Specific BMP to be Implemented***	***BMP Requirements***
	• *Ensure collection, removal, and disposal of hazardous waste complies with manufacturer's recommendations and is in compliance with federal, state, and local requirements.* • *See Hazardous Materials and Waste Management Section SM-9 and Vehicle and Equipment Management, Vehicle and Equipment Maintenance SM-12 for additional requirements.*	
Metals and Building Materials	• *Inspect construction waste and recycling areas regularly.* • *Schedule solid waste collection regularly.* • *If building materials or metals are stored on site (such as rebar or galvanized poles) store under cover under tarps or in containers.* • *Minimize the amount of material stored on site.* • *Do not stockpile uncovered metals or other building materials in close proximity to discharge points.* • *See Solid Waste Management Section SM-6 for additional requirements.*	*See Solid Waste Management Section SM-6*
Contaminated Soil	• *See Waste Management, Contaminated Soil Management Section SM-8 and/or Hazardous Materials and Waste Management Section SM-9 for additional requirements.* • *At minimum contain contaminated material soil by surrounding with impermeable lined berms or cover exposed contaminated material with plastic sheets.*	*See Waste Management, Contaminated Soil Management Section SM-8 and/or Hazardous Materials and Waste Management Section SM-9*

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Pollutant Source	***Appropriate Site-Specific BMP to be Implemented***	***BMP Requirements***
Fugitive Dust Control and Dust Control Water	• *Do not over spray water for dust control purposes which will result in runoff from the area.* • *Apply water as conditions require.* • *Washing down of debris or dirt into drainage, sewage systems, or State waters is not allowed.* • *Minimize exposed areas through the schedule of construction activities.* • *Utilize vegetation, mulching, sprinkling, and stone/gravel layering to quickly stabilize exposed soil.* • *Direct construction vehicle traffic to stabilized roadways.* • *Cover dump trucks hauling material from the site with a tarpaulin.* *See Dust Control Section SM-19 for additional requirements.*	*See Dust Control Section SM-19*
Concrete Truck Wash Water	• *Disposal of concrete truck wash water via percolation is prohibited.* • *Wash concrete-coated vehicles or equipment off-site or in the designated wash area.* • *Locate on-site wash area a minimum of 50 feet away or as far as practicable from storm drain inlets, open drainage facilities, or water bodies.* • *Runoff from the on-site concrete wash area shall be contained in a temporary pit or level bermed area where the concrete can set.* • *Design the area so that no overflow can occur due to inadequate wash area sizing or precipitation.* • *The temporary pit shall be lined with plastic to prevent seepage of wash water into the ground.* • *Allow wash water to evaporate or collect wash water and all concrete debris in a concrete washout system bin.* • *Do not dump liquid wastes into storm drainage system.* • *Dispose of liquid and solid concrete wastes in compliance with federal, state, and local standards.* • *See Waste Management, Concrete Wash and Waste Management Section SM-4 for additional requirements.*	*See Waste Management, Concrete Wash and Waste Management Section SM-4*

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Pollutant Source	***Appropriate Site-Specific BMP to be Implemented***	***BMP Requirements***
Sediment Track-Out	• *Include Stabilized Construction Entrance at all points that exit onto paved roads.* • *A sediment trapping device is required if a wash rack is used in conjunction with the stabilized construction entrance/exit.* • *The pavement shall not be cleaned by washing down the street.* • *If sweeping is ineffective or it is necessary to wash the streets, wash water must be contained either by construction of a sump, diverting the water to an acceptable disposal area, or vacuuming the wash water.* • *Use BMPs for adjacent drainage structures.* • *Remove sediment tracked onto the street by the end of the day in which the track-out occurs.* • *Restrict vehicle use to properly designated exit points.* • *Include additional BMPs that remove sediment prior to exit when minimum dimensions cannot be met.* *See Stabilized Construction Entrance/Exit Section SC-11 for additional requirements.*	*See Stabilized Construction Entrance/Exit Section SC-11*
Irrigation Water	• *Consider irrigation requirements.* • *Where possible, avoid species which require irrigation.* • *Design, timing and application methods of irrigation water to eliminate the runoff of excess irrigation water into the storm water drainage system.* *See Seeding and Planting Section EC-12 and California Stormwater BMP Handbook SD-12 Efficient Irrigation included in SWPPP Attachment A for additional requirements.*	*See Seeding and Planting Section EC-12 and California Stormwater BMP Handbook SD-12 Efficient Irrigation*
Hydrotesting Effluent	• *If work includes removing, relocation or installing waterlines, and Contractor elects to flush waterline or discharge hydrotesting effluent into State waters or drainage systems, the Contractor shall prepare and obtain HDOT acceptance of a NOI/NPDES Permit Form F application for HDOT submittal to DOH CWB at least 30 calendar days prior to the start of Hydrotesting Activities if necessary. Site specific BMPs will be included in the NOI/NPDES Permit Form F submittal.*	*Site specific BMPs will be included in the NOI/NPDES Permit Form F submittal.*

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Pollutant Source	***Appropriate Site-Specific BMP to be Implemented***	***BMP Requirements***
Dewatering Effluent	*If excavation or backfilling operations require dewatering, and Contractor elects to discharge dewatering effluent into State waters or existing drainage systems, Contractor shall prepare and obtain HDOT acceptance of a NOI/NPDES Permit Form G application for HDOT submittal to DOH CWB at least 30 calendar days prior to the start of Dewatering Activities if necessary. See Site Planning and General Practices, Dewatering Operations Section SM-18 for additional requirements.*	*See Dewatering Operations SM-18. Site specific BMPs will be included in the NOI/NPDES Permit Form G submittal.*
Saw-cutting Slurry	• *Saw cut slurry shall be removed from the site by vacuuming.* • *Provide storm drain protection during saw cutting. See Paving Operations Section SM-20 for additional requirements.* *Provide Storm Drain Inlet Protection and/or Perimeter Sediment Controls as applicable.*	*See Paving Operations Section SM-20, Storm Drain Inlet Protection SC-1, Perimeter sediment controls where applicable*
Concrete Curing Water	• *Avoid overspraying of curing compounds.* • *Apply an amount of compound that covers the surface, but does not allow any runoff of the compound.* *See California Stormwater BMP Handbook NS-12 Concrete Curing included in SWPPP Attachment A for additional requirements.*	*See California Stormwater BMP Handbook NS-12 Concrete Curing*

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Pollutant Source	*Appropriate Site-Specific BMP to be Implemented*	*BMP Requirements*
Plaster Waste Water	• *Direct all washwater into a leak-proof container or leak-proof pit. The container or pit must be designed so that no overflows can occur due to inadequate sizing or precipitation.* • *Locate on-site wash area a minimum of 50 feet away or as far as practicable from storm drain inlets, open drainage facilities, or water bodies.* • *Any significant residual materials remaining on the ground after the completion of construction shall be removed and properly disposed. If the residual materials contaminate the soil, then the contaminated soil shall also be removed and properly disposed of.* • *Plaster waste water shall not be allowed to flow into drainage structures or State waters. See Material, Storage and Handling Use SM-2, Stockpile Management Use Section SM-3, and Hazardous Materials and Waste Management Section SM-9 for additional requirements.*	*See Material, Storage and Handling Use Section SM-2, Stockpile Management Use Section SM-3, and Hazardous Materials and Waste Management Section SM-9*
Water-Jet Wash Water	• *For Water-Jet Wash Water used to clean vehicles, use off site wash racks or commercial washing facilities when practical.* • *See Vehicle and Equipment Cleaning Section SM-11 for additional information.* • *For Water-Jet Wash Water used to clean impervious surfaces, the runoff shall not be allowed to flow into drainage structures or State Waters.*	*See Vehicle and Equipment Cleaning Section SM-11*
Sanitary/Septic Waste	• *Locate Sanitary facilities in a convenient place away from drainage facilities.* • *Position sanitary facilities so they are secure and will not be tipped over or knocked down.* • *Wastewater shall not be discharged to the ground or buried.* • *A licensed service provider shall maintain sanitary/septic facilities in good working order.* • *Schedule regular waste collection by a licensed transporter.* • *See Sanitary Waste Section SM-7 for additional requirements.*	*See Sanitary Waste Section SM-7.*

"

END OF SECTION 209

SECTION 301 – HOT MIX ASPHALT BASE COURSE

Make the following amendments to said Sections:

(I) Amend **Section 301.02 Materials** by replacing line 11 to read as follows:

"Asphalt Cement (PG 64-16)	702.01(A)
Asphalt Cement (polymer modified, PG 64E-22)	702.01(B)"

(II) Amend **Section 301.03(B) Compaction** by revising the second paragraph from lines 84 to 87 to read as follows:

"Compact mixture immediately upon completion of spreading operations to density of not less than 92.0 percent of maximum theoretical specific gravity in accordance with AASHTO T 209, modified by deletion of Supplemental Procedure for Mixtures Containing Porous Aggregate."

(III) Amend **Section 301.04 Measurement** from lines 98 to 100 to read as follows:

"**301.04 Measurement.**

The Engineer will measure HMAB course per square yard in accordance with contract documents."

(IV) Amend **Section 301.05 Payment,** from lines 102 to 111 to read as follows:

"**301.05 Payment.** The Engineer will pay for the accepted pay items listed below at the contract price per pay unit, as shown in the proposal schedule. Payment will be full compensation for the work prescribed in this section and the contract documents.

The Engineer will pay for the following pay items when included in the proposal schedule:

	Pay Item	**Pay Unit**
____	HMA Base Course	Square Yard
____	HMA Base Course (with PMA)	Square Yard

(1) 80% of the contract unit price upon completion of submitting a job-mix formula acceptable to the Engineer; preparing the surface, spreading, and finishing the mixture; and compacting the mixture by rolling;

(2) 20% of the contract unit price upon completion of cutting samples from the compacted pavement for testing; placing and compacting the sampled area with new material conforming to the surrounding area; protecting the pavement; and final analysis.

The Engineer may, in lieu of requiring removal and replacement, use the sliding scale factor to accept HMAB compacted below 92.0 percent. The Engineer will make payment for the material in that production day at a reduced price arrived at by multiplying the contract unit price by the pay factor shown in Table 301.05-1.

Table 301.05-1 – Sliding Scale Pay Factor

Percent Compaction	Percent Payment
92.0 or greater	100
90.0 – 91.9	80
<90.0	Removal

"

END OF SECTION 301

Amend Section 401- HOT MIX ASPHALT (HMA) PAVEMENT to read as follows:

"SECTION 401 – HOT MIX ASPHALT (HMA) PAVEMENT

401.01 Description. This section describes furnishing and placing dense graded hot mix asphalt (HMA) and polymer modified asphalt (PMA) pavement (herein referred to as HMA and PMA respectively) on a prepared surface. All requirements of this section for HMA shall apply to PMA, except as noted for asphalt cement material or as otherwise noted.

401.02 Materials.

Asphalt Cement (PG 64-16)	702.01(A)

Use for non-surface mixes, unless otherwise specified in the project documents.

Asphalt Cement (PG 64E-22)	702.01(B)

Use for all surface mixes, except for on Lanai and Molokai, and unless otherwise specified in the project documents. Polymer modified asphalt (PMA) pavement refers to dense graded asphalt mix using PG 64E-22, unless otherwise indicated.

Emulsified Asphalt	702.04
Warm Mix Asphalt Additive	702.06
Aggregate for Hot Mix Asphalt Pavement	703.09
Filler	703.15
Hydrated Lime or a liquid anti-strip approved by the engineer	712.03

(A) General. HMA pavement shall be plant mixed and shall include mixture of aggregate and asphalt binder and may include reclaimed asphalt pavement (RAP) or filler, or both.

The manufacture of HMA may include warm mix asphalt (WMA) processes in accordance with these specifications. WMA processes include combinations of organic additives, chemical additives, and foaming.

HMA pavement shall include surface course and may include one or more binder courses, depending on HMA pavement thickness indicated in the contract documents.

RAP is defined as removed or reprocessed pavement materials containing asphalt and aggregates. Process RAP by crushing until 100

percent of RAP passes 3/4-inch sieve. Size, grade uniformly, and combine materials such that blend of RAP and aggregate material conforms to grading requirements of Subsection 703.09 - Aggregate for Hot Mix Asphalt Pavement.

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

Quantity of filler material to correct deficiencies in aggregate gradation passing the No. 200 sieve shall not exceed 3 percent by weight of fine aggregates.

(B) Job-Mix Formula and Tests. Design job-mix formula in accordance with procedures contained in current edition of Asphalt Institute's *Mix Design Methods for Asphalt Concrete and Other Hot Mix Types,* Manual Series No. 2 (MS-2) for either Marshall Method or Hveem Method of Mix Design.

Limit compacted lift thickness and asphalt content of job-mix formula as specified in Table 401.02-1 - Limits of Compacted Lift Thickness and Asphalt Content.

TABLE 401.02-1 - LIMITS OF COMPACTED LIFT THICKNESS AND ASPHALT CONTENT

MIX NO.	II	III	IV	V
Minimum to Maximum Compacted Thickness for Individual Lifts (Inches)	2-1/4 to 3	2 to 3	1-1/2 to 3	1-1/4 to 3
Asphalt Content Limits (Percent of Total Weight of Mix)	3.8 to 6.1	4.3 to 6.1	4.3 to 6.5	4.8 to 7.0

Asphalt content limits for porous aggregate may be exceeded only if it is requested ahead of placement and is reviewed then accepted in writing by the Engineer.

Meet job-mix formula design criteria specified in Table 401.02-2 - Job-Mix Formula Design Criteria.

TABLE 401.02-2 - JOB-MIX FORMULA DESIGN CRITERIA	
Hveem Method Mix Criteria (AASHTO T 246 and AASHTO T 247)	
Stability, minimum	37
Air Voids (percent)[1]	3 - 5
Marshall Method Mix Criteria (AASHTO T 245)	
Compaction (number of blows each end of specimen)	75
Stability, minimum (pounds)	1,800
Flow (x 0.01 inch)	8 - 16
Air Voids (percent)[1]	3 - 5
Notes: 1. Air Voids: AASHTO T 166 or AASHTO T 275; AASHTO T 209, AASHTO T 269.	

Minimum percent voids in mineral aggregates (VMA) of job-mix formula shall be as specified in Table 401.02-3 - Minimum Percent Voids in Mineral Aggregates (VMA).

TABLE 401.02-3 - MINIMUM PERCENT VOIDS IN MINERAL AGGREGATES (VMA)					
Nominal Maximum Particle Size, (Inches)	1-1/2	1	3/4	1/2	3/8
VMA, (percent)[1]	11.0	12.0	13.0	14.0	15.0
Notes: 1. VMA: See Asphalt Institute Manual MS-2					

(C) Submittals. Establish and submit job-mix formula for each type of HMA pavement mix indicated in the contract documents a minimum of 30 days before paving production. Job mix shall include the following applicable information:

(1) Design percent of aggregate passing each required sieve size.

(2) Design percent of asphalt binder material (type determined by type of mix) added to the aggregate (expressed as % by weight of total mix),

(3) Design proportion of processed RAP.

(4) Design temperature of mixture at point of discharge at paver.

(5) Source of aggregate.

(6) Grade of asphalt binder.

(7) Test data used to develop job-mix formula.

Except for item (4) in this subsection, if design requirements are modified after the Engineer accepts job-mix formula, submit new job-mix formula before using HMA produced from modified mix design. Submit any changes to the design temperature of mixture at point of discharge for acceptance by the Engineer.

Submit a certificate of compliance for the asphalt binder, accompanied by substantiating test data from a certified testing laboratory.

(D) Range of Tolerances for HMA. Provide HMA within allowable tolerances of accepted job mix formula as specified in Table 401.02-4 - Range of Tolerances HMA. These tolerances are not to be used for the design of the job mix, they are solely to be used during the testing of the production field sample of the HMA mix.

TABLE 401.02-4 - RANGE OF TOLERANCES HMA	
Passing No. 4 and larger sieves (percent)	± 7.0
Passing No. 8 to No. 100 sieves (inclusive) (percent)	± 4.0
Passing No. 200 sieve (percent)	± 3.0
Asphalt Content (percent)	± 0.4
Mixture Temperature (degrees F)	± 20

The tolerances shown are the allowable variance between the physical characteristics of laboratory job mix submitted mix design and the production or operational mix, i.e., field samples.

401.03 Construction.

(A) Weather Limitations. Placement of HMA shall not be allowed under the following conditions:

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

(2) When air temperature is below 50 degrees F and falling. HMA may be applied when air temperature is above 40 degrees F and rising. Air temperature will be measured in shade and away from artificial heat.

(3) When weather conditions prevent proper method of construction.

(B) Equipment.

(1) Mixing Plant. Use mixing plants that conform to AASHTO M 156, supplemented as follows:

(a) All Plants.

1. Automated Controls. Control proportioning, mixing, and mix discharging automatically. When RAP is incorporated into mixture, provide positive controls for proportioning processed RAP.

2. Dust Collector. AASHTO M 156, Requirements for All Plants, Emission Controls is amended as follows:

Equip plant with dust collector. Dispose of collected material. In the case of baghouse dust collectors, dispose of collected material or return collected material uniformly.

3. Modifications for Processing RAP. When RAP is incorporated into mixture, modify mixing plant in accordance with plant manufacturer's recommendations to process RAP.

(b) Drum Dryer-Mixer Plants.

1. Bins. Provide separate bin in cold aggregate feeder for each individual aggregate stockpile in mix. Use bins of sufficient size to keep plant in continuous operation and of proper design to prevent overflow of material from one bin to another.

2. Stockpiling Procedures. Separate aggregate for Mix II, Mix III and Mix IV into at least three stockpiles with different gradations as follows: coarse, intermediate, and fine. Separate aggregates for Mix V into at least two stockpiles. Stockpile RAP separately from virgin aggregates.

3. Checking Aggregate Stockpile. Check condition of the aggregate stockpile often enough to ensure that the aggregate is in optimal condition.

(c) Batch and Continuous Mix Plants.

1. Hot Aggregate Bin. Provide bin with three or more separate compartments for storage of screened aggregate fractions to be combined for mix. Make partitions between compartments tight and of sufficient height to prevent spillage of aggregate from one compartment into another.

2. Load Cells. Calibrated load cells may be used in batch plants instead of scales.

(2) Hauling Equipment. Use trucks that have tight, clean, smooth metal beds for hauling HMA.

Thinly coat truck beds with a minimum quantity of non-stripping release agent to prevent mixture from adhering to beds. Diesel or petroleum-based liquid release agents, except for paraffin oil, shall not be used. Drain excess release agent from truck bed before loading with HMA.

Provide a designated clean up area for the haul trucks.

Equip each truck with a tarpaulin conforming to the following:

(a) In good condition, without tears and holes.

(b) Large enough to be stretched tightly over truck bed, completely covering mix. The tarpaulin shall be secured in such a manner that it remains stretched tightly over truck bed and HMA mix until the bed is about to be raised up in preparation for discharge.

(3) Asphalt Pavers. Use asphalt pavers that are:

(a) Self-contained, power-propelled units.

(b) Equipped with activated screed or strike-off assembly, heated if necessary.

(c) Capable of spreading and finishing courses of HMA mixtures in lane widths applicable to typical section and thicknesses indicated in the contract documents.

(d) Equipped with receiving hopper having sufficient capacity for uniform spreading operation.

(e) Equipped with automatic feed controls to maintain uniform depth of material ahead of screed.

(f) Equipped with automatic screed controls with sensors capable of sensing grade from outside reference line, sensing transverse slope of screed, and providing automatic signals to control screed grade and transverse slope.

(g) Capable of operating at constant forward speeds consistent with satisfactory laying of mixture.

(h) Equipped with a means of preventing the segregation of the coarse aggregate particles from the remainder of the bituminous plant mix when that mix is carried from the paver hopper back to the paver augers. The means and methods used shall be approved by the paver manufacturer and may consist of chain curtains, deflector plates, or other such devices and any combination of these.

The following specific requirements shall apply to the identified bituminous pavers:

1. **Blaw-Knox Bituminous Pavers.** Blaw-Knox bituminous pavers shall be equipped with the Blaw-Knox Materials Management Kit (MMK).

2. **Cedarapids Bituminous Pavers.** Cedarapids bituminous pavers shall be those that were manufactured in 1989 or later.

3. Barber-Green/Caterpillar Bituminous Pavers. Barber-Green/Caterpillar bituminous pavers shall be equipped with deflector plates as identified in the December 2000 Service Magazine entitled “New Asphalt Deflector Kit {6630, 6631, 6640}”.

Bituminous pavers not listed above shall have similar attachments or designs that shall make them equivalent to the bituminous pavers listed above. The Engineer will solely decide if it is equal to or better that the setups described for the equipment listed above.

Submit for review and acceptance, prior to the start of using the paver for the placing of plant mix, a full description in writing of the means and methods that will be used to prevent the bituminous paver from having both aggregate and temperature segregation. Use of any paver that has not been accepted is prohibited until acceptance of the paver is received from the Engineer. Any pavement placed with an unaccepted paver will be regarded as not compliant work and may not be paid for and may require removal.

Supply a Certificate of Compliance that verifies that the manufacturer’s approved means and methods used to prevent bituminous paver from having both aggregate and temperature segregation have been implemented on all pavers used on the project and are working in accordance with the manufacturer’s requirements and Contract Documents.

(4) Rollers. Rollers shall be self-propelled, steel-tired tandem, pneumatic-tired, or vibratory-type rollers capable of reversing without shoving or tearing the just placed HMA mixture. Provide sufficient number, sequencing, type, and rollers of sufficient weight to compact the mixture to required density while mixture is still in workable condition. Equipment shall not excessively crush aggregate. Operate rollers in accordance with manufacturer's recommendations and Contract Documents. The use of intelligent compaction is encouraged and may be required elsewhere in the Contract Documents.

(a) Steel-Tired Tandem Rollers. Steel-tired tandem rollers used for initial breakdown or intermediate roller passes shall have minimum gross weight of 12 tons and shall provide minimum 250-pound weight per linear inch of width on drive wheel.

Steel-tired tandem rollers used for finish roller passes

shall have minimum total gross weight of 3 tons.

Do not use roller with grooved or pitted rolling drum or worn scrapers or wetting pads. Replace excessively worn scrapers and wetting pads before use.

(b) Pneumatic-Tired Rollers. Pneumatic-tired rollers shall be oscillating-type, equipped with smooth-tread pneumatic tires of equal size and diameter. Maintain tire pressure within 5 pounds per square inch of designated operational pressure when hot. Space tires so that gaps between adjacent tires are covered by following set of tires.

Pneumatic-tired rollers used for breakdown or intermediate roller passes shall have a ballast capable of establishing an operating weight per tire of not less than 3,000 pounds. Equip rollers with tires having minimum 20-inch wheel diameter with tires inflated to 70 to 75 pounds per square inch pressure when cold and 90 pounds per square inch when hot. Equip rollers with skirt-type devices to maintain temperature of tires during rolling operations.

Pneumatic-tired rollers used for kneading finished asphalt surfaces shall have a ballast capable of establishing an operating weight per tire of not less than 1,500 pounds. Equip rollers with tires having minimum 15-inch wheel diameter with tires inflated to 50 to 60 pounds per square inch pressure. If required, equip rollers with skirt-type devices to maintain temperature of tires during rolling operations.

(c) Vibratory Rollers. Vibratory rollers shall be steel-tired tandem rollers having minimum total weight of 3 tons. Equip vibratory rollers with amplitude and frequency controls and speedometer. Operate vibratory roller in accordance with manufacturer's recommendations. For very thin lifts, 1 inch or less in thickness, vibratory rollers shall not be used in the vibratory mode. Instead, operate the unit in the static mode.

(5) Hand Tools. Keep hand tools used in production, hauling, and placement of HMA clean and free of contaminants. Diesel or mineral spirits or other cleaning material that is potentially deleterious to HMA may be used to clean hand tools providing:

(a) It does not contaminate HMA with cleaning material.

(b) Clean hand tools over catch pan with capacity to hold all

the cleaning material.

(c) Remove all diesel or mineral spirits or other cleaning material that is potentially deleterious to HMA from hand tools before using with HMA.

(d) Hand tools used shall be in a condition such that it meets the requirements that it was manufactured for, e.g., a straightedge shall meet the straightness requirement of the manufacturer.

(6) Material Transfer Vehicle (MTV).

(a) Usage. MTV usage applies to surface courses of paving projects on all Islands except Lanai, unless otherwise indicated. When placing HMA surface course use MTV to independently deliver mixtures from hauling equipment to paving equipment. MTV usage will not be required for the following:

1. Projects with less than 1,000 tons of HMA.

2. Temporary pavements.

3. Bridge deck approaches.

4. Shoulders.

5. Tapers.

6. Turning lanes.

7. Driveways.

8. Areas with low overhead clearances.

(b) Equipment. When using MTV, install minimum 10-ton-capacity hopper insert in conventional paver hopper. Provide the following equipment:

1. High-capacity truck unloading system in MTV capable of receiving HMA from hauling equipment.

2. MTV storage bin with minimum 15-ton capacity.

3. An auger mixing system in one of the following: the MTV storage bin, or paver hopper insert, or paver

hopper to continuously mix HMA prior to discharging to the paver's conveyor system.

Avoid stop-and-go operations by coordinating plant production rate, number of haul units, and MTV and paver speeds to provide a continuous, uniform, segregation-free material flow and smooth HMA pavement. Maintain uniform paver speed to produce smooth pavements.

(c) Performance Evaluation. Evaluate the performance of MTV and mixing equipment by measuring mat temperature profile immediately behind paver screed on first day of paving and when it feels the need to do so due to perceived changes in performance or as directed by the Engineer.

Use a hand-held temperature device that has been calibrated within the past 12 months. It shall be an infrared temperature gun is capable of measuring in one degree or finer increments between the temperatures of 80 degrees to 400 degrees F with a laser to indicate where the temperature reading is being taken. Six temperature profile measurements shall be taken of mat surface using infrared temperature gun at 50-foot intervals behind paver. Each temperature profile shall consist of three surface temperature measurements taken transversely across the mat in approximately a straight line from screed while paver is operating. For each profile, temperatures shall be measured approximately 1 foot from each edge and in middle of mat. The difference between maximum and minimum temperature measurements for each temperature profile shall not exceed 10 degrees F. If any two or more temperature profiles exceeds the allowable 10-degree F temperature differential, halt paving operation and adjust MTV or mixing equipment to ensure that material placed by paver meets specified temperature requirements. Redo the measuring of mat temperature profile until adjustment of the MTV or mixing equipment is adequate. Submit all temperature profiles to the Engineer by next business day. Information on the report shall show location and temperature readings and time test was performed. Enough information shall be given, so the Engineer will be able to easily locate the test site of the individual measurement.

When requested temperature profile measurements shall be done in the presence of the Engineer.

Once adjustments are made, repeat measurement procedure for the next two placements to verify that material

placed by paver meets specified temperature requirements. Terminate paving if temperature profile requirements are not met during repeated measurement procedure. If equipment fails to meet requirements after measurement procedure is repeated once, replace equipment before conducting any further temperature profile measurements

The Engineer may perform surface temperature profile measurements at any time during project. The Engineer may in lieu of a hand-held infrared temperature device use an infrared camera or device that is capable of measuring temperatures to locate cold spots. If such cold spots exist, the Engineer may require adjustments to the MTV.

If bleeding or fat spots occur in the pavement adjust means and methods to eliminate such pavement defects and perform remedial repair to pavement acceptable to the Engineer. Bleeding is defined as excess binder occurring on the surface of the pavement. It may create a shiny, glass-like, reflective appearance and may be tacky to the touch. Fat spots are localized bleeding.

(d) Transport.

1. Trailered MTV. Transport MTV by means of truck-tractor/trailer combination in accordance with Chapter 104 of Title 19, Department of Transportation, entitled “The Movement by Permit of Oversize and Overweight Vehicles on State Highways”.

2. Crossing Bridges for Self-Powered MTV. When self-powered MTV exceeds legal axle or total weight limits for vehicles under the HRS, Chapter 291, conform to the following when crossing bridges within project limits unless otherwise indicated in the Contract Documents:

a. Completely remove mix from MTV.

b. Move MTV at relatively constant speed not exceeding 5 miles per hour. MTV will not be allowed to stop on bridge.

c. No other vehicle or equipment will be allowed on bridge.

d. The MTV shall not attempt to cross a bridge where the posted load limit is less than or equal to the weight of the MTV empty. Permission to cross the bridge shall be obtained from the Engineer and HWY-DB in writing.

(C) Preparation of Surface. Clean existing pavement in accordance with Section 310 - Brooming Off. Apply tack coat in accordance with Section 407 - Tack Coat. Tack coat shall not be applied to surfaces to receive an application of joint adhesive.

Where indicated in the Contract Documents, bring irregular surfaces to uniform grade and cross section by furnishing and placing one or more leveling courses of HMA Mix V. Spread leveling course in variable thicknesses to eliminate irregularities in existing surface. Place leveling course such that maximum depth of each course, when thoroughly compacted, does not exceed 3 inches.

In multiple-lift leveling course construction, spread subsequent lifts beyond edges of previously spread lifts in accordance with procedures contained in current edition of the Asphalt Institute's *Construction of Hot Mix Asphalt Pavements,* Manual Series No. 22 (MS-22) for leveling wedges.

Notify the Engineer of existing surfaces that may not be in a condition that will have enough strength to be a good bonding surface or foundation and should be removed or have remedial repairs done before new pavement placement.

(D) Plant Operation.

(1) Preparation of Asphalt Binder. Uniformly heat asphalt binder and provide continuous supply of heated asphalt cement from storage to mixer. Do not heat asphalt binder above the recommendation of the supplier for modified binders or above 350 degrees F for neat binders.

(2) Preparation of Aggregate. Dry and heat aggregate material at temperature sufficient to produce design temperature of job-mix formula. Do not exceed 350 degrees F. Adjust heat source used for drying and heating to avoid damage to and contamination of aggregate. When dry, aggregate shall not contain more than 1 percent moisture by weight.

For batch plants, screen aggregates immediately after heating

and drying into three or more fractions. Convey aggregates into separate compartments ready for batching and mixing with asphalt binder.

(3) Mixing. Measure aggregate and asphalt; or aggregate, RAP, and asphalt into mixer in accordance with an accepted job-mix formula. Mix until components are completely mixed and adequately coated with asphalt binder in accordance with AASHTO M 156. Percent of coated particles shall be 95 percent when tested in accordance with AASHTO T 195.

(4) Plant Inspection. For control and acceptance testing during periods of production, provide a testing laboratory that meets the requirements of AASHTO M 156. Provide space, utilities, and equipment required for performing specified tests.

(E) Spreading and Finishing. Prior to each day's paving operation, check screed or strike-off assembly surface with straight edge to ensure straight alignment and there is no damage or wear to the machine that will affect performance. Provide screed or strike-off assembly that produces finished surface without tearing, shoving, and gouging HMA. Discontinue using spreading equipment that leaves ridges, indentations, or other marks, or combination thereof in surface that cannot be eliminated by rolling or affects the final smoothness of the pavement or be prevented by adjustment in operation.

Maintain HMA at minimum 250 degrees F temperature at discharge to paver. The Engineer shall observe the contractor measuring the temperature of mix in hauling vehicle just before depositing into spreader or paver or MTV.

Deposit HMA in a manner that minimizes segregation. Raise truck beds with tailgates closed before discharging HMA.

Lay, spread, and strike off HMA upon prepared surface. Where practical, use asphalt pavers to distribute mixture.

Where practical, control horizontal alignment using automatic grade and slope controls from reference line, slope control device. Existing pavements or features shall not be used for grade control alone.

Obtain sensor grade reference, horizontal alignment by using established grade and slope controls. For subsequent passes, substitution of one ski with joint-matching shoe riding on finished adjacent pavement is acceptable. Use of a comparable non-contact mobile reference system and joint matching shoe is acceptable.

Avoid stop-and-go operation. Maintain a constant forward speed of

paver during paving operation and minimize other methods that impact smoothness.

Offset longitudinal joint in successive lifts by approximately 6 inches. Incorporate into paving method an overlap of material of 1-inch +/- 0.5 inches at the longitudinal joint. The HMA overlap material shall be left alone when initially placed and shall not be bumped back or pushed back with a lute or any other hand-held device. If the overlap exceeds the maximum amount, remove the excess with a flat shovel, allowing recommended amount of overlap HMA material to remain in place to be compacted. Do not throw the removed excess HMA material on to the paving mat. The longitudinal joint in a surface course when total roadway width is comprised of two lanes shall be near the centerline of pavement or near lane lines when roadway is more than two lanes in width. The longitudinal joint shall not be constructed in the wheel path or under the longitudinal lane lines. Make a paving plan drawing showing how the longitudinal joint will not be located in these areas.

Control the horizontal alignment of the longitudinal edge of the HMA mat being installed so that the edge is parallel to the centerline or has a uniform alignment, e.g., the edge of the mat is straight line or uniform curve, no wavy edge, etc. to have a consistent amount of HMA material at the joint.

Check the compaction of the longitudinal joint during paving often enough to ensure that it will meet the compaction requirements.

If nuclear gauges and ground penetrating radar are used as the contractor’s quality control method, they shall be properly calibrated and periodically checked by comparison to cores taken from the pavement. The use of sand as an aid in properly seating the gauge may also be considered for improving the accuracy of the gauge.

In areas where irregularities or unavoidable obstacles make use of mechanical spreading and finishing equipment impracticable, spread, rake, and lute mixture by hand tools. For such areas, deposit, spread evenly, and screed mixture to required compacted thickness.

Demonstrate competence of personnel operating grade and crown control device before placing surface courses. If automatic control system becomes inoperative during the day's work, the Engineer will permit the Contractor to finish day's work using manual controls. The Engineer may also allow additional HMA to be ordered and placed using manual controls if it will provide a safer work site for the public to travel through. Do not resume work until automatic control system is made operative. The Engineer may waive requirement for electronic screed control device when paving gores, shoulders, transitions, and miscellaneous reconstruction areas where the use of the devices is not practical.

When production of HMA can be maintained and when practicable, use pavers in echelon shall be used to place surface course in adjacent lanes.

At the end of each workday, HMA pavement that is open to traffic shall not extend beyond the panel of the adjacent new lane pavement by more than the distance normally placed in one workday. At end of each day's production, construct tapered transitions along all longitudinal and transverse pavement drop-offs; this shall apply to areas where existing pavement is to meet newly placed pavement. Use slopes of 6:1 for longitudinal taper transitions and 48:1 for transverse tapered transitions. Maximum drop-off height along the joints shall be 2 inches. Also, using a 48:1 slope provides a taper around any protruding object, e.g., manholes, drain boxes, survey monuments, inlets, etc., that may be above pavement surface when opened to the public. If the object is below the surface of the pavement then fill the depression until it is level with the surrounding pavement or raise depressed objects to the finish grade of the placed pavement. Remove and dispose of all transition tapers before placing adjoining panel or next layer of HMA. Notify traveling public of pavement drop-offs or raised objects with signs placed in every direction of traffic that may use and encounter pavement drop-offs or protruding objects or holes.

Use the same taper rates for areas where there is a difference in elevation due to construction work.

At end of each workweek, complete full width of the roadway's pavement, including shoulders, to same elevation with no drop-offs.

(F) Compaction. Immediately after spreading and striking off HMA and adjusting surface irregularities, uniformly compact mixture by rolling.

Initiate compaction at highest mix temperature allowing compaction without excessive horizontal movement. Temperature shall not be less than 220 degrees F.

Finish rolling using tandem roller while HMA temperature is at or above 175 degrees F.

On superelevated curves, begin rolling at lower edge and progress to higher edge by overlapping of longitudinal trips parallel to centerline.

If necessary, repair damage immediately using rakes and fresh mix. Do not displace line and grade of HMA edges during rolling.

Keep roller wheels properly moistened with water or water mixed with

small quantities of detergent. Use of excess liquid, diesel, and petroleum-based liquids will not be allowed on rollers.

Along forms, curbs, headers, walls and other places not accessible to rollers, compact mixture with hot hand tampers, smoothing irons, or mechanical tampers. On depressed areas, trench roller or cleated compression strips under roller may be used to transmit compression.

Before the start of compaction or during compaction or both remove pavement that is loose, broken, or contaminated, or combination thereof; pavement that shows an excess or deficiency in asphalt binder content; and pavement that is defective in any way. Replace with fresh HMA pavement of same type, and compact. Remove and replace defective pavement and compact at no increase in contract price or contract time.

Operate rollers at slow and uniform speed with no sudden stops. The drive wheels shall be nearest to the paver. Continue rolling to attain specified density and until roller marks are eliminated.

Rollers shall not be parked on the pavement placed that day or shift.

(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 percent of the maximum specific gravity determined in accordance with AASHTO T 209, modified by deletion of Supplemental Procedure for Mixtures Containing Porous Aggregate.

Place HMA pavement in individual lifts that are within minimum and maximum allowable compacted thickness for various types of mixture as specified in Table 401.02-1 - Limits of Compacted Lift Thickness and Asphalt Content.

(2) HMA Pavement Courses Less Than One and a Half Inches Thick. Where HMA pavement compacted thickness indicated in the contract documents is less than 1-1/2 inches, compaction to a specified density will not be required.

Use only 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.

For intermediate rolling, roll entire surface with minimum of four passes of roller.

Finish rolling using steel-tired, tandem roller. Continue rolling until entire surface has been compacted with minimum of three passes of roller, and roller marks have been eliminated.

Do not use rollers that will excessively crush aggregate.

(3) HMA Pavement Courses One and a Half Inches Thick or Greater In Special Areas Not Designated For Vehicular Traffic. For areas such as bikeways that are not part of roadway and other areas not subjected to vehicular traffic, compact to not less than 90.0 percent of maximum specific gravity determined in accordance with AASHTO T 209, modified by deletion of Supplemental Procedure for Mixtures Containing Porous Aggregate. Increase asphalt content by at least 0.5 percent above that used for HMA pavements designed for vehicular traffic. Paved shoulders shall be compacted in the same manner as pavements designed for vehicular traffic.

(G) Joints, Trimming Edges and Utility Marking. At HMA pavement connections to existing pavements, make joints vertical to depth of new pavement. Saw cut existing pavement and cold plane in accordance with Section 415 - Cold Planing of Existing Pavement to depth equal to thickness of surface course or as indicated in the Contract Documents.

At HMA connections to previously placed lifts, form transverse joints by cutting back on previous run to expose full depth of course. Dispose of material trimmed from edges. Protect end of freshly laid mixture from rollers.

Before and after paving, identify and mark location of existing utility manholes, valves, and handholes on finished surface. Adjust existing frames and covers and valve boxes to final pavement finish grade in accordance with Section 604 - Manholes, Inlets and Catch Basins and Section 626 - Manholes and Valve Boxes for Water and Sewer Systems.

(1) Longitudinal joints. Submit for review the means and methods that will be used to install longitudinal joints at the required compaction and density. Compact longitudinal joints to be not less than 91.0 percent of the maximum specific gravity determined in accordance with AASHTO T 209, modified by deletion of Supplemental Procedure for Mixtures Containing Porous Aggregate. Verify the compaction of the longitudinal joints meets requirements by using non-destructive testing methods during paving and submit the results on the daily quality control test reports.

Test for compaction and density regardless of layer thickness. Compaction and density of the longitudinal joint shall be determined by using six-inch diameter cores. For longitudinal joints made using butt joints cores

shall be taken over the joint with half of the core being on each side of the joint. For longitudinal joints using notched wedge joints, center core over the center of the wedge so that 50 percent of the material is from the most recently paved material and the remaining 50 percent of the core is from the material used to pave the previous layer. One core shall be taken at a maximum frequency of every 1,500 lineal feet (LF) of the second side of the longitudinal joint and any fraction of that length for each day of paving with a minimum of one core taken for each longitudinal joint per day. Cores taken for the testing of the longitudinal joint may be used to determine pavement thickness.

When the longitudinal joints are found to have less than 91.0 percent of the maximum specific gravity, overband all longitudinal joints within the entire lot represented by the non-compliant core, PG binder seal coat, or other type of joint enrichment accepted by the Engineer. The overband shall not decrease the skid resistance of the pavement under any ambient weather condition. Submit overband material's catalog cuts, test results and application procedure for review and acceptance by the Engineer before use. Center the overband over the longitudinal joint. The overband shall be placed in a uniform width and horizontal alignment. The overband shall have no holidays or streaking in its placement. The width of the overband shall be based on how the longitudinal joint was constructed or as directed by the Engineer. If a butt joint is used, the overband width shall be a minimum of 12-inches. For notch wedge or wedge joints the overband width shall be the width of the wedge plus an additional six-inches minimum. Replace any pavement markings damaged or soiled by the overband remedial repair process.

For longitudinal joints that have a compaction of less than 89 percent of the maximum specific gravity; removal may be required by the Engineer instead of overbanding the non-compliant joint.

Persistent low compaction results may be cause to suspend work and remove non-conforming work. During the suspension of paving, revise means and methods used in constructing longitudinal joints and submit to the Engineer for review and acceptance. Suspension may occur when:

(1) Two or more longitudinal joints tests fail to meet the minimum compaction

(2) One sample reveals that the joint compaction is 89 percent or less.

(H) HMA Pavement Samples. Obtain test samples from compacted HMA pavement within 72 hours of lay down. Provide minimum 4-inch diameter cores consisting of undisturbed, full-depth portion of compacted mixture taken at locations designated by the Engineer in accordance with the "Sampling and Testing Guide for Acceptance and Verification" in Hawaii DOT Highways Division, *Quality Assurance Manual for Materials*, Appendix 3. Cores shall be taken in the presence of the Engineer. Turn cores over to Engineer immediately after cores have been taken.

For pavement samples for longitudinal joints provide 6-inch diameter cores minimum. For pavement samples for other than longitudinal joints 4-inch diameter cores minimum shall be taken. All cores shall consist of undisturbed, full-depth of the lift of the compacted mixture taken at locations designated by the Engineer in accordance with the "Sampling and Testing Guide for Acceptance and Verification" in Hawaii DOT Highways Division, *Quality Assurance Manual for Materials*, appendix 3.

Cores that separate shall indicate to the Engineer that there is insufficient bonding of layers. Modify the previously used paving means and methods to prevent future debonding of layers. Debonding of a core sample after adjustment of the Contractor's methods will be an indication of continued non-conforming work and the Engineer may direct removal of the layer at no additional cost or contract time.

Restore HMA pavement immediately after obtaining samples. Clean core hole and walls of all deleterious material that will prevent the complete filling of the core hole and the bonding of the new HMA to the existing. Apply tack coat to vertical faces of sample holes. Fill sampled area with new HMA pavement of same type as that removed. If hand compaction is used; fill in layers not exceeding the minimum thickness stated in Table 401.02-1 - Limits of Compacted Lift Thickness And Asphalt Content. Compact each layer to compaction requirements. If Mechanical Compaction methods are used, then layers may be the maximum layer thickness stated in Table 401.02-1 - Limits of Compacted Lift Thickness And Asphalt Content. Using tires or hand tamping to compact the HMA material to restore the pavement shall not be considered as mechanical compaction.

Only sample and test leveling course if 1-1/2 inches or greater. No compaction requirements for less than 1-1/2 inches.

(I) HMA Pavement Thickness Tolerances.

Thickness of finished HMA pavement shall be within 0.25 inch of thickness indicated in the Contract Documents. Pavement not meeting the thickness requirements of the Contract Documents may be required by the Engineer to be removed and replaced.

Corrective methods taken on pavement exceeding specified tolerances, e.g., insufficient thickness by methods accepted by the Engineer, including removal and replacement, shall be at no increase in contract price or contract time.

The checking of pavement thickness shall be done after all remedial repairs, e.g., smoothness compliance repairs, compaction, have been completed, reviewed, and accepted by the Engineer.

(J) Quality Control Using New Technology. The Engineer and MTRB reserves the right to utilize new technology and methods to improve the detection of noncompliant work on the project. The technology or method may be used to locate defects in the work, e.g., ground penetrating radar to locate delaminations, moisture damage, thin sections, voids, non-compliant compaction, other non-destructive testing to locate flaws. The defect will be verified by the methods stated in the Contract Documents or by other established conventional means. If the technology or method has already been accepted elsewhere or has standardized testing procedures the results may be judged acceptable by the Engineer and no further testing will be required. These new technologies and methods may be used for the selection of sampling locations.

(K) Protection of HMA Pavement. Except for construction equipment directly connected with paving operations, keep traffic off HMA pavement.

Protect HMA pavement from damage until it has cooled and set.

Do not refuel equipment or clean equipment or hand tools over paved surfaces unless catch pan or device that will contain spilled fuel and other products is provided. After completion of refueling or cleaning, remove catch pan or device without spilling any of the collected content.

Do not park roller or other paving equipment on HMA pavement paved within 24 hours of laydown.

(L) Pavement Joint Adhesive

(1) Pavement Joint Adhesive on Joints. Use on all asphalt pavement construction where joints are formed at such locations but not limited to the following:

(a) Adjacent asphalt pavements, e.g., trafficked lanes, shoulders, etc.

(b) Asphalt pavement and adjacent concrete pavement or

curb and gutter or any other surface where the bonding of the asphalt pavement and concrete surface is desired,

(c) Transverse joints between asphalt pavements not placed at the same time or if the pavement's temperature on one side of the joint is below the minimum temperature the mix can be at, during asphalt pavement compaction or installation.

(d) Cut face of an existing pavement where it will have new HMA pavement placed against it, e.g., utility trenches, partial or full depth repairs, etc.

Pavement joint adhesive is not required on a longitudinal construction joint between adjacent hot mix asphalt pavements formed by echelon paving. Echelon paving is defined as paving multiple lanes side-by-side with adjacent pavers slightly offset at the same time.

A longitudinal construction joint between one shift's work and another shall have pavement joint adhesive applied at the joint. Any longitudinal construction joint formed, with the temperature on one side of the joint that is below the minimum temperature the mix can be when compacted to contract requirements during asphalt pavement installation, shall have pavement joint adhesive applied at the joint.

(2) Material requirements. Asphalt joint adhesive shall meet requirements as specified in Table 401.03-1 - Asphalt Joint Adhesive Specifications.

TABLE 401.03-1 – ASPHALT JOINT ADHESIVE SPECIFICATIONS

TEST		SPECIFICATION
Brookfield Viscosity, 204 °C [400 °F]	ASTM D 3236	4,000-10,000 cp
Cone Penetration, 25 °C [77 °F]	ASTM D 5329	60-100 dmm
Resilience, 25 °C [77 °F]	ASTM D 5329	30% minimum
Ductility, 25 °C [77 °F]	ASTM D 113	30 cm minimum
Ductility, 4 °C [39.2 °F]	ASTM D 113	30 cm minimum
Tensile Adhesion, 25 °C [77 °F]	ASTM D 5329	500% minimum
Softening Point	ASTM D 36	77 °C [170 °F] min.
Asphalt Compatibility	ASTM D 5329	Pass

(3) Construction Requirements for Asphalt Joint Adhesive

(a) Equipment Requirements. Use a jacketed double

boiler type melting unit, with both agitation and recirculation systems. Provide a pressure feed wand application system.

(b) Material Handling. Submit a copy of the manufacturer's recommendations for heating, re-heating, and applying the joint adhesive material. Follow manufacturer's recommendations. Do not remove the joint adhesive from the package until immediately before it is placed in the melter. Joint adhesive boxes must be clearly marked with the name of the manufacturer, the trade name of the adhesive, the manufacturer's batch and lot number, the application/pour temperature, and the safe heating temperature. Feed additional material into the melter at a rate equal to the rate of material used.

Verify the pouring temperature of the joint adhesive at least once per hour at the point of discharge. Stop production if the adhesive falls below the recommended application/pour temperature. When the temperature of the adhesive exceeds the maximum safe heating temperature, stop production, empty the melter, and dispose of that adhesive in an environmentally safe method. No payment will be made for this material or its disposal.

Do not blend or mix different manufacturer’s brands or different types of adhesives.

(c) Joint Adhesive Application: The face of the joint that the new asphalt pavement will bind to shall be clean and dry before the joint adhesive is applied. Apply the pavement joint adhesive material to the entire face of the surface where HMA pavement shall be installed. The thickness of the asphalt adhesive application shall be approximately 1/8 inch. Use an application shoe attached to the end of application wand. Do not overlap the joint by greater than 1/2-inch at the top of the joint or two-inches at the bottom of the joint. Apply the joint adhesive immediately in front of the paving operation. If the adhesive is tracked by construction vehicles, repair the damaged area, and restrict traffic from driving on the adhesive.

(d) Field Sampling. Take a sample from the application wand during the first 20 minutes of placing sealant. One sample should be taken per manufacturer’s batch or minimum of every 6 months on the Project in the presence of the Engineer.

Each sample shall consist of one quart in an aluminum or steel sample container. The sampling container shall be labeled with Contractor's name; project name and number; date and time sample taken; location of where material was used at, e.g., from where to where it was used at in stations; manufacturer and lot number of the sealant. Turn over samples to Engineer without Engineer losing sight of the sample. The Engineer reserves the right to conduct supplementary sampling and testing of the sealant material.

(M) Pavement Smoothness Rideability Test. Perform surface profile tests frequently to ensure that the means and methods being used produces pavement that is compliant with the surface profile smoothness requirement. Test the pavement surface for smoothness with High-Speed Inertial Profiler to determine the International Roughness Index (IRI) of the pavement. For the locations determined by the Engineer, a 10-foot straightedge shall be used to measure smoothness.

All smoothness testing must be performed with the presence of the Engineer. The High-Speed Inertial Profiler operator shall be a certified operator by MTRB or the manufacturer.

The High-Speed Inertial Profiler operator's certification shall be no older than five years old at the date of the Notice to Proceed and at the day of the pavement profile measurement.

The finished pavement shall comply to all the following requirements:

(a) Smoothness Test using 10-Foot Straightedge (Manual or rolling) The 10-foot straightedge is used to identify the locations that vary more than 3/16 inch from the lower edge when the 10-foot straightedge is laid on finished pavement on the direction parallel with the centerline or perpendicular to centerline. Remove the high points that cause the surface to exceed that 3/16 inch tolerance by grinding.

The Contractor shall use a 10-foot straightedge for the following locations:

1. Longitudinal profiling parallel to centerline, when within 15 feet of a bridge approach or existing pavement which is being joined.

2. Transverse profiling of cross slopes, approaches, and as otherwise directed. Lay the straightedge in a direction perpendicular to the centerline.

3. When pavement abuts bridge approaches or pavement not under this Contract, ensure that the longitudinal slope deviations of the finished pavement comply with Contract Document's requirements.

4. Short pavement sections up to 600 feet long, including both mainline and non-mainline sections on tangent sections and on horizontal curves with a centerline radius of curve less than 1,000 feet.

5. Within a superelevation transition on horizontal curves having centerline curve radius less than 1,000 feet, e.g., curves, turn lanes, ramps, tapers, and other non-mainline pavements.

6. Within 15 feet of transverse joint that separates pavement from existing pavement not constructed under the contract, or from bridge deck or approach slab for longitudinal profiling.

7. At miscellaneous areas of improvement where width is less than 11 feet, such as medians, gore areas, and shoulders.

8. As otherwise directed by the Engineer. The Engineer may confine the checking of through traffic lanes with the straightedge to joints and obvious irregularities or choose to use it at locations not specifically stated in this Section.

(b) High-Speed Inertial Profiler

There shall be a minimum 3 profile runs per lane, for each wheel path (left and right) which is approximately three feet from edge lane line. The segment length shall be 0.1 mi. The final segments in a lane that are less than 0.1 mi shall be evaluated as an independent segment and pay adjustments will be prorated for length. The profiles shall be taken in the direction of traffic only.

The latest version of FHWA ProVAL software shall be used to conduct profile analysis to determine IRI and areas of localized roughness. The IRI values shall be reported in units of in/mi.

Areas of localized roughness will be identified by using ProVAL's "Smoothness Assurance" analysis, calculating IRI with a continuous short interval of 25 feet and the 250-mm filter applied.

Additional runs may be required by the Engineer if the data indicate a lack of repeatability of results. A 92% agreement is required for repeatability and IRI values shall have at minimum a 95% confidence level.

(N) Required Pavement Smoothness

The IRI for the left and right wheel paths in an individual lane will be computed and then averaged to determine the Mean Roughness Index (MRI) values. The MRI will be used to determine acceptance and pay adjustment. Each lane shall be tested and evaluated separately.

There are three (3) categories of target MRI values as specified in Table 401.03-2 – Pavement Smoothness Categories.

TABLE 401.03-2 – PAVEMENT SMOOTHNESS CATEGORIES

Category	Description	MRI
Type A	Three or more opportunities for improving ride	Shall not exceed 60 in/mi
Type B	Two opportunities for improving ride	Shall not exceed 70 in/mi
Type C	One opportunity for improving ride	Shall not exceed 75 in/mi

An opportunity for improving ride is considered as one (1) lift of asphalt pavement, including but not limited to HMAB, HMA, PMA, and SMA.

For the location where a 10-foot manual straightedge is required, the surface shall not vary more than 3/16 inch from the lower edge of a straightedge.

No pre-final inspection, final inspection, and substantial completion granted will be made until the pavement meets smoothness requirement and all required profile reports are submitted to the Engineer and MTRB and are accepted.

(O) Request for Profile Testing by the Department.

For Type C, prior to pavement activities, the Engineer will measure the smoothness of the existing pavement.

The Contractor shall submit a written request to the Engineer to perform all required profile tests.

The request shall be made at least 30 days before desired testing date and shall include an approximate acceptance profile testing date, a plan view drawing of the area to be tested with the limits of the test area highlighted.

The Contractor shall reimburse HDOT for any incurred cost related to any Contractor-caused cancellation or a deduction to the monthly payment will be made.

(P) Department Requirements for Profile Testing. When a request for testing is made, the requested area to be tested shall be 100% of the total area indicated to be paved in the Contract Documents unless the requirement is waived by the Engineer and MTRB.

Clean debris and clear obstructions from area to be tested, as well as a minimum of 100 feet before and beyond the area to be tested before testing starts for use as staging areas. Provide traffic control for all profile testing.

The Engineer or MTRB or both may cancel the profile testing if the test area is not sufficiently clean, traffic control is unsatisfactory, or the area is not a safe work environment or test area does not meet Contract Document requirements. This canceled profile test will count as one profile test.

(Q) Cost of Acceptance Profile Testing by The Department. The Engineer, MTRB, or State's Third-Party Consultant will perform one initial profile test, at no cost to the Contractor for each area to be tested.

The Department's High-Speed Inertial Profiler pavement profile will be used to determine if the pavement's profile, i.e., smoothness is acceptable.

If the profile of the pavement does not meet the requirements of the Contract Documents, the Contractor shall perform remedial work, i.e. corrective work then retest the area to ensure that the area has the required MRI, i.e., smoothness, before requesting another profile test by the Engineer.

(1) Additional testing. Additional testing, by the Department beyond the initial test will be performed at cost to the Contractor as follows:

(a) $2,500 per test will be required when Department personnel or State's Third-Party Consultant is used.

(R) Remedial Work for Pavements.

(1) Corrective work shall be required for any 25 ft interval with a localized roughness in excess of 160 in/ mi. The Engineer may waive localized roughness requirements for deficiencies resulting from manholes or other similar appurtenances. Adjust manholes or other similar appurtenances so that using a 10-ft. straightedge the area

around that manhole or other similar appurtenance shall not have more than 3/16-in. variation between any 2 contacts on the straightedge.

If corrective action is not successful, the Engineer may require continued corrective action, or apply a payment adjustment of $250 per occurrence.

(2) Corrective work shall also be required for any 0.1 mile interval with an average MRI above 95.0 in/mi for Types A and B. For Type A, correct the deficient section to an MRI of 60 in/mi or less. For Type B, correct the deficient section to an MRI of 70 in/mi or less. For Type C, corrective work may be required by the Engineer for 0.1 mile intervals that have an average MRI above the threshold shown in Table 401.03-4 – Smoothness Pay Disincentives with MRI; and Table 401.03-5 – Smoothness Pay Disincentives for Percent Improvement as applicable.

If corrective action does not produce the required improvement, the Engineer may require continued corrective action, or apply payment adjustment as shown in Table 401.03-4 – Smoothness Pay Disincentives with MRI; and Table 401.03-5 – Smoothness Pay Disincentives for Percent Improvement.

(3) The Contractor shall notify the Engineer at least 24 hours prior to commencement of the corrective work. The Contractor shall not commence corrective work until the methods and procedure have been approved in writing by the Engineer.

(4) All smoothness corrective work for areas of localized roughness shall be for the entire lane width. Pavement cross slope shall be maintained through corrective areas.

(5) The remedial repair areas shall be neat, rectangular areas having a uniform surface appearance.

(6) If grinding is used on HMA pavement, the surface shall have nearly invisible grinding marks to passing motorist.

(7) Other methods may include milling and overlaying HMA pavement. The length, depth of the milling and the replacement material will be solely decided by the Engineer.

(8) The finished repaired pavement surface shall leave no ridges or valleys or fins of pavement other than those allowed below.

(9) Remedial repairs shall not leave any drainage structures' inlets higher than the surrounding pavement or alter the Contract Document's drainage pattern.

(10) For items in the pavement other than drainage structures, e.g., manhole frame and covers, survey monuments, expansion joints etc., the finish pavement, ground or not, shall not be more than 1/4 inch in elevation difference. Submit to the Engineer remedial repair method to correct these conditions for acceptance.

(11) Pick up immediately grinding operation residue by using a vacuum attached to grinding machine or other method acceptable to the Engineer.

(a) Any remaining residue shall be picked up before the end of shift or before the area is open to traffic, whichever is earlier.

(b) Prevent residue from flowing across pavement or from being left on pavement surface or both.

(c) Residue shall not be allowed to enter the drainage system.

(d) The residue shall not be allowed to dry or remain on the pavement.

(e) Dispose of all material that is the result of the remedial repair operation, e.g., HMA residue, wastewater, and dust at a legal facility.

(12) Complete corrective work before determining pavement thickness for HMA pavements in accordance with Subsection 401.03(I) – HMA Pavement Thickness Tolerances.

(13) All HMA wearing surface areas that have been ground shall receive a coating, e.g., a coating material that will restore any lost impermeability of the HMA due to the grinding of the surface. The coating used shall not be picked up or tracked by passing vehicles or be degraded after a short period of time has passed, i.e., it shall have a service life equal to or greater than the HMA pavement. The coating shall not decrease the pavement's friction value. The coating's limits shall be the full width of the lane regardless how small. If the remedial repair area extends into the next lane, then the repair area will be full lane width also. Extend the length of coating areas in order for the coating area to look like the rest of the road and does not have patches on it, i.e., make the road look uniform in color. The coating shall be of

a color that matches the surrounding pavement. The areas receiving the coating shall not be open to traffic until it has cured enough so that it cannot be picked up or tracked by passing vehicles or degrade. Submit means and methods of the coating and type of coating to the Engineer or MTRB for review and acceptance. Do not proceed with the coating without acceptance from the Engineer.

(14) Recompacting cold HMA, i.e., HMA that has reached ambient temperature is not an acceptable remedial repair method.

(15) Replace all pavement markings damaged or discolored by remedial repairs.

(16) Reprofile the corrected area and provide the Engineer the results that show the corrective action, i.e., remedial repairs were successful.

(S) Pavement Smoothness and Acceptance.

(1) Price and payment in various paving sections, e.g., 401 (Hot Mix Asphalt Pavement), shall be full compensation for all work and materials specified in the various paving sections and this section, including but not limited to furnishing all labor, materials, tools, equipment, testing, incidentals and for doing all work involved in micro milling, milling (cold planing), grinding existing or new pavement, removing residue, cleaning the pavement, necessary disposal of residue, furnishing of any water or air used in cleaning the pavement and any other related ancillary work or material or services. Also, it includes any remedial work, e.g., re-paving, surface grinding, application of a coating, curing compound, and replacement of damaged pavement markings.

(2) The contract price in those sections may be adjusted for pavement smoothness by the Engineer. The pavement smoothness contract unit price adjustments and work acceptance will be made in accordance with the following schedules.

TABLE 401.03-3 –SMOOTHNESS PAY INCENTIVES		
Category	**MRI (in/mi)**	**Pay Adjustment $ per 0.1 mi**
Type A	<30.0	$580
	30.0- less than 35.0	$480
	35.0- less than 40.0	$380
	40.0- less than 45.0	$280
	45.0- less than 50.0	$180
	50.0- less than 55.0	$80
	55.0- less than 60.0	$0
Type B	<35.0	$420
	35.0- less than 40.0	$360
	40.0- less than 45.0	$300
	45.0- less than 50.0	$240
	50.0- less than 55.0	$180
	55.0- less than 60.0	$120
	60.0- less than 65.0	$60
	65.0- less than 70.0	$0
Type C	<40.0	$280
	40.0- less than 45.0	$240
	45.0- less than 50.0	$200
	50.0- less than 55.0	$160
	55.0- less than 60.0	$120
	60.0- less than 65.0	$80
	65.0- less than 70.0	$40
	70.0- less than 75.0	$0

(3) Pay Pavement Smoothness Adjustment will be based on the initial measured MRI for both left and right wheel path, prior to any corrective work for the 0.10-mile section, except for sections that the Contractor has chosen to remove and replace. For sections that are replaced, assessments will be based on the MRI determined after replacement.

(a) The Pavement Smoothness Adjustment will be computed using the plan surface area of pavement shown in the Contract Documents. This Pavement Smoothness Adjustment will apply to the total area of the 0.10-mile section for the lane width represented by MRI for the same lane. It does not include any other price adjustments specified in the Contract Documents. Those price adjustments will be, for each adjustment, calculated separately using the original contract price to determine the amount of adjustment to be made to the contract price. Sections shorter than 0.1 mile and longer than 50 feet shall be prorated.

(b) For 0.1 mile intervals with an average MRI above the threshold shown in Table 401.03-3 – Smoothness Pay Incentives, the Engineer shall apply a disincentive payment adjustment up to the limit shown.

i. For Types A and B, payment adjustments shall be applied up to an MRI of 95.0 per Table 401.03-4 – Smoothness Pay Disincentives with MRI.

ii. For Type C, the payment adjustment shall be dependent on the average MRI of the pavement prior to paving activities
    1. If the MRI of the pavement prior to paving activities is 125.0 in/mi or less, the payment adjustment shall be per Table 401.03-4 – Smoothness Pay Disincentives with MRI.
    2. If the MRI of the pavement prior to paving activities is more than 125.0 in/mi, the disincentive payment adjustment shall be per Table 401.03-5 – Smoothness Pay Disincentives with Percent Improvement, and based on the percent improvement using the following formula:

% Improvement = (Initial segment MRI – Final segment MRI) x 100 / (Initial Segment MRI)

TABLE 401.03-4 –SMOOTHNESS PAY DISINCENTIVES WITH MRI		
Category	**MRI (in/mi)**	**Pay Adjustment $ per 0.1 mi**
Type A	60.0- less than 70.0	-$100
	70.0- less than 75.0	-$250
	75.0- less than 80.0	-$350
	80.0- less than 85.0	-$450
	85.0- less than 95.0	-$550
	> 95.0	Corrective Work
Type B	70.0- less than 75.0	-$100
	75.0- less than 80.0	-$200
	80.0- less than 85.0	-$300
	85.0- less than 95.0	-$400
	> 95.0	Corrective Work
Type C (pre-paving MRI < 125)	75.0- less than 80.0	-$50
	80.0- less than 85.0	-$100
	85.0- less than 90.0	-$150
	90.0- less than 100.0	-$200
	>100.0	-$250

TABLE 401.03-5 –SMOOTHNESS PAY DISINCENTIVES FOR PERCENT IMPROVEMENT		
Category	**Percent Improvement %**	**Pay Adjustment $ per 0.1 mi**
Type C (pre-paving MRI > 125)	≥ 40	$0
	20.0- less than 40.0	-$100
	< 20	-$200

(c) Incentives will not apply to areas where payment deductions or remedial repairs has been made for non-compliant work, e.g., low compaction, thin pavement, thermal segregation, low compressive or flexural strength, non-compliant alignment. Incentives will also not apply to areas where corrective work was required to meet contract

smoothness requirements, unless the pavement section was replaced. All areas where corrective work was performed shall be tested again to ensure the smoothness requirements are met.

(d) There will be no incentive price adjustments to the contract prices regardless of the pavement meeting the Contract Documents' requirements for incentive contract price adjustment, when 25% of the total area paved of that particular type of pavement on the project has failed to meet any of the Contract document requirements, e.g., smoothness, thickness, unit weight, asphalt content, pavement defects, compaction, flexural or compressive strength. Areas exempt from the smoothness requirements may not be included in the total area calculation unless it is non-compliant.

(e) For contracts using lump sum the method described in Subsection 104.06 Methods of Price Adjustment paragraph (3), will be used to calculated proportionate unit price, i.e., the Engineer's calculated theoretical unit price. This calculated proportionate unit price will be used to calculate the unit price adjustment.

401.04 Measurement.

(A) The Engineer will measure HMA and PMA pavement per square yard in accordance with the Contract Documents.

(B) The Engineer will measure leveling course and HMA pavement overlay per ton in accordance with the Contract Documents.

(C) Engineer will measure additional State pavement profiling work when applicable on a cost-plus basis as specified in this section and as ordered by Engineer. The Engineer will issue a billing for the pavement profile work done for the time period with the invoices and receipts that the billing was based on attached to the Contractor for each contract item. The Contractor's pavement profile work required in this section will not be measured and will be considered incidental to the various paving items unless stated otherwise.

401.05 Payment. The Engineer will pay for the accepted HMA pavement at the contract price per pay unit, as shown in the proposal schedule. Payment will be full compensation for the work prescribed in this section and the contract documents.

(A) Price and payment in Section 401 – HMA Pavement will be full compensation for all work and materials specified in this Section including furnishing all labor, materials, tools, equipment, testing, pavement profiles

and incidentals and for doing all work involved in grinding existing or new pavement, removing residue, and cleaning the pavement, including necessary disposal of residue and furnishing any water or air used in cleaning the pavement and remedial work needed to conform to the requirements of the Contract Documents.

(B) No payment for the Contractor's pavement profile work required in this section will be made. The Contractor's pavement profile work shall be considered incidental to the various paving items unless stated otherwise.

(C) Engineer will pay or deduct for the following pay items when included in proposal schedule:

Pay Item	**Pay Unit**
Pavement Smoothness Incentive	Allowance
2 Inch HMA Pavement, Mix No. IV	Square Yard
3 Inch HMA Pavement, Mix No. IV	Square Yard
2 Inch PMA Pavement, Mix No. IV	Square Yard
3 Inch PMA Pavement, Mix No. IV	Square Yard

(1) 70% of the contract unit price or the theoretical calculated unit price upon completion of submitting a job-mix formula acceptable to the Engineer; preparing the surface, spreading, and finishing the mixture; and compacting the mixture.

(2) 20% of the contract unit price or the theoretical calculated unit price upon completion of cutting samples from the compacted pavement for testing; placing and compacting the sampled area with new material conforming to the surrounding area; protecting the pavement; and compaction acceptance. Maintain temporary pavement markings and other temporary work zone items, maintain a clean work site.

(3) 10% of the contract unit price or calculate the unit price when the final configuration of the pavement markings is in place.

HMA Pavement, Mix No. V Leveling	Ton

(1) 80% of the contract unit price upon completion of submitting a job-mix formula acceptable to the Engineer; preparing the surface, spreading, and finishing the mixture; and compacting the mixture.

(2) 20% of the contract unit price upon completion of cutting samples from the compacted pavement for testing; placing and compacting the sampled area with new material conforming to the surrounding area; protecting the pavement; and compaction acceptance.

The Engineer will pay for adjusting existing frames and covers and valve boxes in accordance with and under Section 604 – Manholes, Inlets and Catch Basins. Adjustments for existing street survey monument frames and covers will be paid for as if each were a valve box frame and cover.

The Engineer may, at his sole discretion, use the sliding scale factor as specified in Table 401.05-1 – Sliding Scale Pay Factor for Compaction to accept HMA pavements compacted between 90.0 percent and 98.0 percent. If the sliding scale factor is used, the Engineer will make payment for the material in that production day at a reduced price by multiplying the contract unit price by the pay factor. The Engineer is not obligated to allow non-compliant work to remain in place and may choose to require removal of the pavement that is less than 93.0 percent or greater than 97.0 percent.

Removal of non-compliant pavement shall be in accordance with Subsection 105.12 Removal of Non-Conforming and Unauthorized Work.

Table 401.05-1 – Sliding Scale Pay Factor for Compaction

Percent Compaction	Percent of Quantity Paid
> 98.0	Removal
>97.0 - 98.0	95
93.0- 97.0	100
90.0 - <93.0	80
<90.0	Removal

END OF SECTION 401”

Amend this section to read as follows:

"SECTION 404 - SLURRY SEAL

404.01 Description. This section describes furnishing and applying slurry seal on an existing asphalt surface.

404.02 Materials.

Emulsified Asphalt (Type CQS-1h with 2% Polymer Latex)	702.04
Aggregate for Slurry Seal	703.11
Filler	703.15
Water	712.01

(A) General. Slurry seal shall include uniform blend of emulsified asphalt, aggregate, water, and if required by job-mix formula, filler.

(B) Job-Mix Formula and Tests. Unless otherwise specified, design and test job-mix formula in accordance with ASTM D 3910 and International Slurry Seal Association (ISSA) technical bulletins, for Type III slurry seal, and as indicated in the contract documents.

Tolerance of plus or minus 1 percent will be allowed in residual asphalt content from that specified in job-mix formula accepted by the Engineer.

(C) Submittals. Submit slurry seal job-mix formula for each type of slurry seal mix indicated in the contract documents as follows:

(1) Design percent of aggregate passing each required sieve size.

(2) Design percent of residual asphalt added to aggregate, based on dry weight of aggregate.

(3) Source of aggregate.

(4) Grade of emulsified asphalt.

(5) Test data used to develop job-mix formula.

(6) Slurry seal equipment calibration and production settings for approved job-mix formula.

If design requirements are modified after the Engineer accepts job-mix formula, submit new job-mix formula before using slurry seal produced from modified mix design.

(D) Material Storage & Handling. A barrier shall be placed under the aggregate stockpile to prevent underlying material from being incorporated into the slurry seal aggregate. Prior to loading aggregates into mixing machine bins, aggregates shall be screened to remove oversized material.

404.03 Construction.

(A) Test Section. Before production and after calibration as specified in Subsection 404.03(D)(6) - Equipment Calibration, apply slurry seal onto test section using same mixture, equipment, and method proposed for use in the work. Test section shall be at least 10 feet by 50 feet and applied under typical project environmental conditions. A separate test section is required for each piece of equipment that will be used on the project. The test sections shall also include a demonstration of the equipment change-out procedure for material resupply to verify the consistency of the slurry material upon restart and the ability to construct an acceptable construction joint. The Engineer will determine location of test section. Prior to continuation of slurry seal production, mixture samples may be taken and the test strip will be evaluated to verify mix consistency, proportioning, application rate, and set time.

(B) Paving Plan. Submit a slurry seal paving plan for review and acceptance prior to the start of slurry seal activity. The paving plan shall include the sequence of work for the slurry application areas, equipment application runs, and designated handwork application areas.

(C) Weather Limitation. Application of slurry seal will not be allowed under the following conditions:

(1) On wet surfaces as determined by the Engineer.

(2) When air temperature is below 60 degrees F and falling. Slurry seal may be applied when air temperature is above 50 degrees F and rising. Air temperature will be measured in shade and away from artificial heat.

(3) When weather conditions prevent proper method of construction.

(D) Equipment.

(1) General. Keep equipment, tools, and machinery clean and maintained in satisfactory condition.

(2) Mixing Equipment. Use self-propelled machine specifically designed and manufactured to lay slurry seal. Mixing machine shall be either truck-mounted or continuous-run design. A continuous-run machine is defined as one that is equipped to self-load while continuing to lay slurry seal. Either type machine shall be able to accurately deliver and proportion aggregate, emulsified asphalt, water, and if specified by job-mix formula, filler to maintain adequate supply to the proportioning controls.

If continuous-run machine is used, equip to allow operator to have full control of forward and reverse speeds during slurry seal application; and to include opposite-side driver stations and forward and reverse speed controls.

(3) Proportioning Devices. Provide and label individual volume or weight controls for proportioning each material to be added to mix.

(4) Spreading Equipment. Spread mixture uniformly by means of conventional surfacing spreader box attached to mixer and equipped to agitate and spread material evenly throughout box. Provide front seal that prevents loss of mixture at road contact point and adjustable rear seal the functions as final strike-off. Design and operate spreader box and rear strike-off such that uniform consistency is achieved to produce free flow of material to rear strike-off. Equip spreader box with means to side shift box to compensate for variations in pavement geometry. Burlap drag or other accepted screed may be attached to rear of spreader box to provide uniform, highly textured mat.

(5) Auxiliary Equipment. Provide other tools or equipment, such as brushes, hose equipment, tank trucks, water distributors and flushers, power sweepers, and power blowers.

(6) Equipment Calibration. Calibrate in the Engineer's presence all equipment to be used in performance of the work. Submittal of previous calibration documents may be used in lieu of calibration in the Engineer's presence if documented calibration were made within one calendar year of submittal. Include individual calibration of each material at various settings, which can be related to machine's metering devices. No machine will be allowed

to be used on project until calibration has been completed and accepted.

After calibration and prior to production, make test strips for each machine. Test strips shall be part of test section specified in Subsection 404.03(A) - Test Section. Upon failure of test for mix consistency, proportioning, or rate of application, or combination thereof, additional test strips at no increase in contract price or contract time will be required until each machine is accepted for work. Machine failing to pass specified tests after three trials will not be allowed to be used on project.

(E) Preparation of Surfaces. Immediately before applying slurry seal, clean existing pavement in accordance with Section 310 - Brooming Off.

Remove all pavement markers and eradicate the existing thermoplastic pavement striping.

Cold plane the existing pavement to provide a smooth transition between the slurry seal and any existing pavement or structure. The cold planed or ground transition shall be a minimum width of one foot from the edge of the existing pavement or structure and deep enough for the slurry seal to match the grades of the existing pavement or structure.

Distressed areas on the existing pavement indicated for removal and replacement with hot-mix asphalt shall be completed at least seven days prior to the start of slurry seal placement. The reconstructed areas shall not be higher than the existing pavement surface and may be recessed up to 1/8-inch below the existing pavement surface. This work shall be completed and paid for under the pay item, Reconstruction of Weakened Pavement Areas.

Contaminated areas on the existing pavement including but not limited to chemical spills/stains and accumulation of debris or organic matter shall be removed, cleaned with an approved biodegradable cleaning solution, and thoroughly rinsed. Persistent stains shall be removed by spot-grinding or torching and sealed with an approved oil spot primer. High pressure washing is not permitted.

Manholes, valve boxes, drop inlets and other service entrances as well as survey and centerline monuments, shall be protected from the slurry seal by a suitable method. Contractors shall be held liable for any service entrances and monuments covered up resulting from construction. The clean up of any service entrances and monuments shall be at the expense of the contractor.

The Engineer shall approve surface prior to application of slurry surfacing.

(F) Application of Slurry Seal. Apply slurry seal in accordance with ASTM D 3910, ISSA A105, and as indicated in the contract documents. Pour slurry seal into spreader box in sufficient quantity to completely cover full width of spreader. Do not overload the spreader or allow slurry seal to flow out of the sides of the spreader box. The slurry seal shall possess sufficient stability so that the premature breaking of the material in the spreader box does not occur. The mixture shall be homogeneous during and following mixing and spreading. It shall be free of excess water and emulsion and free of segregation of the emulsion and aggregate fines from the coarser aggregate. Spraying of additional water into the spreader box will not be permitted.

Apply slurry seal in one uniformly blended coat. Use hand spreaders only in areas where spreader box cannot be used.

Lumping, balling, or unmixed aggregate in the slurry seal shall not be permitted. No streaks, such as those caused by oversized aggregate, shall be left in the finished surface. If excess oversize develops, the job will be stopped until the Contractor is able to prove that the situation has been corrected. All cost and time expense related to the stoppage will be the responsibility of the Contractor.

(G) Joints, Trimming Edges, Removal of Excess Material, and Corrective Measures. Excess buildup, uncovered areas, or unsightly appearance shall not be permitted. All excess slurry seal build-up on longitudinal and transverse joints shall be removed. Place longitudinal joints on lane lines. Half passes and odd-width passes may only be used in minimum amounts and only when authorized by the Engineer. The contractor shall provide suitable width-spreading equipment to minimize the number of longitudinal joints throughout the project. Longitudinal lane line joints shall not overlap more than six inches.

Excess slurry seal on areas such as shoulders, gutters, curbs, utility covers, and pavement markers and striping to remain shall be removed.

All deficiencies in the slurry seal, resulting from but not limited to poor workmanship, contractor's operations, removal of temporary traffic control measures, and early opening to vehicular traffic, shall be repaired before acceptance. All corrective measures shall be considered incidental to the slurry seal. The corrective methods shall be approved by the Engineer.

(H) Protection of Slurry Seal. Except for construction equipment used for slurry seal operations, keep traffic off slurry seal until such time that mixture has cured sufficiently so that slurry seal will not adhere to and be picked up by vehicle tires. Ensure that cured slurry seal adheres firmly to existing surface.

404.04 Measurement. The Engineer will measure slurry seal per square yard in accordance with the contract documents.

The Engineer will not measure preparation of surfaces except for distressed asphalt reconstruction work. All other work mentioned in the preparation of surfaces shall be considered incidental to slurry seal activities.

404.05 Payment. The Engineer will pay for the accepted slurry seal at the contract unit price basis, as shown in the proposal schedule. Payment will be full compensation for the work prescribed in this section and the contract documents.

The Engineer will pay for the following pay item when included in the proposal schedule:

Pay Item	**Pay Unit**
Slurry Seal	Square Yard

Engineer will pay 100 percent of the contract bid price upon completion of the slurry seal installation."

END OF SECTION 404

Amend Section 406 – Stone Matrix Asphalt (SMA) Pavement to read as follows:

"SECTION 406 — STONE MATRIX ASPHALT (SMA) PAVEMENT

406.01 Description. This Section describes furnishing and placing stone matrix asphalt pavement on a prepared surface. General requirements for all asphalt concrete pavements as specified in Section 401 Hot Mix Asphalt (HMA) Pavement are applicable to this Section, subject to any exceptions contained herein.

406.02 Materials. Materials shall conform to the following:

(A) Asphalt Cement (PG 64E-22) 702.01(B)

(B) Aggregates. Make mineral aggregate by crushing and screening hard, tough, durable stone of uniform quality. Crushed aggregate shall be free from soft or disintegrated pieces, clay, dirt, or other deleterious substances.

Coarse aggregate shall be that portion of the mineral aggregate retained on the No. 4 sieve. Fine aggregate shall be that portion of the mineral aggregate passing the No. 4 sieve.

When tested according to the designated methods, the combined mineral aggregate shall meet the following requirements:

Test	Test Method	Requirement
Soundness	AASHTO T 104 (5 cycles using sodium sulfate)	9% Maximum
Flat and Elongated Particles (Length to thickness ratio of 3:1)	ASTM D 4791 (by Weight)	20% Maximum
Los Angeles Abrasion	AASHTO T 96	30% Maximum
Sand Equivalent	AASHTO T 176	50% Minimum
Fine Aggregate Angularity	AASHTO T 304, Method A	45% Minimum
Absorption	AASHTO T84 & T85	4% Maximum
Gradation	AASHTO T 27 AASHTO T 11	See Table 406-1
Plasticity Index	AASHTO T90	Non-Plastic

100 percent of the material retained on the No. 4 sieve shall consist of crushed particles. A crushed particle is one having at least one mechanically fractured face. A face is considered fractured if it has a projected area that is at least 0.25 of the maximum projected area of the particle.

(C) RAP (Reclaimed Asphalt Pavement). Use of RAP is not allowed in SMA.

(D) Aggregate Blend. Size, uniformly grade, and combine coarse and fine aggregate fractions to produce a job-mix formula that meets the gradation requirements of Table 406-1 Aggregate Gradation Limits 1/2 inch Nominal Maximum Size Mix.

TABLE 406-1 - AGGREGATE GRADATION LIMITS 1/2 INCH NOMINAL MAXIMUM SIZE MIX

SIEVE SIZE	PERCENT PASSING
3/4 inch	100
1/2 inch	90 -100
3/8 inch	40 - 80
No. 4	20 - 35
No. 8	16 - 24
No. 16	-
No. 30	12 - 18
No. 50	-
No. 100	-
No. 200	8.0 – 11.0

(E) Mineral Filler. Mineral filler shall conform to AASHTO M 17 and shall be rock dust or crushed limestone conforming to the following:

Test	Test Method	Requirement
Plasticity Index	AASHTO T 90	4% Maximum

(F) Stabilizer. Dosage rate of cellulose shall be approximately 0.3 percent (by weight of total mix) and sufficient to prevent draindown not to exceed the amount stated in Table 406-2 - Design Criteria as determined by AASHTO T 305 Standard Method of Test for Determination of Draindown Characteristics in Uncompacted Asphalt Mixtures. Increase the amount of fiber at no additional cost to HDOT to meet the allowed draindown requirement. Fibers other than cellulose fiber that are equal or better may be used if requested to and accepted by the Engineer. The Engineer is under no obligation to accept a substitution.

(G) Job-Mix Formula. Design the job-mix formula according to AASHTO R 46.

Table 406-2 - Design Criteria	
$N_{initial}$, N_{design}, N_{max}	8, 100, 160
Air Voids at N_{design}	4%
Voids in Mineral Aggregate (VMA) at N_{design} (for 1/2 inch Nominal Maximum Particle Size)	17.0% Minimum
Voids in Coarse Aggregate (VCA)	Less than VCA_{DRC}
Density at $N_{initial}$ (% of Theoretical Maximum Specific Gravity)	Not more than 89.0 %
Density at N_{design} (% of Theoretical Maximum Specific Gravity)	96.0 %
Density at N_{max} (% of Theoretical Maximum Specific Gravity)	Not more than 98.0 %
Binder Content (by weight of total mix)	6.0 % Minimum
Draindown at Production Temperature	0.3 % Maximum
Stabilizer (by weight of total mix)	0.2 - 0.4 %

Submit the job-mix formula at least 30 working days before production. Production paving shall not start until the job mix formula has been reviewed and found acceptable by the Engineer. The job-mix formula shall include:

(1) Design percent of aggregate passing each required sieve size (aggregate gradation),

(2) Design percent of PG binder material added to the aggregate (expressed as % by weight of total mix),

(3) Temperature at which the mixture is delivered to the point of discharge,

(4) Source of aggregate,

(5) Grade of PG binder,

(6) Type and percentage of stabilizer, and

(7) Test data used to develop job-mix formula.

Mixtures shall meet the requirements of Table 406-1 (Aggregate Gradation Limits 1/2 inch Nominal Maximum Size Mix) and 406-2 (Design Criteria).

Table 406-3 — Production Tolerances	
Passing 3/8 inch and larger sieves	± 5%
Passing No. 4 to No. 16 sieves (inclusive)	± 4%
Passing No. 30 to No. 100 sieves (inclusive)	± 3%
Passing No. 200 sieve	± 2.0%
Binder Content (expressed as % by weight of total mix)	± 0.4%
Temperature of Mixture	± 20° F
Voids, total mix	± 1.0%

* The tolerances shown are the allowable variance between the physical characteristics of laboratory job mix submitted mix design and the production or operational mix, i.e., field samples.

406.03 Construction Requirements. Construction requirements shall be as specified in Subsection 401.03 - Construction, except as follows:

(A) Equipment

(1) Mixing Plant. Use mixing plants that conform to AASHTO M 156, supplemented as follows:

(a) All Plants.

1. Automated Controls. Control proportioning, mixing, and mix discharging automatically.

2. Dust Collector. AASHTO M 156, Requirements for All Plants, Emission Controls is amended as follows:

Equip plant with dust collector. Dispose of collected material. In the case of baghouse dust collectors, dispose of collected material or return collected material uniformly.

3. Stabilizer Supply System. Use a separate system for feeding stabilizing additives to proportion the required amount into the mixture and obtain a uniform distribution. Stabilizer supply system shall include low level and no-flow indicators, section of transparent pipe for observing consistency of flow or feed interlock with plant controls, and printout of status of feed rate.

(2) Hauling Equipment. Use trucks that have tight, clean, smooth, metal beds for hauling SMA.

Thinly coat truck beds with a minimum quantity of detergent or lime solution to prevent the mixture from adhering to the beds. A light dusting of No. 10 aggregate coated with one percent asphalt may be used in lieu of liquid release agent. The use of diesel or petroleum-based liquid release agents will not be allowed.

Raise truck beds to drain excess water before loading with SMA mixture.

Equip each truck with tarpaulin conforming to the following:

(a) In good condition, without tears and holes.

(b) Large enough to be stretched tightly over truck bed completely covering the mix.

(B) Plant Operation.

(1) Mixing. Measure aggregate and asphalt into mixer in accordance with job-mix formula. Mix until the components are

completely mixed and adequately coated with asphalt in accordance with AASHTO M 156. Percent of coated particles shall be 98% when tested in accordance with AASHTO T 195.

(C) SMA Storage. The time between plant mixing and shipment shall not exceed one hour. Store the SMA mixture only in silos. Do not stockpile the SMA.

Equip the storage silo to prevent segregation of the completed mixture as the mixture is discharged into the silo.

Stored material shall be of no less quality than mixtures discharged directly into hauling vehicles.

(D) Spreading and Finishing. Prior to each day's paving operation, check screed or strike-off assembly surface with straight edge to ensure straight alignment. Provide screed or strike-off assembly that produces finished surface without tearing, shoving, and gouging SMA. Discontinue using spreading equipment that leaves ridges, indentations, or other marks, or combination thereof in surface that cannot be eliminated by rolling or be prevented by adjustment in operation.

The minimum temperature of the bituminous mixture as discharged to the paver shall be established during the mix design procedure. Measure temperature of mix in hauling vehicle just before depositing into spreader.

Deposit SMA in a manner that minimizes segregation. Raise truck beds with tailgates closed before discharging SMA mixture.

Lay, spread, and strike off SMA upon prepared surface. Use asphalt pavers to distribute mixture.

Control horizontal alignment using automatic grade and slope controls from reference line, ski and slope control device, or dual skis.

Obtain sensor grade reference from 30-foot ski for first pass. For subsequent passes, substitution of one ski with joint-matching shoe riding on the recently-placed-finished-adjacent pavement is acceptable. Use of a comparable non-contact mobile reference system and joint matching shoe is acceptable.

Avoid stop-and-go operations. Minimize changing forward speed of paver during paver operation.

Offset longitudinal joint in successive lifts by approximately 6 inches. Position joint in surface course at centerline of pavement when roadway comprises two lanes of width, or at lane lines when roadway is more than two lanes in width. Joints shall be parallel to the centerline of the road or lane and shall have a uniform longitudinal alignment that is not wavy in appearance.In areas where irregularities or unavoidable obstacles make the use of mechanical spreading and finishing equipment impracticable, spread, rake, and lute the mixture by hand tools. For such areas, dump, spread, and screed the mixture to required compacted thickness.

Demonstrate competence of personnel operating grade and crown control device before placing surface courses. If automatic control system becomes inoperative during the day's work, the Engineer will permit the Contractor to finish work using the material on site or is in the process of being delivered to the project using manual controls. Additional work may be performed if needed to provide the public with a safe travelway, e.g., no dips or bumps, drop offs. Do not resume work until automatic control system is made operative. The Engineer may waive requirement for electronic screed control device when paving gores, shoulders, transitions, and miscellaneous reconstruction areas.

When production of SMA can be maintained and when practicable, use pavers in echelon to place surface course in adjacent lanes.

At the end of each workday, SMA pavement that is open to traffic shall not extend beyond an adjacent panel of new lane pavement by more than distance normally covered in one workday.

At end of each workweek, complete full width of pavement, including shoulders, to same elevation with no drop-offs. Construct transition taper along lane line at longitudinal pavement drop-off. Maximum drop-off height shall be 2 inches. Remove and dispose of transition taper before placing adjoining panel.

The minimum and maximum allowable compacted lift thicknesses for the SMA mixture shall be 1-1/2 inch minimum thickness and 3 inch maximum thickness.

(E) Compaction. Immediately after spreading and striking off SMA and adjusting surface irregularities, uniformly compact the mixture by rolling.

Initiate compaction within the temperature range determined from the Temperature-Viscosity graph that does not produce excessive horizontal movement.

Use steel-tired tandem rollers for initial or breakdown rolling. Rollers shall follow directly behind the paver.

Finish rolling using tandem roller weighing at least eight tons. Complete compaction before the mix cools below 240°F.

On superelevated curves, begin rolling at lower-longitudinal edge of the placed SMA and progress to higher edge by overlapping of longitudinal trips parallel to centerline.

If necessary, repair damage immediately using rakes and fresh mix. Do not displace line and grade of SMA edges during rolling.

Keep roller wheels properly moistened with water or water mixed with small quantities of detergent. Use of excess liquid, e.g., water, detergent and water mixture, diesel, and petroleum- based liquids will not be allowed on rollers.

Along forms, curbs, headers, walls and other places not accessible to rollers, compact mixture with hot hand tampers, smoothing irons or mechanical tampers that have been accepted by the Engineer. On depressed areas, trench roller or cleated compression strips under roller may be used to transmit compression.

Remove pavement that is loose, broken, exposed to deleterious material, contaminated, or shows an excess or deficiency in asphalt binder content; or is defective in any way or combination thereof. Replace with fresh SMA pavement of same type and compact. Remove and replace defective pavement and compact at no increase in contract price or contract time.

Operate rollers at slow but uniform speed with drive wheels nearest the paver. Continue rolling to attain specified density and until roller marks are eliminated.

(1) SMA Pavement Courses One and a Half Inches Thick Or Greater. Where SMA pavement compacted thickness indicated in the contract documents is 1-1/2 inches or greater, compact to not less than 94.0 percent nor greater than 97.0 percent of the maximum specific gravity determined in accordance with AASHTO T 209, modified by deletion of Supplemental Procedure for Mixtures Containing Porous Aggregate.

(F) Demonstration. Before proceeding with the SMA work, demonstrate that a satisfactory mix can be produced and placed and determine the compactive effort required. For the demonstration, place a

minimum of 150 tons outside of the project limits. No production pavement shall start until the SMA demonstration is accepted by the Engineer.

(G) Control Strip. Prior to starting paving, construct a full lane width control strip on the finished grade at least 500 ft in length. The control strip will be used to determine the compactive effort. After the control strip is complete, do not deviate from the approved rolling pattern without constructing a new control strip. As determined by the Engineer, remove and dispose of any unacceptable control strip at no additional cost to the State. Submit to the Engineer the means and methods to construct the control strip, e.g., equipment, rolling pattern, compaction of the longitudinal joint, quality control plan including real-time pavement smoothness methods and testing during paving. If acceptable to the Engineer, this document will be considered part of the Contract Documents and the Contractor shall meet the stated means and methods unless another control strip is constructed and accepted by the Engineer. No production pavement shall start until the SMA control strip is accepted by the Engineer.

(H) Pavement Smoothness Rideability Test. The requirements for pavement smoothness rideability in Section 401 – Hot Mix Asphalt Pavement shall apply to this section. This includes applicable Subsections of 401.03 Construction.

406.04 Measurement. The Engineer will measure SMA pavement per square yard in accordance with the contract documents.

Engineer will measure pavement profiling work when applicable on a cost-plus basis as specified in this section and as ordered by Engineer. The Engineer will issue a billing for the pavement profile work done for the time period with the invoices and receipts that the billing was based on, attached to the Contractor for each contract item. The Contractor's pavement profile work required in this section will not be measured and will be considered incidental to the various paving items unless stated otherwise.

406.05 Payment. The Engineer will pay for the accepted pay items listed below at the contract unit price per pay unit, as shown in the proposal schedule. Payment will be full compensation for the work prescribed in this section and the contract documents.

Pay Item	**Pay Unit**
2 Inch SMA Pavement	Square Yard
3 Inch SMA Pavement	Square Yard

(1) 70% of the contract unit price upon the submitting a job-mix formula acceptable to the Engineer; the SMA demonstration and control strip is accepted by the Engineer, completion of preparing the surface, spreading, finishing the mixture; compacting the mixture.

(2) 20% of the contract unit price upon completion of cutting samples from the compacted pavement for testing; placing and compacting the sampled area with new material conforming to the surrounding area; protecting the pavement; and final analysis.

(3) 10% of the contract unit price upon completion of removal of temporary pavement markings, installation of permanent pavement markings, work zone signage, site cleanup.

(4) The Engineer may, at its sole discretion, in lieu of requiring removal and replacement, use the sliding scale factor to accept SMA pavements compacted below 94.0 percent and above 97.0 percent. The Engineer will make payment for the material in that production day, if he decides to use a sliding scale factor, at a reduced price arrived at by multiplying the contract unit price by the pay factor. The Engineer is not obligated to allow non-compliant work to remain in place and may at any time choose not to use a sliding scale factor method of payment and instead require removal of the noncompliant pavement greater than 97.0 or less than 94.0.

(5) Removal of noncompliant pavement shall be in accordance with Subsection 105.12 – Removal of Non-Conforming and Unauthorized Work.

Table 406-4 – Sliding Scale Pay Factor for Compaction

Percent Compaction	Percentage Payment
> 98.0	Removal
97.1 - 98.0	95
94.0 - 97.0	100
92.0 - 93.9	95
90.0 - 91.9	80
< 90.0	Removal

The Engineer may use the sliding scale factor to accept SMA mixtures with air voids at N_{design} less than three percent and greater than five percent. The Engineer will make payment for the material in that production day at a reduced

price arrived at by multiplying the contract unit price by the pay factor shown in Table 406-5 – Sliding Scale Pay Factor for Air Voids at N_{design}.

Table 406-5 — Sliding Scale Pay Factor for Air Voids at N_{design}	
Percent Air Voids	Percentage Payment
> 6.0	90
5.1 – 6.0	95
3.0 – 5.0	100
2.0 – 2.9	95
< 2.0	90

To apply multiple price-quantity adjustments for a production day, calculate a composite pay factor using the algebraic sum of the individual price adjustments.

Example: Compaction Pay Factor = 95% 100-95=5%=0.05
Design Air Voids Pay Factor = 90% 100-90=10%=0.10

Composite Pay Factor = [(- 0.05) + (- 0.10) + 1.00] x 100 = 85%

Demonstration paving (406.03(F)) shall be incidental to SMA pavement.

The Engineer will pay for only one accepted control strip. Control strips not accepted by the Engineer shall be considered as work noncompliant to the Contract Document requirements and will not be paid for. Additional control strips after the initial acceptance of the control strip will not be paid for unless it is incorporated into the accepted SMA paving work. It then will be paid at the contract unit price or shall be part of the lump sum price. Paving for the first accepted control strip will be paid for at the contract unit price or shall be part of the lump sum price.

The Engineer will pay for cold planing in accordance with and under Section 415 — Cold Planing of Existing Pavement.

The Engineer will pay for adjusting existing frames, covers, and valve boxes in accordance with and under Section 604 — Manholes, Inlets and Catch Basins and Section 626 – Manholes and Valve Boxes for Water and Sewer Systems.

END OF SECTION 406”

SECTION 414 – RECONSTRUCTION OF WEAKENED PAVEMENT AREAS

Make the following amendment to said Section:

(I) Amend **Subsection 414.03 – Construction** by adding the following paragraphs after line 26:

"The depth of excavation for reconstruction shall be the reconstruction thickness as ordered by the Engineer. Consider the depth of excavation for reconstruction to be equal to the thickness of the new pavement section if the contract shows no depth. Reconstruct the excavated areas according to Section 301 – Hot Mix Asphalt Base Course (HMABC).

Backfill and thoroughly compact unauthorized excavation below the required bottom grade with suitable material at no cost to the State. The finished bottom grade immediately before placing subsequent material thereon shall have a relative compaction of not less than 95 percent for a depth of 6 inches."

(II) Amend **Subsection 414.04 – Measurement** from lines 28 to 29 to read:

"**414.04 Measurement.** The Engineer will measure excavation for reconstruction of weakened pavement areas per square yard as determined by the Engineer."

(III) Amend **Subsection 414.05 – Payment** from lines 31 to 40 to read:

"**414.05 Payment.** The Engineer will pay for the accepted excavation of weakened pavement areas at the contract unit price per square yard. Payment will be full compensation for the work prescribed in this section and the contract documents.

The Engineer will pay for the following pay item when included in the proposal schedule:

Pay Item	**Pay Unit**
Excavation of Weakened Pavement Areas, ____	Square Yard"

END OF SECTION 414

SECTION 415 – COLD PLANING OF EXISTING PAVEMENT

Make the following amendments to said Sections:

(I) Amend **Section 415.04 Measurement**, from line 67 to 68 to read as follows:

"**415.04 Measurement.**

(A) The Engineer will measure cold planing per square yard in accordance with the contract documents."

(II) Amend **Section 415.05 Payment**, from line 70 to 79 to read as follows:

"**415.05 Payment.** The Engineer will pay for the accepted pay items listed below at the contract price per pay unit, as shown in the proposal schedule. Payment will be full compensation for the work prescribed in this section and the contract documents.

The Engineer will pay for one of the following pay items when included in the proposal schedule:

Pay Item	**Pay Unit**
2 Inch Cold Planing	Square Yard
3 Inch Cold Planing	Square Yard

(1) 80 percent of the contract bid price upon completion of removing the indicated thickness and clean and sweep before opening to public traffic;

(2) 20 percent of the contract bid price upon completion of removing the material and disposing of the removed material."

END OF SECTION 415

Make this section a part of the Standard Specifications:

"SECTION 416 – SCARIFY EXISTING PAVEMENT

416.01 Description. This section is for removing specified thickness of existing pavement by cold planing according to the contract. The intention of this work is to enhance skid resistance on the highway.

416.02 Materials. None specified.

416.03 Construction.

(A) Equipment. The equipment used for scarifying the existing pavement may be either equipment specifically designed for this purpose, or may be equipment similar to or the same as the equipment used for Section 415 – Cold Planing of Existing Pavement.

(B) Planed Surface and Removed Materials. Scarifying shall be done at an amplitude not to exceed one quarter inch (1/4") or as directed by the Engineer. Scarifying shall be parallel to the direction of traffic and shall be done so that the existing pavement markings remain (in other words, scarify between yellow and white stripes only) or as directed by the Engineer. The surface produced shall be such that a 10-foot straight edge laid longitudinally and laterally shall have variances of less than 0.50 inch (except in crown area). The removed material shall be stockpiled at a location specified by the Engineer. Scarify the entire width of the lane specified in one day.

(C) Vacuum Sweeping. Vacuum sweep the scarified areas immediately after scarifying. The vacuum sweep shall not preclude dust control operations.

(D) Seal Coat. The Contractor shall spray a seal coat of emulsified asphalt (SS-1 or CSS-1) to the scarified areas. The material shall be diluted with water at a ratio of 1:1.

416.04 Measurement. The Engineer will measure the scarified pavement per square yard.

416.05 Payment. The Engineer will pay for the accepted scarified pavement at the contract unit price per square yard complete in place.

Pay Item	**Pay Unit**
Scarify Existing Pavement	Square Yard"

END OF SECTION 416

Make this section a part of the Standard Specifications:

"SECTION 417 – CUT CORES IN EXISTING PAVEMENT

417.01 Description. This section is for obtaining 4-inch diameter sample cores of the existing pavement structure.

417.02 Materials. None specified.

417.03 Construction. Obtain 4-inch diameter sample cores of the full depth of the existing pavement structure at locations and in quantities as directed by the Engineer. Sampling shall be done with a core drill, and in accordance with the "Sampling and Testing Guide for Acceptance and Verification" in Hawaii DOT Highways Division's *Quality Assurance Manual for Material*, Appendix 3. After coring, the hole shall be filled and compacted with new material to conform to the surrounding area.

417.04 Measurement. The Engineer will measure the sample cores per each.

417.05 Payment. The Engineer will pay for the accepted sample cores at the contract unit price per each.

Pay Item	Pay Unit
Cut Cores to Determine Existing Pavement Condition	Each"

END OF SECTION 417

Make the following Section a part of the Standard Specifications:

"SECTION 615 – MILLED RUMBLE STRIP

615.01 Description. This section describes constructing Centerline and Edgeline Milled Rumble Strips (MRS) in HMA pavement.

615.02 Materials. None.

615.03 Construction.

(A) Submittal. Method of constructing the milled rumble strip shall be submitted to the Engineer for acceptance. Meeting shall be scheduled 14 days before start of construction work. Discuss sequence of work plans, and proposal for dust control.

(B) Equipment. Milling equipment shall be equipped with a rotary-type cutting head with cutting tips arranged in a pattern as to provide a relatively smooth cut, approximately 1/16 inches between peaks and valleys.

The cutting head(s) shall be on a suspension independent from the power unit to allow the head(s) to self-align with surface slopes and irregularities.

The machine shall have a guidance system that provides consistent alignment of each cut in relation to the roadway and provide uniformity and consistency throughout the project.

(C) Longitudinal Spacing. The Milled Rumble Strips (MRS) shall be placed perpendicular to the roadway with longitudinal spacing as follow:

Centerline MRS: 20 inch on-center (milled across centerline)
Edgeline MRS: 12 inch on-center (within edgeline)

The 20 inch on-center longitudinal spacing for Centerline MRS is designed to accommodate multiple centerline pavement striping and raised pavement marker configurations. It will allow placement of raised pavement markers between the milled concave depressions.

(D) Milling Operations. Clean pavement surface before constructing the rumble strips. Mill the concave depressions to the dimensions shown in the plans.

Align the concave depressions as shown in the plans. Alignment of milled rumble strips shall not deviate from the plans more than ± 2 inches.

After the concave depressions are milled into the pavement surface, use a power broom or sweeper/vacuum to collect the waste material resulting from the milling operations.

Contractor shall dispose the waste material as directed by the Engineer at no increase in contract price or contract time.

615.04 Measurement. The Engineer will measure for furnishing and installing milled rumble strip per linear foot.

615.05 Payment. The Engineer will pay for the accepted milled rumble strip on at the contract unit price per linear foot. Payment will be full compensation for the work prescribed in this section and the contract documents.

The Engineer will pay for the following pay item when included in the proposal schedule:

Pay Item	**Pay Unit**
16-Inch Milled Rumble Strip, Centerline	Linear Foot
12-Inch Milled Rumble Strip, Edgeline	Linear Foot”

END OF SECTION 615

Make the following section a part of the Standard Specifications:

SECTION 621 – INVASIVE SPECIES MANAGEMENT

621.01 Description. This section describes the best management practices for the prevention, identification, control, eradication, and reporting of invasive plant and animal species (collectively, invasive species). Invasive species impacts can include damage to infrastructure, public health and safety issues, reduction of biodiversity, and reduced cover of desirable native and/or nonnative species. The material found in Section 621 – Invasive Species Management shall be applied to the following sections, as appropriate: Section 201 – Clearing and Grubbing, Sections 202 – Removal of Structures and Obstructions, 203 – Excavation and Embankment, 204 –Excavation and Backfill for Miscellaneous Facilities, 205 – Excavation and Backfill for Bridge and Retaining Structures, and 206 –Excavation and Backfill for Drainage Facilities, which cover various excavations; Section 209 – Temporary Water Pollution, Dust, and Erosion Control; Section 619 – Planting; Section 641 – Hydro-Mulch Seeding; Section 642 – Landscape Maintenance; and Section 643 – Maintenance of Existing Landscape Areas.

(A) Definitions. Whenever the following words, terms, or pronouns are used in contract documents, unless otherwise prescribed therein and without regard to the use or omission of uppercase letters, the intent and meaning shall be interpreted as follows:

(1) Alien Species. Any species, including its seeds, eggs, spores, or other biological material capable of propagating that species, that is not native to that ecosystem.

(2) Botanist/Arborist. A person with a minimum of 5 years of experience in the botanical field, including the identification, eradication, control, and reporting of invasive plant species. The CONTRACTOR's selected botanist/arborist shall be approved by the Engineer.

(3) Hawaii Invasive Species Council (HISC). Inter-departmental collaboration comprised of the Departments of Land & Natural Resources (DLNR), Agriculture (DOA), Health (DOH), Transportation (DOT), Business, Economic Development & Tourism (DBEDT), and the University of Hawaii (UH). The HISC was established in 2003 for the special purpose of providing policy level direction, coordination, and planning among state departments, federal agencies, and international and local initiatives for the control and eradication of harmful invasive species infestations throughout the State and for preventing the introduction of other invasive species that may be potentially harmful.

(4) Invasive Species. An alien species whose introduction does, or is likely to, cause economic or environmental harm or harm to human health.

(5) Invasive Species Committee (ISC). Committees located in Hawai‘i that are island-based partnerships of government agencies, nongovernmental organizations, and private businesses protecting each island from the most threatening invasive weeds and pests.

(6) Noxious Weed. Any plant species that is, or that may be likely to become, injurious, harmful, or deleterious to the agricultural, horticultural, aquacultural, or livestock industry of the state and to forest and recreational areas and conservation districts of the state, as regulated by the Secretary of Agriculture and the federal land management agencies and the State of Hawai‘i Department of Agriculture (HDOA) Hawai‘i Revised Statutes (HRS) Chapter 152. The HDOA Noxious Weed List can be found in HRS 4:6:68 (Noxious Weed Rules).

(7) Pest. Any insect, rodent, nematode, fungus, weed, or any other form of terrestrial or aquatic plant or animal life or virus, bacteria, or other microorganism (except viruses, bacteria, or other microorganisms on or in living humans or other living animals) that the Engineer declares to be a pest (Federal Insecticide, Fungicide, and Rodenticide Act, Section 2(t)).

(8) Physical Construction. Activities associated with clearing, grubbing, grading, excavating, filling of land, or other similar site work activities and that cause ground disturbance and/or site disturbance.

(9) Propagule. A vegetative structure that can become detached from a plant and give rise to a new plant, e.g., a bud, sucker, or spore.

(10) Priority Invasive Plants for the State of Hawai‘i Department of Transportation Construction Projects.

(a) Plants and weeds identified in State of Hawai‘i Department of Transportation (HDOT) contract specifications.

(b) Plants on the U.S. Department of Agriculture Federal Noxious Weed List and in HRS 4:6:68 (Noxious Weed Rules) *provided that* the HDOA and/or the ISC also recommend that weed as a target.

(c) Species identified as targets for the early detection, eradication, or containment and control by the local island ISC in each county, found at the following websites:

1. Hawai‘i Island: https://www.biisc.org/

2. Kaua‘i: https://www.kauaiisc.org/

3. Maui: https://mauiinvasive.org/

4. O‘ahu: https://www.oahuisc.org/

(d) Species determined by HDOT to impact roadside maintenance operations, infrastructure, or health and safety of the public (as determined by the Engineer). These species can be found in Chapter 2 of the HDOT Invasive Species Project Prioritization Plan.

(e) Species that are actively controlled by neighboring landowners and agreed upon by the Engineer, as identified during pre-construction consultation with landowners (as applicable).

(11) Priority Pests for the State of Hawai‘i Department of Transportation.

(a) Animals and pathogens designated as high-priority invasive species for early detection, eradication, or containment by the ISCs or HDOA in each county.

(b) Animals and pathogens known to impact roadside maintenance operations, infrastructure, or public safety, as determined by HDOT.

(c) Animals and pathogens that are of concern to neighboring landowners and the Engineer agrees should be targets for HDOT.

(12) Weed. Any plant growing where it is not wanted, as determined by the Engineer.

(13) Wildlife Biologist. A person with a minimum of 5 years of experience in the wildlife field, including identification, eradication, control, and reporting of invasive animal species. The CONTRACTOR’s selected Wildlife Biologist shall be approved by the Engineer.

621.02 Materials.

(A) Free from Invasive Plants or Pests. All material, including plant material, gravel, sand, and soil, provided for the project shall be free of invasive plants or pests. Such action is to prevent the introduction of invasive species onto the project site.

(B) Plant Material Sources.

(1) The CONTRACTOR shall buy plants propagated on the island where the plants will be planted. The CONTRACTOR shall provide the Engineer with the names of the nursery or nurseries they will use to provide landscaping plants in accordance with Section 619 – Planting. A Botanist/Arborist and a Wildlife Biologist (collectively, Biologists) shall inspect the nursery for the presence of invasive species on the property and in planting materials destined for the project site within 90 days of planting. Inspection results shall be provided to the Engineer in a report.

(2) Should plants not be available on-island, imported plants from off-island may be used but shall not be brought directly to the project site. State of Hawai‘i Plant Quarantine Branch–certified nurseries should be given priority when selecting off-island plant imports (State of Hawai‘i Plant Industry Division 2020, available at: https://hdoa.hawaii.gov/1pi/pq/certified-nurseries/). These plants shall not be mixed with locally grown plants and shall be first quarantined in a location away from the project site for a period not less than 30 days in an area approved by the Engineer. Biologists shall inspect all plants imported from off-island to ensure that they are free from invasive species, such as coqui frogs (*Eleutherodactylus coqui*), fire ants (*Wasmannia auropunctata* and *Solenopsis geminata*), and weed seedlings, that could arrive inadvertently. The Biologists shall screen out any priority invasive plants or other potentially invasive plants or organisms, including imported plants that appear to be sick or carrying disease. Any plant that appears to be diseased shall be submitted to the University of Hawai‘i College of Tropical Agriculture and Humane Resources extension agents for positive identification of the disease. The Biologists may also seek assistance from other organizations, including the State of Hawai‘i Department of Land and Natural Resources (DLNR), HDOA, and the local island ISC in the identification or detection of non-plant invasive species. Imported plants shall be planted out only after they have been determined to be free of unwanted weeds or animal pests at the quarantine location determined by the Engineer. All pests or invasive species shall be

reported by calling the Hawai‘i Invasive Species Council at 808-643-PEST (7378) to determine appropriate treatment.

(3) In conjunction with Section 641 – Hydro-Mulch Seeding, a botanist/arborist shall inspect seeded areas a minimum of 45 days after hydroseed is applied.

(C) Construction Material.

(1) The Contractor shall make sure all material stockpile sites are free of invasive plants (including seeds and propagules) and animals. Stockpile site surveys shall be included in the Biologists' inventory report.

(2) All imported materials, including gravel, soil, rock, and sand shall be free of invasive species.

(3) All materials shall be stockpiled at a designated staging area to prevent contamination. If possible, permanent containment areas shall be constructed for long-term projects.

(4) Stockpiles of materials such as gravel, soil, rock, and sand shall be inspected every 6 months by the Biologists to ensure that they are not encroached upon by invasive plants or animals (a buffer of 30 feet shall be maintained).

(5) If invasive species are present, the CONTRACTOR shall either chemically or mechanically remove them, as determined by the Engineer.

621.03 Construction.

(A) Responsibility.

(1) Any priority invasive plants and priority pests that establish after notice to proceed and prior to final acceptance by the Engineer that were not present before construction shall be the sole responsibility of the CONTRACTOR to remove or control. Acceptable removal is dependent on the type of species and shall be approved by the Engineer.

(2) The CONTRACTOR shall be responsible for the control or eradication of priority invasive plants and/or priority pests that are already established at a project site before construction begins. CONTRACTOR responsibility is determined by the Engineer. Removal of already established species shall be paid from the force account; see Payment section below.

(3) The CONTRACTOR shall ensure that weed and/or pest removal is carried out in a legal manner, including obtaining all necessary training, licenses, and permits from applicable regulatory agencies for the specific methods proposed for removal and disposal of invasive species.

(B) Inventory of Invasive Species before Physical Construction.

(1) A full list of plant and animal species present at the site (botanical inventory and faunal inventory, respectively) is required for projects that have more than 1 acre or 43,560 square feet of roadside soil or vegetation and which will remain as soil or vegetation at the end of the construction project. The botanical and faunal inventory can either be combined into one report or the floral and faunal inventories can be reported on separately. Biologists shall provide one electronic copy of each inventory report to the Engineer. Botanical and faunal inventories shall be undertaken within 30 days before physical construction activities (e.g., site work, clearing, grubbing, ground disturbance, and/or any other site disturbance) are initiated. The postconstruction botanical and faunal inventories shall be undertaken during the Plant Establishment Period, which extends 9 months from the accepted completion date of the Planting Period. See Section 619 – Planting for definitions on the Planting Period and the Plant Establishment Period. The botanical and faunal inventory of the right-of-way shall be done by Biologists hired by the CONTRACTOR. The botanical inventory report shall include scientific names of plant species and their abundance (area covered and/or number of plants, as appropriate, depending on growth form). For priority invasive plants, the inventory shall provide details on GPS location (NAD 83) and reproductive status: mature (reproductive parts present) or immature. For priority invasive animals, the inventory shall include scientific names of faunal species and shall provide details on GPS location (NAD 83) and individual(s) detected.

(2) The Biologists shall inventory and report any priority invasive plants and/or priority invasive pests within 30 feet of any proposed on-site stockpiles for gravel, sand, and soil that may be sourced for the construction project.

(C) Invasive Species Removal Plan.

(1) If invasive species are found before physical construction, including within 30 feet of material stockpile locations, the CONTRACTOR shall submit an invasive species removal plan for approval by the Engineer. This plan shall include specific removal methods for all priority invasive species identified by the Engineer, such as physical removal and/or chemical treatments, and a detailed post-removal monitoring plan. The plan should address how to prevent the spread of the invasive species if not removed. A cost to remove and a cost to prevent the spread shall be submitted by the CONTRACTOR. Preparation of the removal plan will be paid for from the force account.

(2) If the invasive species is/are not removed prior to physical construction, the CONTRACTOR shall surround areas of all invasive plants with a protective 4-foot-high, orange plastic mesh or equivalent fence accepted by the Engineer, supported on a minimum 6-foot-long steel T-post. The CONTRACTOR shall provide signage on the fence that states “not to disturb or work within the fenced area.” Fences shall be erected before removal work begins and shall not be removed until removal work is completed. For trees or shrubs, flagging tape can be used to mark plants. The CONTRACTOR shall contact the local island ISC to determine the best method to contain invasive animals.

(D) Removal of Priority Invasive Species Found before Physical Construction.

(1) The CONTRACTOR shall be required to remove invasive plants and/or priority pests present at the site after approval of the removal plan or implement mitigation measures to prevent their spread. Removal of invasive species present prior to construction will be paid from the force account. Removal shall be completed prior to any physical construction at the project site.

(2) The CONTRACTOR shall be responsible for ensuring the plant and animal removal is carried out in a legal manner, including obtaining all necessary training, licenses, and permits from applicable regulatory agencies for the specific methods proposed for clearing and removing invasive species.

(3) If pesticides are proposed for use in the removal plan, the CONTRACTOR shall ensure that their application is supervised by a licensed commercial applicator. The labels for pesticides being used must be in the applicator's possession; the applicator shall have proper safety equipment and be prepared to handle chemical spills before they occur. The CONTRACTOR shall use the least toxic chemical that shall achieve the desired results. If a chemical spill occurs, the Engineer must be notified, and the proper authorities shall be notified in accordance with the pesticide label requirements. A record of chemical applications shall be kept by the commercial applicator and submitted to the Engineer.

(4) Green waste resulting from invasive species removal shall be disposed in a manner that will prevent spread by seeds or regrowth from plant fragments. Material contaminated with invasive species shall be covered and secured during transport to prevent other areas from becoming contaminated. In addition, seeds and fruit shall be placed and secured in bags by the CONTRACTOR. As determined by the Engineer, plant material shall be incinerated or buried in a landfill.

(E) Post-removal Monitoring and Inspection. A Biologist shall carry out post-removal monitoring at least every 6 months to confirm that the removal plan was successfully implemented. The post-removal monitoring is intended to ensure that the treated areas remain free of invasive species during the construction. Before handing the site over to the Engineer, the CONTRACTOR shall perform an inspection of the entire construction site. The Engineer shall determine whether the CONTRACTOR has met the responsibilities for invasive species removal based on the post-removal inspection report.

(F) Decontaminating Equipment, Machinery, and Vehicles.

(1) Clean Equipment.

(a) All CONTRACTOR equipment and vehicles shall arrive at the work site clean and visibly free of any soil, plants, or plant parts (e.g., seeds); insects and insect eggs; reptiles and amphibians and their eggs; or any other invasive species. Routine clean-down procedures shall be implemented to prevent contaminants from building up using visible inspection and power washing equipment. All equipment cleaning and sanitation shall be incidental to the lump-sum pay items.

(b) The CONTRACTOR shall certify that equipment is arriving free of soil and debris capable of transporting viable invasive plant parts, seeds, or propagules, or invasive animals. The CONTRACTOR shall provide the Engineer with sequentially numbered decals and an accompanying spreadsheet with the decal numbers indicated in one column and subsequent column headings for the date of inspection and license plate number. Decals shall include the contract number and be consistent with the format supplied by the Engineer. The CONTRACTOR shall place the decal on construction project machinery and vehicles, and the Engineer will initial and date the decal after an inspection determines that the vehicles are acceptably clean. After initialing the decal on the vehicle/ machinery, the Engineer will use the submitted spreadsheet to record the date of inspection and license plate number. The CONTRACTOR shall remove the decal after project completion.

(c) Vehicles or equipment that are off-site for 1 or more working days shall be cleaned and inspected at least once prior to their arrival at site. For other vehicles left on-site, the CONTRACTOR shall attempt to maintain reasonable standards of vehicle hygiene, and frequency of inspection will be determined by the Engineer.

(d) All vehicles and equipment brought in for construction work from off-island are required to be thoroughly washed at the port of export before they arrive at the project site. If invasive species are found at the project site, all vehicles that are deemed to be contaminated by the Engineer must be washed before leaving the project site and being returned to its island of origin, or if not feasible or appropriate at the project site, then at an approved alternative site.

(e) Cleaning Stations.

1. The Engineer will designate a cleaning station for the project site. The location of cleaning stations shall be recorded using a GPS unit and provided to the Engineer. The Engineer will consider the following when selecting and approving a cleaning station at the project site:

a. The cleaning stations shall not contribute to further contamination of machinery. To prevent this, gravel or other appropriate material shall be used to minimize contact with mud or dirt, which may contain invasive plant seeds.

b. Cleaning stations shall be located in low-value areas (e.g., away from native vegetation) or off-site.

c. The designated cleaning area must provide an environment for operators to safely undertake clean-down procedures (i.e., is safe for road traffic and personnel).

d. Cleaning station locations must be clearly posted with signs that say: “Cleaning Station.”

2. The CONTRACTOR shall only use designated cleaning stations at the project site to decontaminate equipment, machinery, and vehicles. All earthwork equipment shall be cleaned and be completely free of soil, seeds, vegetative matter, or other debris that could contain plant seeds or propagules prior to arrival and/or before leaving the project site. Manual clean-down procedures consist of using hand tools such as brushes, brooms, air compressors, vacuums, and/or high-pressure water guns. If using high-pressure water, apply only as much water as needed to avoid unnecessary run-off. As part of the cleaning, the CONTRACTOR must pay particular attention to key areas such as the chassis and wheels. A clean-down checklist for vehicles shall include the following:

a. Underside: wheels, rollers, tracks, wheel arches, wheel trim, bumpers, mud flaps, tire rims, axle, differentials, and spare tire

b. Digging apparatus, blades, and buckets

c. Interior: foot wells, carpets, and under mats

d. Engine bay: radiator, air filters, grille, recess under windscreen wipers, and transmission gearbox

e. Tray and trunk (for soil, seed, and plant material)

3. The CONTRACTOR shall clean and inspect equipment before it arrives at the project site. Equipment shall be considered free of soil, seeds, and other such debris after a visual inspection confirms it. Visual inspection shall include the complete exterior, including undercarriages, tires, wheel wells, and grille. Disassembly of equipment components or specialized inspection tools are not required. The Engineer will maintain a log of vehicle inspections. Earthwork equipment shall not be allowed to operate within the state right-of-way until approved by the Engineer.

4. Priority pests found hitchhiking on equipment shall be reported to HDOA by calling 808-643-PEST (7378).

5. Equipment shall not be sprayed with pesticides as a preventative measure. Spraying equipment with pesticides is not consistent with label specifications. Additionally, many pesticides target a wide range of vegetation and invertebrates and using pesticides in this way may harm nontarget vegetation and invertebrates.

6. The CONTRACTOR shall thoroughly inspect seeding equipment prior to conducting seeding activities to ensure they are free of invasive plant propagules.

(G) Ensuring No Invasive Species Become Established during Construction.

(1) The CONTRACTOR is responsible for keeping the construction site free of invasive species**.** Monitoring shall be carried out by the CONTRACTOR after removal of invasive species found prior to construction, every 6 months during construction, after physical construction, and after the Plant Establishment Period, before handing the site over to the State. This monitoring shall be undertaken by a Botanist/Arborist for invasive plants and a Wildlife

Biologist for invasive animals who shall provide an inventory report which will include scientific names of plant and animal species and their abundance (e.g., area covered and/or number of plants, as appropriate, depending on growth form; and number of individual animals detected). The invasive species inventory report can either report on invasive plants and animals separately or joined as a single document. The report for priority invasive plants shall provide GPS (NAD 83) locations and reproductive status, and the report for priority invasive pests shall provide GPS (NAD 83) locations and the number of individuals detected. Each Biologist shall provide one electronic copy of each inventory report to the Engineer.

(2) Invasive Species Information Signage at the Project Site. Invasive species and noxious weed signage shall be prominently posted at the CONTRACTOR's workplace and at the project site. Signage shall include one laminated 8.5 × 11–inch color page for each HDOT priority invasive species relevant to the project site. The CONTRACTOR may obtain free digital files with invasive species photographs that shall be printed and laminated for use on the project site; these are available at: http://www.hawaiiinvasivespecies.org. All signage shall include "Call 808-643-PEST (7378)."

(3) Training. HDOT and the CONTRACTOR's field staff shall attend a mandatory training by biologists knowledgeable about invasive plants and animals about on-site decontamination protocols, identification of priority invasive species and pests, and reporting procedures**,** once annually (or prior to any physical construction). The local island ISC should be contacted for training information. Trainers shall record the name and date of training for those individuals that complete the training, which shall be provided to the Engineer upon request.

(4) Unannounced Inspections. The CONTRACTOR shall provide unfettered access to the state right-of-way to any ISC staff, HDOA staff, or anyone else acting for the Engineer for the purpose of detecting or monitoring invasive species.

(H) Post-Physical Construction Prior to Returning the Site to the State—Post-Construction Inventory. The CONTRACTOR shall conduct a post-construction invasive species inventory to verify and confirm that the CONTRACTOR maintained the site in the original condition after the initial removal of invasive species was conducted. If additional invasive species are found, the CONTRACTOR would be responsible to develop a removal plan, remove the invasive species found, and conduct post-removal monitoring at their own expense. The removal plan shall be subject to Engineer approval.

621.04 Measurement.

(A) Invasive species control measures during construction, including signage and decontamination training, will be paid on a lump sum basis. Measurement for payment will not apply.

(B) The development of the invasive species removal plan, removal of invasive species established before physical construction and not part of the project's physical construction work, as well as the post-removal monitoring, shall be paid with force account funds. The Engineer will measure invasive species removal planning, removal, and monitoring required and requested by Engineer on a force account basis in accordance with Subsection 109.06 – Force Account Provisions and Compensation.

621.05 Payment. The Engineer will pay for the accepted invasive species management on a force account basis in accordance with Subsection 109.06 – Force Account Provisions and Compensation. Payment will be full compensation for the work prescribed in this section and the contract documents.

The Engineer will pay for the following pay item when included in the proposal schedule:

Pay Item	**Pay Unit**
Invasive Species Management	Force Account

An estimated amount for the force account is allocated in the proposal schedule under “Invasive Species Management”, but the actual amount to be paid will be the sum shown on accepted force account records, whether this sum be more or less than the estimated amount allocated in the proposal schedule.”

END OF SECTION 621

SECTION 623 - TRAFFIC SIGNAL SYSTEM

Make the following amendments to said section:

(I) Amend **Subsection 623.03(C)(5) – Vehicle Detectors** by adding the following after line 248:

"For new pavement with Stone Matrix Asphalt (SMA) top layer, no saw-cutting in SMA for traffic signal loop detectors is allowed.

Prior to SMA paving operations, saw-cut and install traffic signal loop cables with minimum 1-inch cover below the top of underlying asphalt pavement section. Fill saw-cut grooves with hot-applied rubberized sealant that could withstand subsequent SMA paving temperature.

Both 6-foot diameter circular loop detectors and 6 Ft. x 6 Ft. square loop detectors will be allowed. Do not install circular loop and square loop detectors together within the same loop circuit.

All saw-cutting slurry shall be wet vacuumed, and the collected slurry disposed of appropriately."

(II) Amend **Subsection 623.03(C)(14) – Approach-Only Microwave Vehicle Detector** by adding the following after line 452:

"Approach-only microwave vehicle detectors are used to detect left-turn lane traffic at signalized intersections when existing loop detectors are disabled by pavement resurfacing operations.

Temporarily install approach-only microwave vehicle detector above ground in existing roadway median nears left-turn lane stop line. If no existing pole or traffic signal standard is available, install square-tube type sign post for temporary mounting support at location designated by the Engineer.

Do not install microwave vehicle detector across intersection from the intended left-turn lane, or overhead on existing traffic signal standard mast-arm, if the detector could not be adjusted to detect approaching left-turn traffic only"

(III) Amend **Subsection 623.04 - Measurement** from lines 578 to 579 to read:

"**623.04 Measurement.** The Engineer will measure the loop detector sensing unit and microwave vehicle detector per each."

(IV) Amend **Subsection 623.05 - Payment** from lines 581 to 590 to read:

"**623.05 Payment.** The Engineer will pay for the accepted microwave vehicle detector at the contract unit price per each complete in place. The price includes full compensation for submitting the equipment list and drawing; installing sign post for temporary mounting support; assembling the microwave vehicle detector; wiring; bonding and grounding; testing; providing turn-on service; submitting warranty; and furnishing equipments, tools, labor, materials and other incidentals necessary to complete the work.

The Engineer will pay for the loop detector sensing unit at the contract unit price per each complete in place. The price includes full compensation for submitting the equipment list and drawing; furnishing and installing the loop detector sensing unit; submitting warranty; and furnishing equipments, tools, labor, materials and other incidentals necessary to complete the work.

The Engineer will consider cost for additional materials and labors not specifically shown or called for that are necessary to complete the work incidental to the various contract items in the proposal.

The Engineer will make payment under:

Pay Item	**Pay Unit**
Loop Detector Sensing Unit (6 Ft. x 6 Ft.)	Each
Loop Detector Sensing Unit (6 Ft. Diameter)	Each
Approach-Only Microwave Vehicle Detector	Each

END OF SECTION 623

Make this Section a part of the Standard Specifications:

"SECTION 627 – ENHANCED VEHICLE CLASSIFICATION TRAFFIC COUNTING SYSTEM

627.01 Description. The work includes furnishing labor, materials, tools, machinery, and equipment to repair any damages to the existing Enhanced Vehicular Classification (EVC) traffic counting system due to the paving work. The Contractor shall make repairs to the damaged system as ordered by the Engineer, including the following:

(A) Provide necessary provisions for traffic counting operations by installing and testing piezoelectric sensors, vehicle detector loops, installing conduit, cable wiring, providing electrical connections, warning sign and system integration and testing according to the contract.

(B) Provide underground conduit systems including trenching, structural excavation, furnish and install pull boxes, backfilling and restoration work.

(C) Conduct required testing for the vehicle detector loops and piezo sensors. Submit for acceptance test procedures and criteria for acceptance test results to the Engineer. Notify the Engineer a minimum of one week before the date scheduled for testing.

(D) Coordinate and arrange for inspection of work with the Engineer. Arrange for a representative from piezo sensor's manufacturer to supervise installation of piezo sensors.

(E) Turn over to the Engineer a complete and operating vehicle counting system according to the contract.

Furnish and install incidental parts necessary to complete the vehicular counting and classification system as though such parts were in the contract.

Electrical equipment shall conform to the NEMA Standards and this contract. Materials and workmanship shall conform to "National Electric Code", (the code); General Order Nos. 6, and 10 of the Hawaii Public Utilities Commission; ASTM standards; the ANSI and applicable revisions for all the above codes and standards and local ordinances that may apply.

627.02 Materials.

(A) Enhanced Vehicular Classification (EVC) Traffic Counting System. The EVC system is intended to count vehicle volume and perform

vehicle classification, including but not, limited to the 13 FHWA vehicle types, and data for environmental impact analysis per FHWA requirements.

(1) General Requirements. Install EVC system in each lane at the system's existing location. The EVC system contains a set of piezoelectric sensors and magnetic loop detectors. The EVC system will be used to classify the number of axles in accordance with FHWA requirements.

The EVC system shall also be capable of monitoring traffic volume data using one or more magnetic induction vehicle detector loops. Such loops shall be installed as called for in the submitted plans.

(2) EVC System Components. Installation and setup per manufacturer's recommendation for all sensors, lead-in cables, and related components.

(a) Traffic Classification Data System Requirements.

1. In-Road Piezo and Classification Sensor System. A Piezo Sensor System is the type of classification sensor system required for this project.

(i) The piezo sensors shall have an operating life of a minimum of one year from the date of acceptance. Sensor failure during this period shall require replacement of the faulty unit at the Contractor's expense for furnishing, delivering and installing the replacement equipment, system, and components including any traffic control measures required for the safe installation of the replacement sensor.

(ii) Install piezo sensors under the supervision of the manufacturer's representative for the Piezo system. All necessary components, process, system modifications, and installation requirements shall be provided as incidentals to the system.

(iii) Piezo Sensor System: The following are requirements for the Piezoelectric Sensor system:

a) Configuration: Install piezoelectric sensors in the roadway for each lane in both traffic directions.

b) Class 1 BL unencapsulated piezo-electric sensors must be supplied complete with custom length lead-in coaxial cable with pre-made termination connectors. The sensor design and installation technique must have been proven reliable in conditions (soil and environmental), similar to those in Hawaii.

c) Piezo Sensor shall be Class I Weigh in Motion Sensor, 12-foot length (or based on actual roadway width), complete with coaxial lead cable (non-spliced). The sensor shall have 16 gauge flat braided silver plated copper wire center core with highly compressed piezoelectric copolymer P(VDF-TrFE) and outer sheath of 0.16-inch thick brass meeting CDA-260 and ASTM B87-88 requirements. The sensor shall be approximately 0.26-inches wide with a maximum thickness of 0.063-inches (plus/minus 0.05 inches). Insulation resistance between core and shield shall be greater than 500M ohms. Piezoelectric coefficient shall be greater or equal to 20 pC/N nominal.

1) Embed piezo sensors in a grout with clips for mounting at six inch intervals. The sensors shall be of the type suitable for the application. Install piezo lead-in cables and piezo sensors in slots cut in the road surface, approximately 3/4-inch wide by two inches deep and provide supporting clips at six inch centers.

2) Lay sensor in a groove at one inch below the surface of the roadway or as recommended by the manufacturer. Secure sensor in

place along the entire length of the sensor in the slot by quick setting grout clips.

3) Sensor shall be manufactured to produce uniform, high amplitude piezoelectric output with signal to noise ratio of 10:1 minimum.

4) Groove shall be constructed in strict accordance with specifications of the manufacturer. Install sensor straight and flat in groove.

5) Epoxy fill voids of the groove. The epoxy grout fill shall be prepared in accordance with the manufacturer's instructions, and shall result in a concave finish approximately 1/16-inch above the surface of pavement or as shown on the plans. The grout curing requirements of the manufacturer shall be complied with and traffic loading shall not be permitted until the grout is fully cured.

6) Passive signal cable shall be RG 58 rated for underground direct burial, with outer jacket of 0.187-inch outside diameter and nominal capacitance of 27 pF/Ft, with factory termination to sensor and BNC connector. Each cable shall have field measured custom length to suit the installation conditions. In the event that the cables provided have insufficient length to reach the equipment harness inside the cabinet, the cables shall be rejected and splicing to lengthen the cable will not be allowed.

7) Install sensor in clean saw cut grooves in strict conformance to the

sensor manufacturer's installation requirements.

8) Hot tar shall not be used. Installation of encapsulating material shall be allowed to cure and shall be ground flat.

9) Do not allow traffic on the completed system until the manufacturer's representative approves all conditions of the installation with the acceptance by the Engineer. Thereafter, testing in accordance with the manufacturer's requirements shall be completed before public traffic is allowed.

10) Grooves shall be made by wet cutting. Dry cutting shall not be allowed.

11) Overall length of the passive cable shall be 300-feet maximum or as required. Provide loop of five feet in handhole for each cable.

12) In the event that heating of the encapsulating material is allowed by the Engineer, the temperature of the material shall not be allowed to exceed 170 degrees F. In the event that the temperature exceeds the maximum allowed, the entire sensor system installed shall be replaced.

13) Provide adequate power for all test equipment to meet the detailed and specific requirements of the manufacturer for all tests required for certification and acceptance. Provide all necessary equipment to perform the required tests.

d) One 12-foot piezoelectric sensors (or as determined by the Engineer) must be supplied for each lane for both directions.

e) The sensors shall be able to withstand at least one million cycles and interface with the counting equipment to perform the above mentioned, applications.

f) The sensors shall include all mounting hardware and installation grout. The supplied installation grout must be suitable for installation in both asphalt and Portland cement pavements. The installation grout must require no special equipment to facilitate installation. The grout must have a short curing time (less than 75 minutes) to minimize lane closure time. The grout should be of sufficient consistency to prevent "running" when being applied on road surfaces with a drainage cross-slope. Particulate matter within the grout must not separate or settle. The grout must not shrink during the curing process.

(iv) Sensor (inductive) loops shall be furnished and installed in each traffic lane, to measure speed and length of vehicles and also to classify vehicles in conjunction with the axle detectors.

(v) If the number and configuration of the in-roadway sensors, and sensor loops, need to be modified from the number and configuration shown in the field, the Contractor shall inform the State at the time of submitting the proposal, or earlier, and submit Shop Drawings of the revised configuration for approval.

(vi) Grout and Epoxy. The sensor manufacturer must approve and the Engineer must accept all grout and epoxy used for the sensor installation.

(b) Vehicle Inductive Loops. Install two vehicle inductive loops per lane for measuring volume, speed and vehicle length. The inductive loops shall be completely tested prior to shipment with no splices and ready to install. (Note: The lead-in wire(s) for the new inductive loops can be spliced (soldered connection/waterproof insulation) to an existing lead-in wires at the existing or new pull box. Ensure sufficient wire lengths for the piezo sensors must be provided to be able to connect wires into the terminal block inside cabinet without splices. HDOT or its representative will make the final connection into the terminal block inside the cabinet, however, the Contractor shall label the wires clearly to identify traffic direction, lane number, and sequence of loops and piezo sensors in each lane per direction).

Each loop and its two lead-in-wires, shall be one continuous piece of #14 AWG, 19 strand bare copper, IMSA 51- conforming to the requirements of ASTM B-3 as manufactured by Berkshire Electric Cable Company or approved equal. The loop cable shall be continuous within the roadway. The loop itself includes four turns of wire of a size, as specified in the contract. Do not twist lead-in-wires from one loop pair with another loop pair.

Embed loop and lead-in-wires in a 3/8-inch minimum width saw-cut in the pavement. Saw cut depth to the top layer of wire shall be at least two inches deep. The saw cut groove shall be air blown to remove debris before installing the loop cable. Fill the saw cut groove with approved epoxy sealer. Install Vehicle Detector Loops such that they are centered in the lane relative to the final lane stripping. Replace loops not centered in each lane relative to the final lane stripping at no additional cost to the State.

(c) EVC Controller Cabinet. The new EVC controller cabinet shall house all required communications and control equipment necessary to control the EVC System and to remotely communicate with the Department of Transportation, Highways Division, Planning Branch via modem.

The EVC controller cabinet shall consist of a ground-mounted cabinet similar to a CALTRANS Model 332 Controller Cabinet or approved equal capable of housing and mounting the data collection unit.

Each 332 Cabinet shall meet the following additional requirements:

1. Cabinets fabricated from 0.125 anodized Aluminum.

2. Cabinet's Main Breakers shall be rated as 50 amps.

3. Front and back fluorescent lights activated upon opening any door.

4. Convenience GFI Receptacles.

5. Door locks of solid brass rim Best Lock Series 516RL3XA7559-606 including two keys.

6. Labeling by Silk-Screening only.

7. Attach one each 24 inch x 36 inch Cabinet Print in a weatherproof plastic jacket to front and back cabinet doors.

8. The cabinet shall be painted with an “anti-graffiti” type paint in conformance with Section 708 - Paints of the Standard Specifications.

Internal wiring shall be modified to meet the functional needs of the EVC System.

(d) Electrical Conductors shall be as follows:

1. Type 1 Home-Run Cable Tie in Loop Detector Stubs to the Cabinet. Polyethylene insulated, Stranded-Tinned-Copper14 AWG; 2 Conductor Cable; Stranded Tinned-Copper Drain Wire; Aluminum - Polyester Shielded; Polyethylene Jacketed; 600 Volts Rated; IMSA Spec. 50-2 Certified.

2. Type 2 Detector-Loop Cable for installation into the roadway sawcut; 12 AWG Stranded THHN; 600 Volts; inserted into a Polyethylene Tube, 0.25 inch max. diameter IMSA Spec 51-5 Certified.

Cable inclusive in the Detector Loop Bid.

3. The remaining cables required for the installation of the EVC station shall be as required by the manufacturer's requirements and recommendations.

(e) Excavation Warning Signs. The Contractor shall furnish and install two warning signs and appropriate mountings on each side of the roadway adjacent to the sensor lead-in cable runs or as close as possible. Signs and mountings shall conform to the requirements of Section 750.01 (Signs) of the Standard Specifications and Standard Plan TE-01. Signs shall be a minimum of 12 inches by 18 inches. Sign text shall read as follows:

WARNING
BURIED TRAFFIC SIGNAL LINES
NOTIFY HWY-PLANNING BRANCH AT
(808) 587-6352 BEFORE DIGGING/EXCAVATION

The first line of text shall be a minimum of two inches in height. Subsequent lines of text shall be one inch in height. No border is necessary, but a margin of 1/4 inch shall be maintained. For the letters and background, use black and yellow paints, respectively. The first line of text shall be centered. Subsequent lines shall also be centered, however, the Contractor shall have the option to more the wording within these lines to allow for best fit. Furnishing warning signs, mountings, and installation shall be incidental to the Contract.

(B) Other Materials. Concrete shall conform to the requirements of Section 601 - Structural Concrete. Other materials shall meet the requirements specified in the following:

Trench Backfill Material	Subsection 703.21
Conduits	Subsection 712.27
Concrete Pull Box	Subsection 712.06(B)
Conductors and Cables	Subsection 770.06

627.03 Construction Requirements.

(A) Equipment List and Drawings. Submit the equipment list and drawings to the Engineer for acceptance.

(B) Excavation and Backfill. Excavation and backfill shall conform to Section 204 - Excavation and Backfill for Miscellaneous Facilities. Place the material from the excavation to prevent damage and obstruction to vehicular and pedestrian traffic and interference with surface drainage.

(C) Installation.

(1) Provide supervision for the EVC installation and testing of the entire EVC system.

(a) Install piezo (EVC) sensors under supervision of EVC system Contractor.

(b) Provide other work necessary such that the completed sensors are ready for HDOT's use.

(2) Vehicle Detectors. Install vehicle inductive loops as ordered by the Engineer and as required by the EVC system Contractor, or as recommended by the manufacturer.

(3) Conduits. Conduits, if any, shall be direct burial and concrete encased as shown in the contract. Conduits shall be PVC, Schedule 80.

Install the ducts to drain towards either one or both pullboxes. Conduits shall not drain towards the EVC Controller cabinet.

Intake directional changes in the conduits, such as bends and changes to clear obstructions with curved segments using accepted deflection couplings or with short lengths of straight ducts and couplings. The deflection angle between two adjacent lengths of ducts shall not exceed six degrees (6°). The bends shall not have a radius of less than 12 times the nominal size of the conduit. The Contractor may use factory-made ells.

Square and trim the ends after cutting to remove rough edges. The connections shall be of the solvent weld type. Make the solvent weld joints according to the conduit manufacturer's recommendations and as accepted.

Seal the ends of the duct with plugs at the end of each day of work, whenever problems interrupt the duct installation work and whenever ducts are subject to submergence in water.

Keep the conduits clean during construction.

Use only hand shovels in compacting concrete encasements. Cure the concrete for at least 72 hours before permitting vehicular traffic to run over the concrete.

Provide each conduit run with a No. 10 gage flexible, zinc coated pull wire extending through its entire length. Double an additional two feet back into the conduit at each end of the run. Conduits and sleeves entering pullboxes shall end flush in the wall with ends ground smooth. Plug the conduits and sleeves temporarily.

Give the exterior portions of the direct burial steel conduits not encased in concrete two coats of asphaltic base paint.

The entire length of a conduit run between pullboxes or standards shall be of one type of material.

The completed duct lines shall be subject to a field test. Pass a bullet-shaped test mandrel about 14 inches long with a diameter 0.5 inch less than the inside diameter of the ducts through the entire length of each duct run. The Engineer will consider scouring found on the mandrel deeper than one thirty-seconds inch an indication of burrs and/or obstructions in the duct run. Normal abrasion between the duct line and bottom of mandrel is not an indication of burrs and/or obstructions in the duct run. Remove such burrs and/or obstructions. Pass the test mandrel through again. Repeat the process until the Contractor gets a satisfactory result.

(D) Electrical Service. Electric power shall be 120 volts, 60 cycles. Install the service underground in a steel conduit of the size shown in the contract from the local power company's pole to the controller.

Furnish and install service connections such as conduits, weatherhead, wires and meter loop, and comply with the power company's requirement for electrical service. The cost of service connections shall be the responsibility of the contractor.

(E) Inspection and Testing.

(1) Preliminary Arrangements. The equipment shall be given requisite factory tests as necessary to determine that the

workmanship and materials are free from defects and to establish that the design and construction are satisfactory.

Arrange for and conduct shop tests of the equipment to establish compliance of the contract documents and all applicable codes and standards. Furnish certified reports showing the results of all such tests. Test facilities shall be subject to prior inspection by the Engineer. Notify the Engineer at least 21 calendar days before the scheduled start of a test so that the Engineer may elect to witness any or all such tests. Furnish protection of equipment to prevent damage during the test period. All repair or replacement costs of any item damaged as a result directly or indirectly of the test will be at no cost to the State.

Unless otherwise noted in the contract documents, shop testing and inspection of the components or the complete system shall be in accordance with the Contractor's standard practice. Supply a list of all Contractor's standard testing with the equipment submittal. The Engineer shall not be charged for any of the preliminary testing.

(2) Inspection. The Engineer reserves the right to inspect all material during fabrication and before shipment and shall have access to the manufacturer's or Contractor's plant as required.

(3) Tests.

(a) After installation of piezo sensors, perform and furnish written test results for each piezo sensor showing:

1) Resistance: The resistance should be at least one MegaOhm.

2) Capacitance: The capacitance should range from five to 20 nano Farads.

3) Dissipation Factor: The reading should be less than 0.04.

Provide all testing equipment such as BK 875A or equivalent LCR meter, Fluke 75 or higher/equivalent multimeter, Megohmeter, and Scope meter or oscilloscope for the above tests.

(b) After the installation of the inductive loop detectors, furnish written test results for each loop sensor showing:

1) Induced voltage (V)

2) f = Frequency of Loop (KHz)

3) L = Inductance of Loop (uH)

4) R = Resistance of Loop (Ohm)

5) Meg Test = Loop insulation resistance should be > 100M ohm

Correct any defects discovered as a result of the Static tests at no additional cost to the State.

(4) Acceptance of EVC System.

(a) The EVC system shall not be accepted and payment shall not be made until the system has successfully met the required testing.

(b) Inspection. The Owner reserves the right to inspect all material during fabrication and before shipment and shall have access to the manufacturer's or Contractor's plant as required.

(5) Restoring Pavements and Other Improvements. Restore the existing pavements and other improvements disturbed by excavation to their original condition according to the contract. Materials used for restoration work shall meet specifications match thickness, texture, and color whenever applicable. The grades of the restored surfaces shall match the existing grades.

(6) Warranty. Materials and equipment installed for permanent construction shall be new. Use first-class material and equipment throughout the performance of the contract.

Secure from the manufacturer(s), a warranty or warranties guaranteeing equipment from defects in materials, design and workmanship for not less than 12 months from the date of acceptance.

When requiring adjustments or repairs during the warranty period, adjust or repair the existing unit within 24 hours from the time of notification.

When requiring repairs that need factory corrections during the warranty period, replace the existing unit with an accepted temporary operational replacement unit within 24 hours from the time of notification until the Contractor can install the new unit. Install the new, identical non-defective unit within 30 days from the time of notification.

627.04 Measurement. The Engineer will measure the new Vehicular Counting and Classification System Sensor Replacement, if ordered by the Engineer, on a force account basis, in accordance with Subsection 109.06 – Force Account Provisions and Compensation.

627.05 Basis of Payment. The Engineer will pay for the accepted Vehicular Counting and Classification System Sensor Replacement on a force account basis, as shown in the proposal schedule. Payment will be full compensation for the work prescribed in this section and the contract documents.

The Engineer will pay for the following pay item when included in the proposal schedule:

Pay Item	**Pay Unit**
Vehicular Counting and Classification System Sensor Replacement	Force Account"

END OF SECTION 627

Amend **Section 629 – PAVEMENT MARKINGS** to read as follows:

"SECTION 629 - PAVEMENT MARKINGS

629.01 Description. This section describes furnishing, installing, and removing pavement markings.

629.02 Materials.

White and Yellow Traffic Paint 755.01

Pavement Markers 755.02

Adhesives for Pavement Markers 755.03

Preformed Pavement Marking Tape 755.04

Retroreflective Thermoplastic Compound Pavement Markings 755.05

Pavement markers shall be of uniform composition, free from surface irregularities, and free from other physical damage or defects that affect appearance or performance, or both.

629.03 Construction.

(A) General. Pavement markings shall conform to most recent edition of MUTCD, and as amended; and shall be applied as indicated in the contract documents.

Establish control points and layout pavement markings.

Remove surface moisture and other materials that may adversely affect bonding before applying pavement markings.

If bituminous adhesive is used, apply pavement markers not less than 7 days after completing pavement. If epoxy adhesive is used, apply markers not less than 14 days after completing pavement.

Do not allow more than 1-inch deviation from intended alignment of longitudinal pavement markings on tangents and curves with radii greater than 5,000 feet. Do not allow more than 2-inch deviation from intended alignment of longitudinal pavement markings on curves with radii of 5,000 feet or less. Correct misalignments by removing and reinstalling misaligned portion(s), plus an additional 25-foot segment from each end, within one working day after notification of misalignment by the Engineer.

(B) Temporary Pavement Markings. Install temporary pavement markings by end of work day in accordance with Table 629.03-1 - Temporary Pavement Markings when the following conditions exist:

(1) Permanent pavement markings are not installed after completion of each day's final paving.

(2) Additional guidance through area is required.

(3) Markings for special traffic patterns are warranted.

Install temporary, solid, 6-inch pavement marking tapes on edges of traveled way for newly paved, scarified, or cold-planed surfaces, reconstructed areas, and unmarked areas. Where curbs are present at edges of traveled way, 4-inch pavement marking tapes may be eliminated.

Maintain and replace temporary pavement markings, flexible delineators, and barricades.

Remove temporary markings before installing permanent pavement markings.

Cover or temporarily remove signs that conflict with temporary pavement markings.

When pavement markings are not installed by the completion of construction operations for each day, the Engineer will suspend work and progress payment in accordance with Subsection 105.01(A) - Authority of the Engineer.

TABLE 629.03-1 TEMPORARY PAVEMENT MARKINGS

TYPE	PAVEMENT MARKINGS
Passing Permitted - Both Sides	Single 6-inch yellow stripe 5 feet in length spaced 20 feet on center with Type D markers spaced 40 feet on center and located on center of 5-foot length of stripe.
Passing Prohibited - Both Sides	Double solid 6-inch yellow stripes with Type D markers placed 20 feet on center on one of 6-inch yellow stripes selected by the Engineer.
Passing Permitted - One Side Only	Single continuous 6-inch yellow stripe with Type D markers placed on stripe 20 feet on center on no-passing side and single 6-inch yellow stripes 5 feet in length spaced 20 feet on center on passing side.
Lane Lines - Lane Changing Permitted	Single 6-inch yellow or white stripe 5 feet in length spaced 20 feet on center with Type C or Type D markers spaced 40 feet on center.
Lane Lines -	Double solid 6-inch white stripes with

Lane Changing Prohibited	Type C markers placed 20 feet on center on one of the 6-inch white stripes selected by the Engineer.
Crosswalk	Two 12-inch white transverse lines spaced 8 feet on center or as ordered by the Engineer.
Stop Line	Single 12-inch white transverse line.

Note: Paint may be used for temporary markings in areas where final paving is not complete."

(C) Permanent Pavement Markings.

(1) Permanent Pavement Markers. Provide pavement markers conforming to shapes, dimensions, tolerances, types, uses, and layout as indicated in the contract documents.

Submit samples of pavement markers and adhesives for testing and acceptance 10 days before usage. The Engineer will sample and test pavement markers in accordance with Subsection 755.02 – Pavement Markers.

Use bituminous adhesive or standard set type epoxy adhesive to bond pavement markers to pavement.

Heat and dispense bituminous adhesive from equipment that can maintain required temperature.

When using epoxy adhesive, mix components by employing two-component type automatic mixing and extruding apparatus. Automatic mixing equipment shall use positive displacement pumps and shall properly meter components in ratio of 1:1, $\pm$ 5 percent by volume. Check ratio in presence of the Engineer at beginning of each day or as ordered by the Engineer.

Mix only standard set type adhesive manually, and do not mix more than 1 quart.

Place pavement markers within 60 seconds after mixing and extruding adhesive. No further movement of placed marker will be allowed. Use completely each mixed batch of adhesive within 5 minutes after start of mixing. Place adhesive on pavement surface or on bottom of marker, covering entire area of contact, without voids and with uniform thickness, to produce slight excess after pressing marker in place. Place marker in position and apply pressure with slight twisting motion until firm contact is made with pavement. If adhesive cannot be readily extruded from under marker when pressure is applied, discard remaining batch of adhesive. Immediately remove excess adhesive around edge of

marker, on surrounding pavement, and on exposed surfaces of markers.

Remove adhesive from exposed faces of markers, using soft rags moistened with mineral spirits conforming to MIL-PRF-680A(1) or kerosene. Other solvents will not be allowed.

Where bituminous adhesive is used, protect marker against impact until adhesive has hardened to the degree designated by the Engineer. Where epoxy adhesive is used, protect pavement markers against impact until adhesive has hardened in accordance with Table 629.03-2 – Adhesive Set Time For Epoxy Pavement Markers:

TABLE 629.03-2 - ADHESIVE SET TIME FOR EPOXY PAVEMENT MARKERS

Temperature* (Degrees F)	Standard Set Type (Hours)	Rapid Set Type (Minutes)
100	1.5	15
90	2	20
80	3	25
70	4	30
60	5	35
50	7	45
40	No application below 50 degrees F	65
30		85
20		No application below 30 degrees F
10		

*Either pavement surface temperature or ambient air temperature, whichever is lower.

Do not use hardness of epoxy rim around marker as an indication of degree of cure.

Remove and replace pavement markers that do not meet set time requirements indicated in Table 629.03-2 - Adhesive Set Time For Epoxy Pavement Markers.

Do not install pavement markers when relative humidity is greater than 80 percent, or when pavement surface is not dry.

When using Type A and J pavement markers for delineating 10-foot lane stripes, install markers in sets of four, with no fractional sets allowed. Adjust lengths of each 10-foot stripe and each 30-foot gap for skip striping $\pm$ 1 foot, to present uniform and balanced pattern.

Do not install pavement markers over longitudinal or transverse joints of pavement surface, pavement marking tape, and thermoplastic extrusion markings.

(2) Traffic Paint. Use wheeled, manually or motor-propelled applicator machine to apply traffic paint at nominal thickness of 0.015 inch or at rate of 300 linear feet of single 6-inch stripe for 1-gallon paint. Use applicator having appropriate shields around nozzles to permit sharp stripe definition, and separate nozzle to direct air stream immediately ahead of paint application for clearing debris, dust, and other foreign matter. Immediately remove misted, dripped, and spattered paint from pavements.

Protect freshly painted pavement markings from traffic until paint will not transfer to tires or other devices.

Repair or correct pavement markings damaged by traffic and paint marks on pavement caused by traffic crossing wet paint.

(3) Thermoplastic Extrusion Pavement Marking.

(a) Equipment. Apply material to pavement by extrusion method. One side of shaping die shall be pavement surface and other three sides shall be contained by, or shall be part of equipment for heating and controlling flow of material.

Equipment shall provide continuous mixing and agitation of material. Conveying parts of equipment shall be constructed to prevent accumulation and clogging.

Mixing and conveying parts, including shaping die, shall maintain material at plastic temperature.

Equipment shall produce continuously uniform stripe dimensions.

Applicator shall cleanly and squarely cut off stripe ends. Pans, aprons, or similar appliances that the die overruns will not be allowed.

Apply beads to entire surface of completed stripe by automatic bead dispenser attached to liner.

Equip bead dispenser with automatic cutoff control synchronized with cutoff of thermoplastic material.

Use equipment that provides for varying die widths to produce varying widths of traffic markings.

Provide kettle for melting and heating composition. Equip kettle with automatic thermoplastic control device so that heating can be done by controlled heat transfer liquid rather than direct flame.

Equip and arrange applicator and kettle in accordance with National Fire Underwriters requirements.

Use mobile and maneuverable applicator that is capable of following straight lines and making curves in true arcs.

Use applicator capable of containing minimum of 125 pounds of molten material.

(b) Application. Clean off dirt, blaze, paint, tape, and grease. Apply thermoplastic extrusion pavement marking only when pavement surface is dry.

Use equipment that can apply material in variable widths from 2 inches to 12 inches. Apply material for full width of stripe in one application or pass.

On concrete pavements, on HMA pavements more than seven days old, and on HMA pavements paved within seven days containing less than 6 percent bituminous asphalt, pre-stripe application area with binder material, primer, or prime seal coat recommended by pavement marker manufacturer.

Line thickness, as viewed from lateral cross section, shall measure not less than 90 mils at edges, and not less than 125 mils in center.

Take measurements as average throughout 36-inch sections of line. Two thousand pounds of thermoplastic materials supplied in granular or block form shall yield approximately 6,600 feet of 4-inch striping with 90-mil thickness.

Where required by the contract documents to apply new markings over existing markings, bond new line over old line so that no splitting or separation takes place during its useful life.

Provide finished lines with well-defined edges, free of waviness.

(c) Profiled Pavement Marking. Profiled thermoplastic marking shall be produced in one continuous integral process consisting of an extruded base line with raised

audible bumps positioned at regular and predetermined intervals. The product shall be available in standard widths and standard colors of white and yellow.

The thermoplastic material used shall be a maleic-modified glycerol ester resin (Alkyd-based) compound formulated for profiled pavement marking. The pigment, beads, resin and fillers shall be a uniform blend material that must be melted to a temperature of approximately 400 degrees F. Maintains a minimum of 380 degrees F when material meets roadway surface.

The amount of glass beads, yellow pigment and calcium carbonate filler contained in the product shall be at manufacturer's option, provided that all other material properties shall comply with requirements of Subsection 755.05 – Retroreflective Thermoplastic Compound Pavement Markings.

The profiled stripe base line shall consist of thermoplastic materials extruded to a thickness of not less than 100 mils nor more than 125 mils. The width of the line shall be in accordance with the plans. The edges of the lines shall be well defined and free from waviness.

The raised audible bumps shall stand a minimum of 365 mils above the pavement surface. The raised bumps shall be approximately rectangular in shape and positioned at 36-inch intervals when measure center to center. The longitudinal length of the raised bump shall be a minimum of 2-1/2 inches when measured along the crown.

(4) Preformed Pavement Marking Tape. Apply temporary or permanent preformed pavement marking tape manually or with tape applicators, in accordance with tape manufacturer's recommendations and the contract documents. Install preformed pavement marking tape only when pavement surface is dry.

Do not apply preformed pavement marking tape over other markings. Remove existing pavement markings and prepare surface for tape application in accordance with Subsection 629.03(A) - General.

Apply preformed pavement marking tape only when ambient air temperature is at least 60 degrees F and rising, and roadway surface temperature is at least 70 degrees F and rising. Application of preformed pavement marking tape will not be allowed when roadway surface temperature exceeds 150 degrees F.

Before applying preformed pavement marking tape, prime existing roadway surfaces with primer in accordance with tape manufacturer's recommendations.

Use tapes of specified width or use tapes of different widths to form specified stripe width. The Engineer will pay for specified width of stripe when different tape widths are used to form specified width.

Use butt splices only. Tape material shall not be overlapped.

Areas marked with preformed pavement marking tape shall be ready for traffic immediately after application.

(D) Removal of Existing Pavement Markings. Completely remove existing pavement markings and dispose of it off the project site before performing the following activities: applying temporary or permanent traffic paint, thermoplastic extrusion pavement marking, or preformed pavement marking tape; and making changes in traffic pattern. Dispose of material in accordance with Subsection 201.03(F) - Removal and Disposal of Material. Use one of the following removal methods:

(1) Grinding. Feather edges of grinding to make smooth transition to existing roadway surface. Limit feathering to 3 inches beyond edge of existing striping to be removed. Vary feathered edges to differentiate them from traffic stripes. Coat ground asphalt pavement with rapid-setting slurry.

(2) Burning. Burn off existing painted pavement markings using excess oxygen method.

(3) Sandblasting. As work progresses, immediately remove sand and other material deposited on pavement.

(4) Hydro-demolition. Use stripe-removing hydro-demolition machine that has an integrated vacuum to collect water and debris (e.g., Hog Technologies' Stripe Hog series or equal).

(5) Other. Remove preformed pavement marking tape by methods recommended by manufacturers. Eradication of existing markings by painting over them will not be allowed.

Damaged pavement due to pavement marking removal shall be repaired. Submit remedial repair method to the Engineer for review and acceptance. Repair damaged pavement at no increase in contract price or contract time.

629.04 Measurement.

The Engineer will measure thermoplastic and preformed pavement marking tape per linear foot in accordance with the contract documents. The longitudinal pavement markings, including profiled lane markings, will be measured per linear foot as a single stripe for the width specified in the contract and in the proposal. The Engineer will include the longitudinal gaps for skip striping, up to thirty (30) feet long, in the measurement.

The Engineer will not measure temporary pavement markings including flexible delineator posts with reflector makers or Type I Barricades and temporary signs installed for the longitudinal guidance of public traffic over reconstructed areas, cold planed surfaces, newly paved surfaces or other unmarked or scarified areas for payment.

The Contractor shall consider the work required for the removal of pavement markings incidental to the various contract items, except as provided in the proposal or elsewhere in the contract.

The Engineer will measure the pavement markers per each for the types shown in the proposal.

The Engineer will measure the painted stripes that are twelve (12) inches wide or less as a single stripe. The Engineer will measure the painted stripes over twelve (12) inches wide as two (2) stripes. The Engineer will measure the double stripes that are twelve (12) inches or less in total width including the transverse space between the stripes as a single stripe.

The Engineer will measure the longitudinal pavement markings by the linear foot according to the contract. Longitudinal gaps for skip striping that are 30 feet or less will be included in the measurement.

The Engineer will measure the transverse markings by the linear foot according to the contract.

The Engineer will measure crosswalk markings per lane of traffic marked according to the contract.

The Engineer will measure yield line markings per lane of traffic marked according to the contract.

The Engineer will measure pavement marking layout for new pavement per linear foot according to the contract.

The Engineer will measure pavement arrows (single and multiple heads), symbols, and words per each according to the contract.

629.05 Payment.

The Engineer will pay for establishing control points and laying out for pavement marking on new pavement surfaces at the contract unit price per linear foot. The price includes full compensation for establishing control points, laying out and furnishing labor, materials, equipment, tools, and incidentals necessary to complete the work.

The Engineer will pay for thermoplastic and preformed pavement marking tape at the contract price per linear foot according to the contract, complete in place, including primers.

The Engineer will pay for double four (4) inch striping with a four (4) inch space between stripes at the contract price per linear foot according to the contract.

The Engineer will pay for crosswalk markings at the contract price per lane of traffic marked according to the contract.

The Engineer will pay for yield line markings at the contract price per lane of traffic marked according to the contract.

The Engineer will pay for pavement arrows (single and multiple heads), symbols, and words at the contract price per each according to the contract.

The contract unit price paid shall be full compensation for furnishing labors, materials, tools, equipment and incidentals and for doing the work involved in furnishing and installing pavement markings complete in place according to the contract.

The Engineer will not pay for the temporary pavement markings including flexible delineator posts with reflector markers or Type I Barricades and temporary signs installed for the longitudinal guidance of public traffic over reconstructed areas, cold planed surfaces, newly paved surfaces or other unmarked or scarified areas for payment if not shown in the proposal separately. The Engineer will consider them incidental to the various contract items.

The Engineer will pay for the various types of pavement markers at the contract price per each according to the contract, complete in place, including adhesives.

The Engineer will pay for painted pavement striping at the contract price per linear foot according to the contract.

The Engineer will pay for the following pay items when included in the proposal schedule:

Pay Item	**Pay Unit**

4-Inch Pavement Striping (Thermoplastic Hot Spray)	Linear Foot
4-Inch Pavement Striping (Thermoplastic Extrusion)	Linear Foot
6-Inch Pavement Striping (Thermoplastic Hot Spray)	Linear Foot
6-Inch Pavement Striping (Thermoplastic Extrusion)	Linear Foot
8-Inch Pavement Striping (Thermoplastic Extrusion)	Linear Foot
12-Inch Pavement Striping (Thermoplastic Extrusion)	Linear Foot
Double 4-Inch Pavement Striping (Thermoplastic Hot Spray)	Linear Foot
Double 4-Inch Pavement Striping (Thermoplastic Extrusion)	Linear Foot
4-Inch Pavement Striping (Profiled Thermoplastic)	Linear Foot
Crosswalk Marking (Thermoplastic Extrusion)	Lane
Pavement Arrow (Thermoplastic Extrusion)	Each
Pavement Word (Thermoplastic Extrusion)	Each
Pavement Symbol (Thermoplastic Extrusion)	Each
Yield Line (Thermoplastic Extrusion)	Lane
Type A Pavement Markers	Each
Type C Pavement Markers	Each
Type D Pavement Markers	Each
Type H Pavement Markers	Each
Type J Pavement Markers	Each
Pavement Marking Layout for New Pavement	Linear Foot

END OF SECTION 629

SECTION 632 – MARKERS

Make the following amendment to said Section:

"632.04 Measurement. The Engineer will measure reflector marker per each as complete units of the type and design specified in the proposal."

"**632.04 Measurement.** The Engineer will measure reflector marker, milepost marker with post (bi-directional), milepost marker, and Type II object marker per each as complete units of the type and design specified in the proposal."

"632.05 Payment. The Engineer will pay for reflector marker at the contract price per each for the type and design specified complete in place. Payment will be full compensation for excavating and backfilling, furnishing and installing materials, furnishing equipment, tools, labors and incidentals necessary to complete the work.

"**632.05 Payment.** The Engineer will pay for reflector marker, milepost marker with post (bi-directional), milepost marker, and Type II object marker at the contract price per each for the type and design specified complete in place. Payment will be full compensation for excavating and backfilling, furnishing and installing materials, furnishing equipment, tools, labors and incidentals necessary to complete the work.

The Engineer will pay for the following pay items when included in the proposal schedule:

Pay Item	**Pay Unit**
Reflector Marker, Type A Delineator (RM-1)	Each
Reflector Marker, Type A Delineator (RM-2)	Each
Reflector Marker, Type A Delineator (RM-3)	Each

END OF SECTION 632

SECTION 645 - WORK ZONE TRAFFIC CONTROL

645.01 Description. This section describes the following:

(A) Furnishing, installing, maintaining, and subsequently removing work zone traffic control devices, and personnel. Work zone traffic control shall include providing flaggers and police officers.

(B) Keeping roads for public traffic open and in passable condition; providing and maintaining temporary access crossings for trails, businesses, parking lots, garages, residences, farms, parks, and other driveways; taking necessary work precautions for the protection, safety, and convenience of the public; should pedestrian facilities exist, taking necessary measures for safe and accessible passage, with route information and ADAAG compliance, for pedestrians traveling through or near work zone; taking necessary precautions to protect work zone workers from situations that place workers at increased risk from motorized traffic.

(C) Taking safety and precautionary measures, such as illuminating roadway obstructions during hours of darkness, in accordance with Chapter 286, HRS; Title 19, Subtitle 5, Chapters 127, 128, and 129, HAR; and *MUTCD*.

645.02 Materials.

Signs	750.01
Sign Posts	750.02
Fasteners for Signs and Route Markers	750.03
Reflector Marker	750.07
Flexible Delineator Posts and Reflectors	750.08
Traffic Delineators	750.09
Preformed Pavement Marking Tape	755.04

Submit electronic crashworthy documentation, including but not limited to, drawings in pdf and CADD, crash test reports, and FHWA eligibility letters certifying compliance with MASH 2016, for signs, sign supports, barricades, tubular markers, cones, vertical panels, and other traffic control devices. Only devices that are deemed crashworthy will be allowed.

Upon request of the Engineer, furnish self-certified MASH 2016 compliant letter from vendor(s) for each type of Category 1 traffic control device, as defined by FHWA and/or AASHTO, including single-piece traffic cone, single-piece drum, and tubular marker.

Traffic control devices, including signs, barricades, warning lights, arrow boards, portable changeable message signs, cones, tubular markers, and temporary concrete barriers shall conform to the American Traffic Safety Services Association (ATSSA), *Quality Guidelines for Temporary Traffic Control Devices and Features* and the *MUTCD*.

Protective devices including barricades, warning signs, lights, and temporary signals shall conform to Title 19, Subtitle 5, Chapters 127, 128, and 129, HAR. Retroreflectorization for protective devices such as barricades, tubular markers, and warning signs shall conform to Subsection 750.01 – Signs.

645.03 Construction. Furnish, install, and maintain barricades, signs, cones, tubular markers, lights, flashing signals, and other traffic control devices.

Furnish two police officers for each location that requires work zone traffic control. If the Traffic Control Plan (TCP) is included in the contract documents, furnish number of police officers indicated in the TCP, whichever is greater.

When directing traffic, flaggers, or police officers, or both shall be in direct communication with each other.

TCP for lane closure on two-lane road will consider intersections and driveway access. Maximum length of a lane closure on a two-lane road is 1,000 feet.

Submit TCP and schedule at least 15 working days before work starts. Submit modifications and deviations from accepted TCP and schedule at least 15 working days before start of work requiring modification or deviation. Illegible TCP will not be accepted.

Include the following in TCP and schedule:

(1) Signs (type, size, designation, and placement).

(2) Traffic movements shown by arrows.

(3) Positions of flaggers and police officers.

(4) Barricades, cones, tubular markers, and additional traffic control devices and measures necessary for protection of work and public safety; and placement, spacing, distances, and reference points for traffic control devices.

(5) Layout, drawn to scale, of traffic control devices, including information needed to layout TCP.

(6) Brief description of work.

(7) Dates of work.

(8) Times of day affected.

(9) Proposed public information sign.

(10) Proposed news release.

Place sign or device situated farthest upstream from work zone first. Then place others progressively downstream toward work zone.

Extend cones or tubular markers to point where cones or tubular markers are visible to approaching traffic.

For signs with messages on both faces, cover inapplicable message before placement.

Keep barricades, construction and warning signs, and other traffic control devices in good condition. Repair, clean, or replace barricades, signs, or other devices as required to maintain effectiveness and appearance. The Engineer alone will decide suitable condition of each barricade, sign, or other traffic control device.

Remove or cover regulatory and warning signs that conflict with TCP. Restore signs upon completion of work or as ordered by the Engineer. Affix object markers to post(s) of covered sign.

Promptly remove or cover construction and warning signs that are not applicable or not in use.

For sign covers, fully covers signs as indicated in the Acceptable category of the ATSSA Quality Guidelines for Temporary Traffic Control Devices and Features. Covers that are deemed to be in the Marginal or Unacceptable categories will not be accepted. Covers that are fabricated from rigid materials will also not be accepted unless it is certified to be MASH 2016 compliant.

Promptly remove traffic control devices that are no longer needed.

Remove traffic control devices in reverse order of installation, starting closest to work zone and continuing away from work zone.

Maintain abutting owners' existing access until replacement access is usable.

Obtain permission from abutting owners, including conditions for closing existing access. Submit copy of agreement with abutting owners before beginning work in the affected area.

When working on existing facility that will be kept open to traffic, provide smooth and even surface for public traffic use. Only work on a portion of roadway at one time, and stage construction from one side to other while routing traffic over opposite side.

During subgrade and paving operations, paved shoulders may be used for public traffic.

Do not store material or equipment where it will interfere with public traffic. Remove equipment and other obstructions out of right-of-way or clear zone to permit free and safe passage of public traffic during non-working hours or suspension of work. For storage of materials and equipment, see Subsection 105.14 – Storage and Handling of Materials and Equipment.

Notify Fire Department, in writing, at least 24 hours before blocking or closing road access. Keep fire hydrants accessible to Fire Department by not placing material or other obstructions within five feet of fire hydrant or closer than permitted by applicable ordinances, rules, and regulations.

Notify the Engineer and County, including Bus Systems Division, Police Department, Fire Department, Emergency Medical Services, and Department of Health in writing at least five days before start of construction.

(A) Signs. Install signs sufficiently ahead of location where operations may interfere with use of road by traffic and at intermediate points where new work crosses or coincides with existing road.

Place signs in accordance with TCP as accepted by the Engineer.

(B) Construction Signs. Erect construction signs at the beginning of project and at the end of project at the location indicated by the Engineer. These signs shall remain for the duration of the highway project. Maintain these signs. Place these signs besides the required traffic control signs called for herein.

The construction signs shall be new and become the property of the Contractor.

(C) Barricades.

(1) General. Provide, erect, and maintain necessary barricades suitable for protection of work and safety of the public.

Barricades shall be in good condition. Barricade application and installation shall be in accordance with accepted TCP.

Provide sand bags if required or ordered by the Engineer. Sand bags and installation method shall comply with *MUTCD* and be accepted by the Engineer prior to use. Do not place sand bags on striped barricade rail.

During hours of darkness, install steady burn or flashing lamps on barricades selected by the Engineer. Attach lamps on barricade ends closest to traveled way and visible to oncoming traffic.

Do not install signs on barricades unless signs and barricades have been crash tested as a unit and accepted under NCHRP Report 350.

(2) Retroreflectorization. Retroreflectorize barricade rails and attachment with retroreflective sheeting in accordance with Subsection 750.01(C)(4) - Type III or IV Retroreflective Sheeting (High Intensity) or Subsection 750.01(C)(5) - Hardened Aluminum-Backed Retroreflective Sheeting.

Retroreflectorize both vertical faces of each barricade rail.

(3) Color. Provide white colored rails, frames, and braces with front and back rail faces having 6-inch-wide alternating orange or red and white stripes sloping downward toward traveled way at angle of 45 degrees from vertical. Use stripe colors in accordance with the following:

(a) Use orange and white stripes for the following conditions:

1. Construction work.

2. Detours.

3. Maintenance work.

(b) Use red and white stripes for the following conditions:

1. On roadways with no outlet, such as dead-ends and cul-de-sacs.

2. Ramps or lanes closed for operational purposes.

3. Permanent or semi-permanent closure or termination of roadway.

(4) Maintenance. Keep barricades in good condition. Repair, repaint, clean, or replace barricades to maintain effectiveness and appearance. Immediately replace missing or damaged barricades, lamps, sandbags, and other accepted weights.

Clean and repair barricades before relocating to other locations.

(D) Traffic Delineators. Install traffic delineators in accordance with accepted TCP.

Maintain traffic delineators in good condition. Immediately replace missing or damaged tubular markers.

Clean delineators prior to relocating to new location.

(E) Cones. Install traffic cones in accordance with accepted TCP.

Maintain traffic cones. Keep traffic cones clean and in good repair. Immediately replace lost, stolen, or damaged traffic cones.

Clean cones prior to relocating to new location.

(F) Lane Closures. Lane closures will be allowed only from 8:30 a.m. to 3:00 p.m., Monday through Friday. Exceptions to lane closure hours specified require written acceptance by the Engineer. Placement and removal of all work zone devices within the travel lanes, such as arrow boards, cones, etc., are restricted to allowable closure times. No increase in contract price or contract time will be given for lane closure restrictions specified.

For island of Oahu, no lane closures will be allowed during 24-hour periods as follows:

(1) Day preceding holiday (3:00 p.m. to Midnight), except as otherwise specified.

(2) Holidays (Midnight to Midnight).

(3) Day before and day after Thanksgiving Day (Midnight to Midnight).

(4) Three-week holiday period for Christmas and New Years

(Midnight to Midnight).

(5) Three-week “Beat-the-School-Jam” period, to be determined, (Midnight to Midnight) beginning approximately third week of August.

(6) Other dates of events indicated in the contract documents.

No time extension will be given for the above restrictions. The contract time for the project has accounted for any loss of time due to the above restrictions.

Closure of only one lane of traffic will be allowed during lane-closure hours. Keep lanes open to traffic and allow flow at posted speed limit during non-lane closure hours.

If applicable, coordinate lane closures with adjacent project(s) at no increase in contract price or contract time.

Rental fees will be assessed in accordance with Subsection 108.09 – Rental Fees for Unauthorized Lane Closure or Occupancy, for failure to open lanes to traffic during peak hours. Morning and afternoon peak hours shall be from 5:30 a.m. to 8:30 a.m. and 3:00 p.m. to 6:00 p.m., respectively, Monday through Friday.

Before scheduling work, submit requests for detours and lane closures as follows:

(1) Detours - 8 weeks before implementing detours.

(2) Lane closures - 6 weeks before implementing lane closures.

Include the following with detour and lane closure requests:

(1) Explanation of proposed changes to existing traffic pattern.

(2) Installation schedule for informational and traffic control signs.

(3) Publication schedule for legal notices.

(4) Plan showing proposed informational signs.

(5) Plan showing lane changes or detours in accordance with accepted TCP, including details at beginning of multi-lane highway lane changes and detours.

Detours or lane closures will not be allowed before the Engineer accepts detour or lane closure request.

Site-specific Traffic Control Plans shall use the sign spacing, taper lengths, longitudinal buffer spaces, and device spacings specified in Table 645-I for the posted speed limit of the roadway.

TABLE 645-I - FOR TRAFFIC CONTROL PLAN							
POSTED SPEED LIMIT (M.P.H.)	SIGN SPACING (D) (FEET)	TAPER LENGTH (T) (FEET)		LONGI-TUDINAL BUFFER SPACE (B) (FEET)	SPACING OF CONES OR TUBULAR MARKERS (FEET)		
		W = 12' OR LESS	W = GREATER THAN 12' *		TAPER	TANGENT	WORK AREA
20	250	200	W x 17	35	20	20	10
25	250	200	W x 17	55	25	25	10
30	250	250	W x 20	85	30	30	10
35	250	250	W x 20	120	35	35	10
40	500	350	W x 30	170	40	40	10
45	500	550	W x 45	220	45	45	10
50	1000	600	W x 50	280	50	50	10
55	1000	700	W x 55	335	55	55	10
* W = width of lane or shoulder							

(G) Advisory Signs. Submit advisory sign shop drawings. Construct, install, maintain, and remove two advisory signs as ordered by the Engineer. Place signs at locations designated by the Engineer. Provide signs, minimum 8 feet wide by 4 feet high, with black letters on orange background, and with three 4.00 pounds/foot flanged channel posts for each sign.

Include starting date and hours of construction in sign message. Use letter heights of 8 inches, Series D. The Engineer will review and accept advisory signs' wording before fabrication. Install advisory signs two weeks before start of construction. Remove advisory signs immediately after construction has been completed or as ordered by the Engineer.

(H) Advertisement. Place advertisement in newspaper, as ordered by the Engineer, for the following traffic pattern changes or night work:

(1) Detours.

(2) Lane closure.

(3) Permanent road closure.

(4) Permanent new route that changes previous route.

Include the following information:

(1) Map of traffic pattern change limits.

(2) Map showing lane(s) closure and detour pattern.

(3) Notice of starting and ending dates and duration.

(4) Explanation of lane(s) closure or detours in "Notice To Motorist".

Quality of map shall conform to the following requirements:

(1) No freehand printing or penciling.

(2) Highlight important features by darkening, cross-hatching, crossing-out, or coloring important words, as necessary.

(3) Provide maps with minimum size of five columns wide and four columns deep. Lesser width columns may be considered to balance against size of drawing.

(4) Text specifications.

(a) Work being featured - 3/16-inch text.

(b) Major roads and features - 1/8-inch text.

(c) Other roads and features- first letter of sentence upper case.

(d) "NOTICE TO MOTORIST" in upper case.

(e) Message - first letter of sentence upper case.

(5) Line Thickness.

(a) Important feature being advertised - line thicker than rest of map.

(b) Directional arrow - bolder than rest of lines shown on map, when important, to show route traffic should us

(6) Show reference direction such as "TO HONOLULU" with arrow Submit the following:

(a) "Notice to Motorists" before placement in newspaper, six weeks before start of work.

(b) Actual size of notice to be published in newspaper. The Engineer will not allow size reduction of notices once accepted. Submit final, camera-ready “Notice to Motorists” advertisement.

Place advertisement for three consecutive days and within one week before traffic pattern changes, in publication as ordered by the Engineer.

645.04 Measurement. The Engineer will measure Traffic Control and Electronic Message Boards per working day in accordance with the contract documents.

Traffic Control (Shoulder Closure) will be measured per working day in accordance with the contract documents.

Traffic Control (Flagging Operation for Contra-flow) will be measured per working day in accordance with the contract documents. A flagging operation is defined as active control of traffic flow by flag person(s), such as 1-lane, 2-way traffic operation.

Traffic Control (Lane Closures) will be measured per working day in accordance with the contract documents. A full lane closure is defined as closing one lane to traffic.

The Engineer will measure Additional Police Officers, Additional Traffic Control Devices, and Advertisement, if ordered by the Engineer, on a force account basis, in accordance with Subsection 109.06 – Force Account Provisions and Compensation.

645.05 Payment. The Engineer will pay for the accepted Traffic Control at the contract price per working day.

The payment for Traffic Control (Shoulder Closure) includes full compensation for renting/furnishing, installing, maintaining, relocating and removing all signs, barricades, delineators, cones as required.

The payment for Traffic Control (Flagger Operation for Contra-Flow) includes full compensation for renting/furnishing, installing, setting up, relocating and removing all signs, cones, flag persons, flagging/communication equipment as required.

The payment for Traffic Control (Lane Closures) includes full compensation for renting/furnishing, installing, maintaining, relocating and removing all signs, barricades, delineators, cones, arrow boards, police officers, etc. as required.

The Engineer will pay for the accepted Electronic Message Boards at the contract price per each on a daily basis. The price includes full compensation for renting/furnishing, installing, setting up, maintaining and removing one electronic message board for a 24-hour period, and furnishing labor, materials, tools, equipment, and incidentals necessary to operate the Electronic Message Boards.

The Engineer will pay for the following pay items when included in the proposal schedule:

Pay Item	Pay Unit
Traffic Control (Shoulder Closure, per day, Not to Exceed $4,000)	Working Day
Traffic Control (Flagging Operation for Contra-Flow, per day, Not to Exceed $6,000)	Working Day
Traffic Control (Lane Closures, per lane, per day, Not to Exceed $3,000)	Working Day
Electronic Message Board (each, per day, Not to Exceed $1,500)	Working Day

Maximum bids allowable for Traffic Control and Electronic Message Boards are indicated above. Should a bidder submit a bid amount in excess of the allowable maximum for either or both items, the indicated amount or amounts shall be reduced to the allowable maximum, as appropriate. "Total Amount for Comparison of Bids" in proposal schedule shall be adjusted to reflect any such reduction. For purposes of comparing bids and determining contract price to be inserted in contract awarded to bidder, if so awarded, "Total Amount for Comparison of Bids" adjusted in accordance with foregoing shall be used and bidder's proposal shall be deemed to have been submitted for amounts as reduced and adjusted in accordance herewith.

Additional Police Officers, Additional Traffic Control Devices, and Advertisement	Force Account

An estimated amount for the force account may be allocated in the proposal schedule, but the actual amount to be paid will be the sum shown on the accepted force account records, whether this sum be more or less than the estimated amount allocated in the proposal schedule. The Engineer will negotiate the force account amounts for the respective pay items when each work order is issued.

485 **END OF SECTION 645**

SECTION 702 – BITUMINOUS MATERIALS

Make the following amendments to said Section:

(I) Amend **Subsection 702.01** by replacing lines 4 to 5 to read:

"702.01 Asphalt Cement.

(**A) PG 64-16.** Performance graded (PG) asphalt binder (neat or unmodified) shall conform to AASHTO M 320.

(B) PG 64E-22. Performance graded binder (polymer modified) shall conform to 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.

(**C) 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."

(II) Amend **Subsection 702.06 (Unassigned)** by replacing line 23 to read:

"**702.06 Warm Mix Asphalt (WMA) Additive.** Additives for WMA shall be approved by the Engineer."

END OF SECTION 702

SECTION 717 – CULLET AND CULLET-MADE MATERIALS

Make the following amendments to said Section:

(I) Amend **Subsection 717.01 – Cullet and Cullet-Aggregate Mixtures as Construction Materials** by revising the third paragraph from line 16 to 20 to read:

"Debris shall not exceed values specified in Tables 717.02-1 - Cullet in Roadway Applications, 717.03-1 - Cullet in Utility Applications, and 717.04-1 - Cullet in Drainage Applications. Debris is defined as deleterious material that includes plastics, papers, and non-ceramic constituents of cullet. Hazardous material will not be allowed in cullet such as but not limited to, TV or other cathode ray tubes, fluorescent light bulbs, and any toxic or hazardous materials. Test cullet stockpile for toxic or hazardous materials every 90 days and submit the results to the Engineer."

(II) Amend **Subsection 717.01 – Cullet and Cullet-Aggregate Mixtures as Construction Materials** by adding the following paragraph after line 21:

"Cullet shall not be used in concrete."

(III) Amend **Table 717.03-1 – Cullet in Utility Applications** from line 37 to line 39 to read:

TABLE 717.03-1 - CULLET IN UTILITY APPLICATIONS

Utility Trench Bedding and Backfill Applications	Maximum Cullet Content (Percent By Weight)	Maximum Debris Level (Percent By Weight Of Cullet)
Sewer Pipes	25	0.3
Electrical Conduits	25	0.3
Fiber Optic Lines	25	0.3

(IV) Amend **Table 717.04-1 – Cullet in Drainage Applications** from line 47 to line 49 to read:

TABLE 717.04-1 - CULLET IN DRAINAGE APPLICATIONS		
Drainage Fill Applications	Maximum Cullet Content (Percent By Weight)	**Maximum Debris Level (Percent By Weight Of Cullet)**
Retaining Walls	25	0.2
Foundation Drains	25	0.2
Drainage Blankets	25	0.2
French Drains	25	0.2

END OF SECTION 717

SECTION 750 – TRAFFIC CONTROL SIGN AND MARKER MATERIALS

Make the following amendments to said Section:

(I) Amend **Subsection 750.01(A)(1) Retroreflectorization** by replacing lines 8 through 31 to read:

"(1) Retroreflectorization. The following shall be retroreflectorized:

(a) Background for illuminated guide signs and exit number panels ("E" designation) with ASTM D 4956 Type XI retroreflective sheeting.

(b) Background for non-illuminated guide signs and exit number panels ("D" designation) with ASTM D 4956 Type XI retroreflective sheeting.

(c) Messages, arrows, and borders of guide signs and exit number panels ("D" and "E" designations) with ASTM D 4956 Type XI retroreflective sheeting.

(d) Regulatory and warning signs, directional signs ("DIR" designation), route and auxiliary markers, shield symbols, yellow "EXIT ONLY" panels, construction warning signs, and barricade rails, completely, with Type III, IV, or IX retroreflective sheeting.

(e) Pedestrian, school, bicycle crossing series, completely with Type IX fluorescent yellow green retroreflective sheeting."

(II) Amend **Subsection 750.01(B) Backing** by replacing lines 72 through 73 to read:

"Aluminum sheet shall conform to ASTM B 209, alloy 5052-H38 or 6061-T6 flat sheet."

(III) Amend **Subsection 750.01(E) Retroreflective Sheeting Materials** by replacing lines 1126 through 1137 to read:

"**(E) Retroreflective Sheeting Materials.** Retroreflective sheeting includes white or colored sheeting having smooth outer surface.

Retroreflective sheeting shall be classified in accordance with ASTM D 4956.

The coefficient of retroflection shall meet the minimum requirements of ASTM D 4956 for the type of reflective sheeting specified.

The color shall conform to the latest appropriate standard color tolerance chart issued by the U.S. Department of Transportation, Federal Highway Administration and to the daytime and nighttime color requirements of ASTM D 4956.

Test methods and procedures shall be in accordance with ASTM.

(IV) Amend **Subsection 750.02 Sign Posts** by replacing lines 1168 through 1172 to read:

"**(C) Square Tube Posts.** Square and other tube posts shall conform to ASTM A 653 for cold-rolled, carbon steel sheet, commercial quality; or ASTM A 787 for electric-resistance-welded, metallic-coated carbon steel mechanical tubing."

END OF SECTION 750

SECTION 755 – PAVEMENT MARKING MATERIALS

Make the following amendments to said Section:

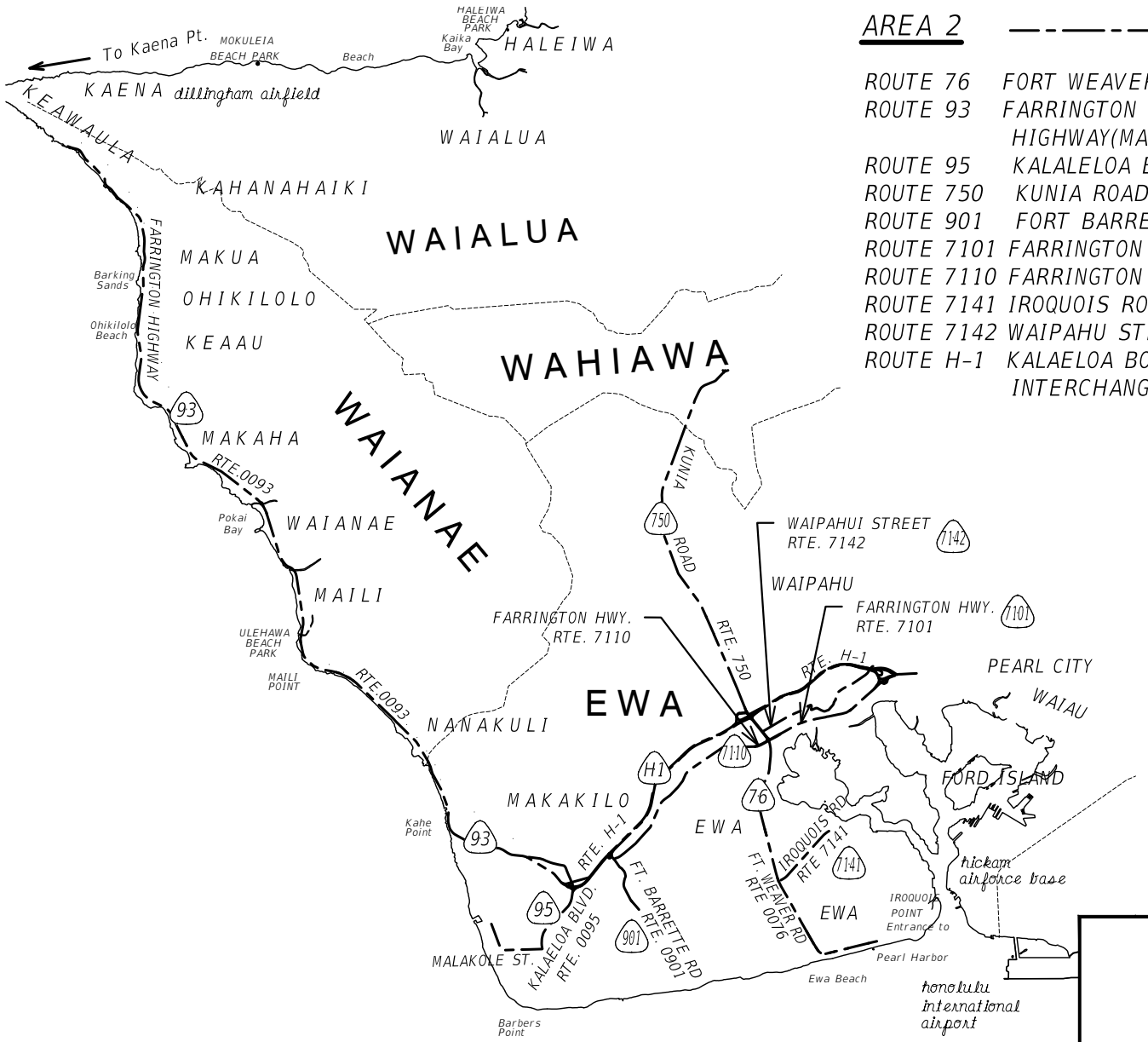
(I) Amend **Subsection 755.02 (C) Retroreflective Pavement Markers** by revising lines 223 to 236 to read:

"Exterior surface of shell shall be smooth and contain one or two retroreflective faces of specified color."

(II) Amend **Subsection 755.05(C)(1) Glass Beads** by adding the following after line 869:

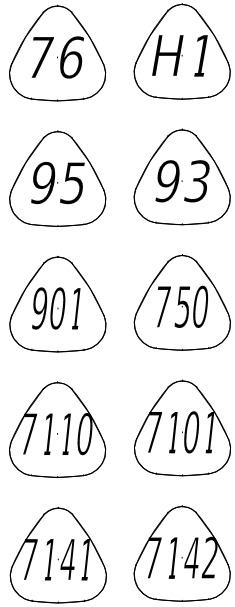
> "**(f)** The glass spheres shall not contain more than 200 ppm (total) arsenic, 200 ppm (total) antimony nor more than 200 ppm (total) lead, when tested according to EPA Methods 3052 and 6010C. Other suitable x-ray fluorescence spectrometry analysis methods may be used to screen samples of glass spheres for arsenic and lead content."

END OF SECTION 755



AREA 2

ROUTE 76 FORT WEAVER ROAD
ROUTE 93 FARRINGTON HIGHWAY FARRINGTON HIGHWAY(MAKAKILO INTERCHANGE)
ROUTE 95 KALALELOA BOULEVARD
ROUTE 750 KUNIA ROAD
ROUTE 901 FORT BARRETTE ROAD
ROUTE 7101 FARRINGTON HIGHWAY
ROUTE 7110 FARRINGTON HIGHWAY
ROUTE 7141 IROQUOIS ROAD
ROUTE 7142 WAIPAHU STREET
ROUTE H-1 KALAELOA BOULEVARD TO WAIAWA INTERCHANGE



N

Scale: Not To Scale

Note: There are numerous side streets with or without route numbers along State highways where State Jurisdiction extends various distances into side streets.

This map does not show all Hawaii Department of Transportation Jurisdiction as stated in Section 110.03 – Areas of Coverage.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ISLAND OF OAHU AREA 2

ASPHALT PAVEMENTPRESERVATION, RESURFACING, RECONSTRUCTION AND PAVEMENT STRIPING AT VARIOUS LOCATIONS

Proj. No. STP-0300(236)

Date: July, 2026

District of Waianae, Ewa
Island Of Oahu

7/17/2026 1:19:48 PM, design2, ANSI full bleed A (8.50 x 11.00 Inches)

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

WORK ORDER FORM
(COMPLAINT/REQUEST)

Tracking Number:

Time:
Date:

Name:
Company Name
Address:
City:

Phone
Home:
Business:

Zip Code:

Complaints:
Area:
Route:

Route Name:

Loc.:
Remarks:

Call Rec. By:
Ref. To:
Act. taken:

Comp. date:
Sign:

Ref. W/O:

Tort:

FIGURE 2

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

"General Decision Number: HI20260001 05/27/2026

State: Hawaii

Construction Types: Building, Heavy, Highway and Residential

Counties: Hawaii Counties of
Hawaii, Honolulu, Kalawao, Kauai and
Maui

BUILDING CONSTRUCTION PROJECTS

RESIDENTIAL CONSTRUCTION PROJECTS (consisting of single family homes and apartments up to and including

HIGHWAY CONSTRUCTION PROJECTS

HEAVY CONSTRUCTION PROJECTS

Modification Number	Publication Date
1	01/16/2026
2	05/18/2026
3	05/27/2026

ASBE0132-001 09/07/2025

	Rates	Fringes
ASBESTOS WORKERS/INSULATOR (INCLUDES APPLICATION OF ALL INSULATING MATERIALS, PROTECTIVE COVERINGS, COATINGS AND FINISHES TO ALL TYPES OF MECHANICAL SYSTEMS. ALSO THE APPLICATION OF FIRESTOPPING MATERIAL FOR WALL OPENINGS AND PENETRATIONS IN WALLS, FLOORS, CEILINGS AND CURTAIN WALLS.)	$ 46.90	29.75

BOIL0627-005 01/01/2025

	Rates	Fringes
BOILERMAKER	$ 49.37	31.25

BRHI0001-001 09/05/2023

	Rates	Fringes
BRICKLAYER: POINTERS, CAULKERS AND WEATHERPROOFERS	$ 48.28	32.23
BRICKLAYERS AND STONEMASONS	$ 48.03	32.23

BRHI0001-002 09/05/2023

	Rates	Fringes
TILE, MARBLE & TERRAZZO WORKER (TERRAZZO BASE GRINDERS)	$ 44.69	33.00
TILE, MARBLE & TERRAZZO WORKER (TERRAZZO FLOOR GRINDERS AND TENDERS)	$ 43.14	33.00
TILE, MARBLE & TERRAZZO WORKER (TILE, MARBLE AND TERRAZZO WORKERS)	$ 46.50	33.00

CARP0745-001 09/01/2025

	Rates	Fringes
CARPENTERS: (CARPENTERS; HARDWOOD FLOOR LAYERS; PATENT SCAFFOLD ERECTORS (14 FT. AND OVER); PILEDRIVERS; PNEUMATIC NAILERS; WOOD SHINGLERS AND TRANSIT AND/OR LAYOUT MAN)	$ 55.50	29.81
CARPENTERS: MILLWRIGHTS AND MACHINE ERECTORS	$ 55.75	29.81
CARPENTERS: POWER SAW OPERATORS (2 H.P. AND OVER)	$ 55.65	29.81

CARP0745-002 09/01/2025

	Rates	Fringes
DRYWALL AND ACOUSTICAL WORKERS AND LATHERS	$ 55.75	29.81

ELEC1186-001 08/24/2025

	Rates	Fringes
ELECTRICIANS	$ 56.55	33.16
ELECTRICIANS: CABLE SPLICERS	$ 63.90	33.38
ELECTRICIANS: TELECOMMUNICATION WORKER	$ 41.00	16.28

ELEC1186-002 08/24/2025

	Rates	Fringes
LINE CONSTRUCTION: CABLE SPLICERS	$ 63.90	33.38
LINE CONSTRUCTION: GROUNDMEN/TRUCK DRIVERS	$ 42.41	27.14
LINE CONSTRUCTION: HEAVY EQUIPMENT OPERATORS	$ 50.90	30.75
LINE CONSTRUCTION: LINEMEN	$ 56.55	33.16
LINE CONSTRUCTION: TELECOMMUNICATION WORKER	$ 41.00	16.28

ELEV0126-001 01/01/2025

	Rates	Fringes
ELEVATOR MECHANIC A. VACATION: EMPLOYER CONTRIBUTES 8% OF BASIC HOURLY RATE FOR 5 YEARS SERVICE AND 6% OF BASIC HOURLY RATE FOR 6 MONTHS TO 5 YEARS SERVICE AS VACATION PAY CREDIT. B. PAID HOLIDAYS: NEW YEAR'S DAY, MEMORIAL DAY, INDEPENDENCE DAY, LABOR DAY, VETERANS' DAY, THANKSGIVING DAY, THE FRIDAY AFTER THANKSGIVING DAY AND CHRISTMAS DAY	$ 73.85	38.44

ENGI0003-002 09/01/2025

	Rates	Fringes
DIVER TENDER: OTHER THAN AQUA LUNG	$ 59.94	35.68
DIVER: (AQUA LUNG) (SCUBA) (over 30 feet)	$ 81.72	35.68
DIVER: (AQUA LUNG) (SCUBA) (up to 30 feet)	$ 72.35	35.68
DIVER: OTHER THAN AQUA LUNG	$ 81.72	35.68
HELICOPTER WORK, AIRBORNE HOIST OPERATOR FOR HELICOPTER	$ 61.52	35.68
HELICOPTER WORK: CO-PILOT OF HELICOPTER	$ 61.66	35.68
HELICOPTER WORK: PILOT OF HELICOPTER	$ 62.83	35.68
POWER EQUIPMENT OPERATOR - TUNNEL WORK, GROUP 1: FORK LIFT (UP TO AND INCLUDING 10 TONS); PARTSMAN (HEAVY DUTY REPAIR SHOP PARTS ROOM WHEN NEEDED). BOOMS AND/OR LEADS (HOURLY PREMIUMS): THE OPERATOR OF A CRANE (UNDER 50 TONS) WITH A BOOM OF 80 FEET OR MORE (INCLUDING JIB), OR OF A CRANE (UNDER 50 TONS) WITH LEADS OF 100 FEET OR MORE, SHALL RECEIVE A PER HOUR PREMIUM FOR EACH HOUR WORKED ON SAID CRANE (UNDER 50 TONS) IN ACCORDANCE WITH THE FOLLOWING SCHEDULE: BOOMS OF 80 FEET UP TO BUT NOT INCLUDING 130 FEET OR LEADS OF 100 FEET UP TO BUT NOT INCLUDING 130 FEET 0.50 BOOMS AND/OR LEADS OF 130 FEET UP TO BUT NOT INCLUDING 180 FEET 0.75 BOOMS AND/OR LEADS OF 180 FEET UP TO AND INCLUDING 250 FEET 1.15 BOOMS AND/OR LEADS OVER 250 FEET 1.50 THE OPERATOR OF A CRANE (50 TONS AND OVER) WITH A BOOM OF 180 FEET OR MORE (INCLUDING JIB) SHALL RECEIVE A PER HOUR PREMIUM FOR EACH HOUR WORKED ON SAID CRANE (50 TONS AND OVER) IN ACCORDANCE WITH THE FOLLOWING SCHEDULE: BOOMS OF 180 FEET UP TO AND INCLUDING 250 FEET 1.25 BOOMS OVER 250 FEET 1.75	$ 57.96	35.68
POWER EQUIPMENT OPERATOR - TUNNEL WORK, GROUP 2: CONVEYOR OPERATOR (HANDLING BUILDING MATERIAL);		

HYDRAULIC MONITOR; MIXER BOX OPERATOR (CONCRETE PLANT). BOOMS AND/OR LEADS (HOURLY PREMIUMS): THE OPERATOR OF A CRANE (UNDER 50 TONS) WITH A BOOM OF 80 FEET OR MORE (INCLUDING JIB), OR OF A CRANE (UNDER 50 TONS) WITH LEADS OF 100 FEET OR MORE, SHALL RECEIVE A PER HOUR PREMIUM FOR EACH HOUR WORKED ON SAID CRANE (UNDER 50 TONS) IN ACCORDANCE WITH THE FOLLOWING SCHEDULE: BOOMS OF 80 FEET UP TO BUT NOT INCLUDING 130 FEET OR LEADS OF 100 FEET UP TO BUT NOT INCLUDING 130 FEET
0.50 BOOMS AND/OR LEADS OF 130 FEET UP TO BUT NOT INCLUDING 180 FEET
0.75 BOOMS AND/OR LEADS OF 180 FEET UP TO AND INCLUDING 250 FEET
1.15 BOOMS AND/OR LEADS OVER 250 FEET
1.50 THE OPERATOR OF A CRANE (50 TONS AND OVER) WITH A BOOM OF 180 FEET OR MORE (INCLUDING JIB) SHALL RECEIVE A PER HOUR PREMIUM FOR EACH HOUR WORKED ON SAID CRANE (50 TONS AND OVER) IN ACCORDANCE WITH THE FOLLOWING SCHEDULE: BOOMS OF 180 FEET UP TO AND INCLUDING 250 FEET
1.25 BOOMS OVER 250 FEET
1.75.....$ 58.07 35.68

POWER EQUIPMENT OPERATOR - TUNNEL WORK, GROUP 3: BRAKEMAN; DECKHAND; FIREMAN; OILER; OILER/GRADECHECKER; SIGNALMAN; SWITCHMAN; HIGHLINE CABLEWAY SIGNALMAN; BARGEMAN; BUNKERMAN; CONCRETE CURING MACHINE (SELF-PROPELLED, AUTOMATICALLY APPLIED UNIT ON STREETS, HIGHWAYS, AIRPORTS AND CANALS); LEVEEMAN; ROLLER (5 TONS AND UNDER); TUGGER HOIST. BOOMS AND/OR LEADS (HOURLY PREMIUMS): THE OPERATOR OF A CRANE (UNDER 50 TONS) WITH A BOOM OF 80 FEET OR MORE (INCLUDING JIB), OR OF A CRANE (UNDER 50 TONS) WITH LEADS OF 100 FEET OR MORE, SHALL RECEIVE A PER HOUR PREMIUM FOR EACH HOUR WORKED ON SAID CRANE (UNDER 50 TONS) IN ACCORDANCE WITH THE FOLLOWING SCHEDULE: BOOMS OF 80 FEET UP TO BUT NOT INCLUDING 130 FEET OR LEADS OF 100 FEET UP TO BUT NOT INCLUDING 130 FEET
0.50 BOOMS AND/OR LEADS OF 130 FEET UP TO BUT NOT INCLUDING 180 FEET
0.75 BOOMS AND/OR LEADS OF 180 FEET UP TO AND INCLUDING 250 FEET
1.15 BOOMS AND/OR LEADS OVER 250 FEET
1.50 THE OPERATOR OF A CRANE (50 TONS AND OVER) WITH A BOOM OF 180 FEET OR MORE (INCLUDING JIB) SHALL RECEIVE A PER HOUR PREMIUM FOR EACH HOUR WORKED ON SAID CRANE (50 TONS AND OVER) IN ACCORDANCE WITH THE FOLLOWING SCHEDULE: BOOMS OF 180 FEET UP TO AND INCLUDING 250 FEET
1.25 BOOMS OVER 250 FEET
1.75.....$ 58.24 35.68

POWER EQUIPMENT OPERATOR - TUNNEL WORK, GROUP 4: BOOM TRUCK OR DUAL PURPOSE ""A"" FRAME TRUCK (5 TONS OR LESS); CONCRETE PLACING BOOM (BUILDING CONSTRUCTION); DINKY OPERATOR; ELEVATOR OPERATOR; HOIST AND/OR WINCH (ONE DRUM); STRADDLE TRUCK (ROSS CARRIER, HYSTER AND SIMILAR BOOMS AND/OR LEADS (HOURLY PREMIUMS): THE OPERATOR OF A CRANE (UNDER 50 TONS) WITH A BOOM OF 80 FEET OR MORE (INCLUDING JIB), OR OF A CRANE (UNDER 50 TONS) WITH LEADS OF 100 FEET OR MORE, SHALL RECEIVE A PER HOUR PREMIUM FOR EACH HOUR WORKED ON SAID CRANE (UNDER 50 TONS) IN ACCORDANCE WITH THE FOLLOWING SCHEDULE: BOOMS OF 80 FEET UP TO BUT NOT INCLUDING 130 FEET OR LEADS OF 100 FEET UP TO BUT NOT INCLUDING 130 FEET
0.50 BOOMS

AND/OR LEADS OF 130 FEET UP TO BUT NOT INCLUDING 180 FEET 0.75 BOOMS AND/OR LEADS OF 180 FEET UP TO AND INCLUDING 250 FEET
1.15 BOOMS AND/OR LEADS OVER 250 FEET
1.50 THE OPERATOR OF A CRANE (50 TONS AND OVER) WITH A BOOM OF 180 FEET OR MORE (INCLUDING JIB) SHALL RECEIVE A PER HOUR PREMIUM FOR EACH HOUR WORKED ON SAID CRANE (50 TONS AND OVER) IN ACCORDANCE WITH THE FOLLOWING SCHEDULE: BOOMS OF 180 FEET UP TO AND INCLUDING 250 FEET
1.25 BOOMS OVER 250 FEET
1.75.....$ 58.51 35.68

POWER EQUIPMENT OPERATOR - TUNNEL WORK, GROUP 5: ASPHALT PLANT FIREMAN; COMPRESSORS, PUMPS, GENERATORS AND WELDING MACHINES (""BANK"" OF 9 OR MORE, INDIVIDUALLY OR COLLECTIVELY); CONCRETE PUMPS OR PUMPCRETE GUNS; LUBRICATION AND SERVICE ENGINEER (GREASE RACK); SCREEDMAN. BOOMS AND/OR LEADS (HOURLY PREMIUMS): THE OPERATOR OF A CRANE (UNDER 50 TONS) WITH A BOOM OF 80 FEET OR MORE (INCLUDING JIB), OR OF A CRANE (UNDER 50 TONS) WITH LEADS OF 100 FEET OR MORE, SHALL RECEIVE A PER HOUR PREMIUM FOR EACH HOUR WORKED ON SAID CRANE (UNDER 50 TONS) IN ACCORDANCE WITH THE FOLLOWING SCHEDULE: BOOMS OF 80 FEET UP TO BUT NOT INCLUDING 130 FEET OR LEADS OF 100 FEET UP TO BUT NOT INCLUDING 130 FEET 0.50 BOOMS AND/OR LEADS OF 130 FEET UP TO BUT NOT INCLUDING 180 FEET 0.75 BOOMS AND/OR LEADS OF 180 FEET UP TO AND INCLUDING 250 FEET
1.15 BOOMS AND/OR LEADS OVER 250 FEET
1.50 THE OPERATOR OF A CRANE (50 TONS AND OVER) WITH A BOOM OF 180 FEET OR MORE (INCLUDING JIB) SHALL RECEIVE A PER HOUR PREMIUM FOR EACH HOUR WORKED ON SAID CRANE (50 TONS AND OVER) IN ACCORDANCE WITH THE FOLLOWING SCHEDULE: BOOMS OF 180 FEET UP TO AND INCLUDING 250 FEET
1.25 BOOMS OVER 250 FEET
1.75.....$ 58.82 35.68

POWER EQUIPMENT OPERATOR - TUNNEL WORK, GROUP 6: BOOM TRUCK OR DUAL PURPOSE ""A""FRAME TRUCK (OVER 5 TONS); COMBINATION LOADER/BACKHOE (UP TO AND INCLUDING 3/4 CU. YD.); CONCRETE BATCH PLANTS (WET OR DRY); CONCRETE CUTTER, GROOVER AND/OR GRINDER (SELF-PROPELLED UNIT ON STREETS, HIGHWAYS, AIRPORTS, AND CANALS); CONVEYOR OR CONCRETE PUMP (TRUCK OR EQUIPMENT MOUNTED); DRILLING MACHINERY (NOT TO APPLY TO WATERLINERS, WAGON DRILLS OR JACK HAMMERS); FORK LIFT (OVER 10 TONS); LOADER (UP TO AND INCLUDING 3 AND 1/2 CU. YDS); LULL HIGH LIFT (UNDER 40 FEET); LUBRICATION AND SERVICE ENGINEER (MOBILE); MAGINNIS INTERNAL FULL SLAB VIBRATOR (ON AIRPORTS, HIGHWAYS, CANALS AND WAREHOUSES); MAN OR MATERIAL HOIST; MECHANICAL CONCRETE FINISHER (LARGE CLARY, JOHNSON BIDWELL, BRIDGE DECK AND SIMILAR); MOBILE TRUCK CRANE DRIVER; PORTABLE SHOTBLAST CONCRETE CLEANING MACHINE; PORTABLE BORING MACHINE (UNDER STREETS, HIGHWAYS, ETC.); PORTABLE CRUSHER; POWER JUMBO OPERATOR (SETTING SLIP FORMS, ETC., IN TUNNELS); ROLLERS (OVER 5 TONS); SELF-PROPELLED COMPACTOR (SINGLE ENGINE); SELF-PROPELLED PAVEMENT BREAKER; SKIDSTEER LOADER WITH ATTACHMENTS; SLIP FORM PUMPS (POWER DRIVEN BY HYDRAULIC, ELECTRIC, AIR, GAS, ETC., LIFTING DEVICE FOR CONCRETE FORMS); SMALL RUBBER TIRED TRACTORS; TRENCHER (UP TO AND INCLUDING 6 FEET); UNDERBRIDGE PERSONNEL AERIAL PLATFORM (50 FEET OF PLATFORM OR LESS). BOOMS

AND/OR LEADS (HOURLY PREMIUMS): THE OPERATOR OF A CRANE (UNDER 50 TONS) WITH A BOOM OF 80 FEET OR MORE (INCLUDING JIB), OR OF A CRANE (UNDER 50 TONS) WITH LEADS OF 100 FEET OR MORE, SHALL RECEIVE A PER HOUR PREMIUM FOR EACH HOUR WORKED ON SAID CRANE (UNDER 50 TONS) IN ACCORDANCE WITH THE FOLLOWING SCHEDULE: BOOMS OF 80 FEET UP TO BUT NOT INCLUDING 130 FEET OR LEADS OF 100 FEET UP TO BUT NOT INCLUDING 130 FEET
0.50 BOOMS AND/OR LEADS OF 130 FEET UP TO BUT NOT INCLUDING 180 FEET 0.75 BOOMS AND/OR LEADS OF 180 FEET UP TO AND INCLUDING 250 FEET 1.15 BOOMS AND/OR LEADS OVER 250 FEET 1.50 THE OPERATOR OF A CRANE (50 TONS AND OVER) WITH A BOOM OF 180 FEET OR MORE (INCLUDING JIB) SHALL RECEIVE A PER HOUR PREMIUM FOR EACH HOUR WORKED ON SAID CRANE (50 TONS AND OVER) IN ACCORDANCE WITH THE FOLLOWING SCHEDULE: BOOMS OF 180 FEET UP TO AND INCLUDING 250 FEET 1.25 BOOMS OVER 250 FEET
1.75.....$ 59.47 35.68

POWER EQUIPMENT OPERATOR - TUNNEL WORK, GROUP 7: CRUSHER PLANT ENGINEER, DOZER (D-4, CASE 450, JOHN DEERE 450, AND SIMILAR); DUAL DRUM MIXER, EXTEND LIFT; HOIST AND/OR WINCH (2 DRUMS); LOADER (OVER 3 AND 1/2 CU. YDS. UP TO AND INCLUDING 6 YARDS.); MECHANICAL FINISHER OR SPREADER MACHINE (ASPHALT), (BARBER GREENE AND SIMILAR) (SCREEDMAN REQUIRED); MINE OR SHAFT HOIST; MOBILE CONCRETE MIXER (OVER 5 TONS); PIPE BENDING MACHINE (PIPELINES ONLY); PIPE CLEANING MACHINE (TRACTOR PROPELLED AND SUPPORTED); PIPE WRAPPING MACHINE (TRACTOR PROPELLED AND SUPPORTED); ROLLER OPERATOR (ASPHALT); SELF-PROPELLED ELEVATING GRADE PLANE; SLUSHER OPERATOR; TRACTOR (WITH BOOM) (D-6, OR SIMILAR); TRENCHER (OVER 6 FEET AND LESS THAN 200 H.P.); WATER TANKER (PULLED BY EUCLIDS, T-PULLS, DW-10, 20 OR 21, OR SIMILAR); WINCHMAN (STERN WINCH ON DREDGE). BOOMS AND/OR LEADS (HOURLY PREMIUMS): THE OPERATOR OF A CRANE (UNDER 50 TONS) WITH A BOOM OF 80 FEET OR MORE (INCLUDING JIB), OR OF A CRANE (UNDER 50 TONS) WITH LEADS OF 100 FEET OR MORE, SHALL RECEIVE A PER HOUR PREMIUM FOR EACH HOUR WORKED ON SAID CRANE (UNDER 50 TONS) IN ACCORDANCE WITH THE FOLLOWING SCHEDULE: BOOMS OF 80 FEET UP TO BUT NOT INCLUDING 130 FEET OR LEADS OF 100 FEET UP TO BUT NOT INCLUDING 130 FEET
0.50 BOOMS AND/OR LEADS OF 130 FEET UP TO BUT NOT INCLUDING 180 FEET 0.75 BOOMS AND/OR LEADS OF 180 FEET UP TO AND INCLUDING 250 FEET 1.15 BOOMS AND/OR LEADS OVER 250 FEET 1.50 THE OPERATOR OF A CRANE (50 TONS AND OVER) WITH A BOOM OF 180 FEET OR MORE (INCLUDING JIB) SHALL RECEIVE A PER HOUR PREMIUM FOR EACH HOUR WORKED ON SAID CRANE (50 TONS AND OVER) IN ACCORDANCE WITH THE FOLLOWING SCHEDULE: BOOMS OF 180 FEET UP TO AND INCLUDING 250 FEET 1.25 BOOMS OVER 250 FEET
1.75.....$ 59.79 35.68

POWER EQUIPMENT OPERATOR - TUNNEL WORK, GROUP 8: ASPHALT PLANT OPERATOR; BARGE MATE (SEAGOING); CAST-IN-PLACE PIPE LAYING MACHINE; CONCRETE BATCH PLANT (MULTIPLE UNITS); CONVEYOR OPERATOR (TUNNEL); DECKMATE; DOZER (D-6 AND SIMILAR); FINISHING MACHINE OPERATOR (AIRPORTS AND HIGHWAYS);

GRADESETTER; KOLMAN LOADER (AND SIMILAR); MUCKING MACHINE (CRAWLER-TYPE); MUCKING MACHINE (CONVEYOR-TYPE); NO-JOINT PIPE LAYING MACHINE; PORTABLE CRUSHING AND SCREENING PLANT; POWER BLADE OPERATOR (UNDER 12); SAURMAN TYPE DRAGLINE (UP TO AND INCLUDING 5 YDS.); STATIONARY PIPE WRAPPING, CLEANING AND BENDING MACHINE; SURFACE HEATER AND PLANER OPERATOR, TRACTOR (D-6 AND SIMILAR); TRI-BATCH PAVER; TUNNEL BADGER; TUNNEL MOLE AND/OR BORING MACHINE OPERATOR UNDERBRIDGE PERSONNEL AERIAL PLATFORM (OVER 50 FEET OF PLATFORM). BOOMS AND/OR LEADS (HOURLY PREMIUMS): THE OPERATOR OF A CRANE (UNDER 50 TONS) WITH A BOOM OF 80 FEET OR MORE (INCLUDING JIB), OR OF A CRANE (UNDER 50 TONS) WITH LEADS OF 100 FEET OR MORE, SHALL RECEIVE A PER HOUR PREMIUM FOR EACH HOUR WORKED ON SAID CRANE (UNDER 50 TONS) IN ACCORDANCE WITH THE FOLLOWING SCHEDULE: BOOMS OF 80 FEET UP TO BUT NOT INCLUDING 130 FEET OR LEADS OF 100 FEET UP TO BUT NOT INCLUDING 130 FEET
0.50 BOOMS AND/OR LEADS OF 130 FEET UP TO BUT NOT INCLUDING 180 FEET 0.75 BOOMS AND/OR LEADS OF 180 FEET UP TO AND INCLUDING 250 FEET 1.15 BOOMS AND/OR LEADS OVER 250 FEET 1.50 THE OPERATOR OF A CRANE (50 TONS AND OVER) WITH A BOOM OF 180 FEET OR MORE (INCLUDING JIB) SHALL RECEIVE A PER HOUR PREMIUM FOR EACH HOUR WORKED ON SAID CRANE (50 TONS AND OVER) IN ACCORDANCE WITH THE FOLLOWING SCHEDULE: BOOMS OF 180 FEET UP TO AND INCLUDING 250 FEET 1.25 BOOMS OVER 250 FEET
1.75.....$ 59.90 35.68

POWER EQUIPMENT OPERATOR - TUNNEL WORK, GROUP 9: COMBINATION MIXER AND COMPRESSOR (GUNITE); DO-MOR LOADERAND ADAMS ELEGRADER; DOZER (D-7 OR EQUAL); WHEEL AND/OR LADDER TRENCHER (OVER 6 FEET AND 200 TO 749 H.P.). BOOMS AND/OR LEADS (HOURLY PREMIUMS): THE OPERATOR OF A CRANE (UNDER 50 TONS) WITH A BOOM OF 80 FEET OR MORE (INCLUDING JIB), OR OF A CRANE (UNDER 50 TONS) WITH LEADS OF 100 FEET OR MORE, SHALL RECEIVE A PER HOUR PREMIUM FOR EACH HOUR WORKED ON SAID CRANE (UNDER 50 TONS) IN ACCORDANCE WITH THE FOLLOWING SCHEDULE: BOOMS OF 80 FEET UP TO BUT NOT INCLUDING 130 FEET OR LEADS OF 100 FEET UP TO BUT NOT INCLUDING 130 FEET
0.50 BOOMS AND/OR LEADS OF 130 FEET UP TO BUT NOT INCLUDING 180 FEET 0.75 BOOMS AND/OR LEADS OF 180 FEET UP TO AND INCLUDING 250 FEET
1.15 BOOMS AND/OR LEADS OVER 250 FEET
1.50 THE OPERATOR OF A CRANE (50 TONS AND OVER) WITH A BOOM OF 180 FEET OR MORE (INCLUDING JIB) SHALL RECEIVE A PER HOUR PREMIUM FOR EACH HOUR WORKED ON SAID CRANE (50 TONS AND OVER) IN ACCORDANCE WITH THE FOLLOWING SCHEDULE: BOOMS OF 180 FEET UP TO AND INCLUDING 250 FEET
1.25 BOOMS OVER 250 FEET
1.75.....$ 60.01 35.68

POWER EQUIPMENT OPERATOR - TUNNEL WORK, GROUP 9A: DOZER (D-8 AND SIMILAR); GRADESETTER (WHEN REQUIRED BY THE CONTRACTOR TO WORK FROM DRAWINGS, PLANS OR SPECIFICATIONS WITHOUT THE DIRECT SUPERVISION OF A FOREMAN OR SUPERINTENDENT); PUSH CAT; SCRAPERS (UP TO AND INCLUDING 20 CU. YDS); SELF-PROPELLED COMPACTOR WITH DOZER; SELF-PROPELLED, RUBBER-TIRED EARTHMOVING EQUIPMENT (UP TO AND INCLUDING 20 CU.

YDS) (621 BAND AND SIMILAR); SHEEP'S FOOT; TRACTOR (D-8 AND SIMILAR); TRACTORS WITH BOOM (LARGER THAN D-6, AND SIMILAR). BOOMS AND/OR LEADS (HOURLY PREMIUMS): THE OPERATOR OF A CRANE (UNDER 50 TONS) WITH A BOOM OF 80 FEET OR MORE (INCLUDING JIB), OR OF A CRANE (UNDER 50 TONS) WITH LEADS OF 100 FEET OR MORE, SHALL RECEIVE A PER HOUR PREMIUM FOR EACH HOUR WORKED ON SAID CRANE (UNDER 50 TONS) IN ACCORDANCE WITH THE FOLLOWING SCHEDULE: BOOMS OF 80 FEET UP TO BUT NOT INCLUDING 130 FEET OR LEADS OF 100 FEET UP TO BUT NOT INCLUDING 130 FEET 0.50 BOOMS AND/OR LEADS OF 130 FEET UP TO BUT NOT INCLUDING 180 FEET 0.75 BOOMS AND/OR LEADS OF 180 FEET UP TO AND INCLUDING 250 FEET 1.15 BOOMS AND/OR LEADS OVER 250 FEET 1.50 THE OPERATOR OF A CRANE (50 TONS AND OVER) WITH A BOOM OF 180 FEET OR MORE (INCLUDING JIB) SHALL RECEIVE A PER HOUR PREMIUM FOR EACH HOUR WORKED ON SAID CRANE (50 TONS AND OVER) IN ACCORDANCE WITH THE FOLLOWING SCHEDULE: BOOMS OF 180 FEET UP TO AND INCLUDING 250 FEET 1.25 BOOMS OVER 250 FEET 1.75.....$ 60.24 35.68

POWER EQUIPMENT OPERATOR - TUNNEL WORK, GROUP 10: CHICAGO BOOM; COLD PLANERS; HEAVY DUTY REPAIRMAN OR WELDER; HOIST AND/OR WINCH (3 DRUMS); HYDRAULIC SKOOPER (KOEHRING AND SIMILAR); LOADER (OVER 6 CU. YDS. UP TO AND INCLUDING 12 CU. YDS.); SAURMAN TYPE DRAGLINE (OVER 5 CU. YDS.); SELF-PROPELLED, RUBBER-TIRED EARTHMOVING EQUIPMENT (OVER 20 CU. YDS. UP TO AND INCLUDING 31 CU. YDS.) (637D AND SIMILAR); SOIL STABILIZER (P & H OR EQUAL); SUB-GRADER (GURRIES OR OTHER AUTOMATIC TYPE); TRACTORS (D-9 OR EQUIVALENT, ALL ATTACHMENTS); TRACTOR (TANDEM SCRAPER); WATCH ENGINEER. BOOMS AND/OR LEADS (HOURLY PREMIUMS): THE OPERATOR OF A CRANE (UNDER 50 TONS) WITH A BOOM OF 80 FEET OR MORE (INCLUDING JIB), OR OF A CRANE (UNDER 50 TONS) WITH LEADS OF 100 FEET OR MORE, SHALL RECEIVE A PER HOUR PREMIUM FOR EACH HOUR WORKED ON SAID CRANE (UNDER 50 TONS) IN ACCORDANCE WITH THE FOLLOWING SCHEDULE: BOOMS OF 80 FEET UP TO BUT NOT INCLUDING 130 FEET OR LEADS OF 100 FEET UP TO BUT NOT INCLUDING 130 FEET 0.50 BOOMS AND/OR LEADS OF 130 FEET UP TO BUT NOT INCLUDING 180 FEET 0.75 BOOMS AND/OR LEADS OF 180 FEET UP TO AND INCLUDING 250 FEET 1.15 BOOMS AND/OR LEADS OVER 250 FEET 1.50 THE OPERATOR OF A CRANE (50 TONS AND OVER) WITH A BOOM OF 180 FEET OR MORE (INCLUDING JIB) SHALL RECEIVE A PER HOUR PREMIUM FOR EACH HOUR WORKED ON SAID CRANE (50 TONS AND OVER) IN ACCORDANCE WITH THE FOLLOWING SCHEDULE: BOOMS OF 180 FEET UP TO AND INCLUDING 250 FEET 1.25 BOOMS OVER 250 FEET 1.75.....$ 60.30 35.68

POWER EQUIPMENT OPERATOR - TUNNEL WORK, GROUP 10A: BOAT OPERATOR; CABLE-OPERATED CRAWLER CRANE (UP TO AND INCLUDING 25 TONS); CABLE-OPERATED POWER SHOVEL, CLAMSHELL, DRAGLINE AND BACKHOE (UP TO AND INCLUDING 1 CU. YD.); DOZER D9-L; DOZER (D-10, HD41 AND SIMILAR) (ALL ATTACHMENTS); GRADALL (UP TO AND INCLUDING 1 CU. YD.); HYDRAULIC BACKHOE (OVER 3/4 CU. YDS. UP TO AND INCLUDING 2 CU. YDS.); MOBILE TRUCK CRANE OPERATOR (UP TO AND INCLUDING 25 TONS)

(MOBILE TRUCK CRANE DRIVER REQUIRED); SELF-PROPELLED BOOM TYPE LIFTING DEVICE (CENTER MOUNT) (UP TO AND INCLUDING 25 TONS) (GROVE, DROTT, P&H, PETTIBONE AND SIMILAR; TRENCHER (OVER 6 FEET AND 750 H.P. OR MORE); WATCH ENGINEER (STEAM OR ELECTRIC). BOOMS AND/OR LEADS (HOURLY PREMIUMS): THE OPERATOR OF A CRANE (UNDER 50 TONS) WITH A BOOM OF 80 FEET OR MORE (INCLUDING JIB), OR OF A CRANE (UNDER 50 TONS) WITH LEADS OF 100 FEET OR MORE, SHALL RECEIVE A PER HOUR PREMIUM FOR EACH HOUR WORKED ON SAID CRANE (UNDER 50 TONS) IN ACCORDANCE WITH THE FOLLOWING SCHEDULE: BOOMS OF 80 FEET UP TO BUT NOT INCLUDING 130 FEET OR LEADS OF 100 FEET UP TO BUT NOT INCLUDING 130 FEET
0.50 BOOMS AND/OR LEADS OF 130 FEET UP TO BUT NOT INCLUDING 180 FEET
0.75 BOOMS AND/OR LEADS OF 180 FEET UP TO AND INCLUDING 250 FEET
1.15 BOOMS AND/OR LEADS OVER 250 FEET
1.50 THE OPERATOR OF A CRANE (50 TONS AND OVER) WITH A BOOM OF 180 FEET OR MORE (INCLUDING JIB) SHALL RECEIVE A PER HOUR PREMIUM FOR EACH HOUR WORKED ON SAID CRANE (50 TONS AND OVER) IN ACCORDANCE WITH THE FOLLOWING SCHEDULE: BOOMS OF 180 FEET UP TO AND INCLUDING 250 FEET
1.25 BOOMS OVER 250 FEET
1.75.....$ 60.45 35.68

POWER EQUIPMENT OPERATOR - TUNNEL WORK, GROUP 11: AUTOMATIC SLIP FORM PAVER (CONCRETE OR ASPHALT); BAND WAGON (IN CONJUNCTION WITH WHEEL EXCAVATOR); CABLE-OPERATED CRAWLER CRANES (OVER 25 TONS BUT LESS THAN 50 TONS); CABLE-OPERATED POWER SHOVEL, CLAMSHELL, DRAGLINE AND BACKHOE (OVER 1 CU. YD. UP TO 7 CU. YDS.); GRADALL (OVER 1 CU. YDS. UP TO 7 CU. YDS.); DW-10, 20, ETC. (TANDEM); EARTHMOVING MACHINES (MULTIPLE PROPULSION POWER UNITS AND 2 OR MORE SCRAPERS) (UP TO AND INCLUDING 35 CU. YDS.,"" STRUCK"" M.R.C.); HIGHLINE CABLEWAY; HYDRAULIC BACKHOE (OVER 2 CU. YDS. UP TO AND INCLUDING 4 CU. YDS.); LEVERMAN; LIFT SLAB MACHINE; LOADER (OVER 12 CU. YDS); MASTER BOAT OPERATOR; MOBILE TRUCK CRANE OPERATOR (OVER 25 TONS BUT LESS THAN 50 TONS); (MOBILE TRUCK CRANE DRIVER REQUIRED); PRE-STRESS WIRE WRAPPING MACHINE; SELF-PROPELLED BOOM-TYPE LIFTING DEVICE (CENTER MOUNT) (OVER 25 TONS M.R.C); SELF-PROPELLED COMPACTOR (WITH MULTIPLE-PROPULSION POWER UNITS); SINGLE ENGINE RUBBER TIRED EARTHMOVING MACHINE (WITH TANDEM SCRAPER); TANDEM CATS; TRENCHER (PULLING ATTACHED SHIELD). BOOMS AND/OR LEADS (HOURLY PREMIUMS): THE OPERATOR OF A CRANE (UNDER 50 TONS) WITH A BOOM OF 80 FEET OR MORE (INCLUDING JIB), OR OF A CRANE (UNDER 50 TONS) WITH LEADS OF 100 FEET OR MORE, SHALL RECEIVE A PER HOUR PREMIUM FOR EACH HOUR WORKED ON SAID CRANE (UNDER 50 TONS) IN ACCORDANCE WITH THE FOLLOWING SCHEDULE: BOOMS OF 80 FEET UP TO BUT NOT INCLUDING 130 FEET OR LEADS OF 100 FEET UP TO BUT NOT INCLUDING 130 FEET
0.50 BOOMS AND/OR LEADS OF 130 FEET UP TO BUT NOT INCLUDING 180 FEET
0.75 BOOMS AND/OR LEADS OF 180 FEET UP TO AND INCLUDING 250 FEET
1.15 BOOMS AND/OR LEADS OVER 250 FEET
1.50 THE OPERATOR OF A CRANE (50 TONS AND OVER) WITH A BOOM OF 180 FEET OR MORE (INCLUDING JIB) SHALL RECEIVE A PER HOUR PREMIUM FOR EACH HOUR WORKED ON SAID CRANE (50 TONS AND OVER) IN ACCORDANCE WITH THE FOLLOWING

SCHEDULE: BOOMS OF 180 FEET UP TO   AND INCLUDING
250 FEET   1.25 BOOMS
OVER 250 FEET
1.75.....$ 60.60 35.68

POWER EQUIPMENT OPERATOR - TUNNEL WORK, GROUP 12:
CLAMSHELL OR DIPPER OPERATOR; DERRICKS; DRILL RIGS;
MULTI-PROPULSION EARTHMOVING MACHINES (2 OR MORE
SCRAPERS) (OVER 35 CU. YDS ""STRUCK""M.R.C.);
OPERATORS (DERRICKS, PILEDRIVERS AND CRANES); POWER
SHOVELS AND DRAGLINES (7 CU. YDS. M.R.C. AND OVER);
SELF-PROPELLED RUBBER-TIRED EARTHMOVING EQUIPMENT
(OVER 31 CU. YDS.) (657B AND SIMILAR); WHEEL
EXCAVATOR (UP TO AND INCLUDING 750 CU. YDS. PER
HOUR); WHEEL EXCAVATOR (OVER 750 CU. YDS. PER
HOUR). .....$ 60.96 35.68

POWER EQUIPMENT OPERATOR - TUNNEL WORK, GROUP 12A:
DOZER (D-11 OR SIMILAR OR LARGER); HYDRAULIC
EXCAVATORS (OVER 4 CU. YDS.); LIFTING CRANES (50
TONS AND OVER); PIONEERING DOZER/BACKHOE (INITIAL
CLEARING AND EXCAVATION FOR THE PURPOSE OF
PROVIDING ACCESS FOR OTHER EQUIPMENT WHERE THE
TERRAIN WORKED INVOLVES 1-TO-1 SLOPES THAT ARE 50
FEET IN HEIGHT OR DEPTH, THE SCOPE OF THIS WORK
DOES NOT INCLUDE NORMAL CLEARING AND GRUBBING ON
USUAL HILLY TERRAIN NOR THE EXCAVATION WORK ONCE
THE ACCESS IS PROVIDED); POWER BLADE OPERATOR (CAT
12 OR EQUIVALENT OR OVER); STRADDLE LIFTS (OVER 50
TONS); TOWER CRANE, MOBILE; TRAVELING TRUSS CRANES;
UNIVERSAL, LIEBHER, LINDEN, AND SIMILAR TYPES OF
TOWER CRANES (IN THE ERECTION, DISMANTLING, AND
MOVING OF EQUIPMENT THERE SHALL BE AN ADDITIONAL
OPERATING ENGINEER OR HEAVY DUTY REPAIRMAN); YO-YO
CAT OR DOZER. BOOMS AND/OR LEADS (HOURLY
PREMIUMS): THE OPERATOR OF A CRANE (UNDER 50 TONS)
WITH A BOOM OF 80 FEET OR MORE (INCLUDING JIB), OR
OF A CRANE (UNDER 50 TONS) WITH LEADS OF 100 FEET
OR MORE, SHALL RECEIVE A PER HOUR PREMIUM FOR EACH
HOUR WORKED ON SAID CRANE (UNDER 50 TONS) IN
ACCORDANCE WITH THE FOLLOWING SCHEDULE: BOOMS OF
80 FEET UP TO BUT   NOT INCLUDING 130 FEET OR
LEADS OF 100 FEET UP TO BUT   NOT INCLUDING 130
FEET   0.50 BOOMS
AND/OR LEADS OF 130 FEET   UP TO BUT NOT INCLUDING
180 FEET   0.75 BOOMS AND/OR LEADS OF 180
FEET UP   TO AND INCLUDING 250 FEET
        1.15 BOOMS AND/OR LEADS OVER 250 FEET
1.50 THE OPERATOR OF A CRANE (50 TONS AND OVER)
WITH A BOOM OF 180 FEET OR MORE (INCLUDING JIB)
SHALL RECEIVE A PER HOUR PREMIUM FOR EACH HOUR
WORKED ON SAID CRANE (50 TONS AND OVER) IN
ACCORDANCE WITH THE FOLLOWING SCHEDULE: BOOMS OF
180 FEET UP TO   AND INCLUDING 250 FEET
                1.25 BOOMS OVER 250 FEET
                        1.75.....$ 61.32 35.68

POWER EQUIPMENT OPERATORS:, GROUP 1: FORK LIFT (UP
TO AND INCLUDING 10 TONS); PARTSMAN (HEAVY DUTY
REPAIR SHOP PARTS ROOM WHEN NEEDED). BOOMS AND/OR
LEADS (HOURLY PREMIUMS): THE OPERATOR OF A CRANE
(UNDER 50 TONS) WITH A BOOM OF 80 FEET OR MORE
(INCLUDING JIB), OR OF A CRANE (UNDER 50 TONS) WITH
LEADS OF 100 FEET OR MORE, SHALL RECEIVE A PER HOUR
PREMIUM FOR EACH HOUR WORKED ON SAID CRANE (UNDER
50 TONS) IN ACCORDANCE WITH THE FOLLOWING SCHEDULE:
 BOOMS OF 80 FEET UP TO BUT   NOT INCLUDING 130
FEET OR   LEADS OF 100 FEET UP TO BUT   NOT
INCLUDING 130 FEET
0.50 BOOMS AND/OR LEADS OF 130 FEET   UP TO BUT

NOT INCLUDING 180 FEET 0.75 BOOMS AND/OR LEADS OF 180 FEET UP TO AND INCLUDING 250 FEET 1.15 BOOMS AND/OR LEADS OVER 250 FEET 1.50 THE OPERATOR OF A CRANE (50 TONS AND OVER) WITH A BOOM OF 180 FEET OR MORE (INCLUDING JIB) SHALL RECEIVE A PER HOUR PREMIUM FOR EACH HOUR WORKED ON SAID CRANE (50 TONS AND OVER) IN ACCORDANCE WITH THE FOLLOWING SCHEDULE: BOOMS OF 180 FEET UP TO AND INCLUDING 250 FEET 1.25 BOOMS OVER 250 FEET 1.75.....$ 57.66 35.68

POWER EQUIPMENT OPERATORS:, GROUP 2: CONVEYOR OPERATOR (HANDLING BUILDING MATERIAL); HYDRAULIC MONITOR; MIXER BOX OPERATOR (CONCRETE PLANT). BOOMS AND/OR LEADS (HOURLY PREMIUMS): THE OPERATOR OF A CRANE (UNDER 50 TONS) WITH A BOOM OF 80 FEET OR MORE (INCLUDING JIB), OR OF A CRANE (UNDER 50 TONS) WITH LEADS OF 100 FEET OR MORE, SHALL RECEIVE A PER HOUR PREMIUM FOR EACH HOUR WORKED ON SAID CRANE (UNDER 50 TONS) IN ACCORDANCE WITH THE FOLLOWING SCHEDULE: BOOMS OF 80 FEET UP TO BUT NOT INCLUDING 130 FEET OR LEADS OF 100 FEET UP TO BUT NOT INCLUDING 130 FEET 0.50 BOOMS AND/OR LEADS OF 130 FEET UP TO BUT NOT INCLUDING 180 FEET 0.75 BOOMS AND/OR LEADS OF 180 FEET UP TO AND INCLUDING 250 FEET 1.15 BOOMS AND/OR LEADS OVER 250 FEET 1.50 THE OPERATOR OF A CRANE (50 TONS AND OVER) WITH A BOOM OF 180 FEET OR MORE (INCLUDING JIB) SHALL RECEIVE A PER HOUR PREMIUM FOR EACH HOUR WORKED ON SAID CRANE (50 TONS AND OVER) IN ACCORDANCE WITH THE FOLLOWING SCHEDULE: BOOMS OF 180 FEET UP TO AND INCLUDING 250 FEET 1.25 BOOMS OVER 250 FEET 1.75.....$ 57.77 35.68

POWER EQUIPMENT OPERATORS:, GROUP 3: BRAKEMAN; DECKHAND; FIREMAN; OILER; OILER/GRADECHECKER; SIGNALMAN; SWITCHMAN; HIGHLINE CABLEWAY SIGNALMAN; BARGEMAN; BUNKERMAN; CONCRETE CURING MACHINE (SELF-PROPELLED, AUTOMATICALLY APPLIED UNIT ON STREETS, HIGHWAYS, AIRPORTS AND CANALS); LEVEEMAN; ROLLER (5 TONS AND UNDER); TUGGER HOIST. BOOMS AND/OR LEADS (HOURLY PREMIUMS): THE OPERATOR OF A CRANE (UNDER 50 TONS) WITH A BOOM OF 80 FEET OR MORE (INCLUDING JIB), OR OF A CRANE (UNDER 50 TONS) WITH LEADS OF 100 FEET OR MORE, SHALL RECEIVE A PER HOUR PREMIUM FOR EACH HOUR WORKED ON SAID CRANE (UNDER 50 TONS) IN ACCORDANCE WITH THE FOLLOWING SCHEDULE: BOOMS OF 80 FEET UP TO BUT NOT INCLUDING 130 FEET OR LEADS OF 100 FEET UP TO BUT NOT INCLUDING 130 FEET 0.50 BOOMS AND/OR LEADS OF 130 FEET UP TO BUT NOT INCLUDING 180 FEET 0.75 BOOMS AND/OR LEADS OF 180 FEET UP TO AND INCLUDING 250 FEET 1.15 BOOMS AND/OR LEADS OVER 250 FEET 1.50 THE OPERATOR OF A CRANE (50 TONS AND OVER) WITH A BOOM OF 180 FEET OR MORE (INCLUDING JIB) SHALL RECEIVE A PER HOUR PREMIUM FOR EACH HOUR WORKED ON SAID CRANE (50 TONS AND OVER) IN ACCORDANCE WITH THE FOLLOWING SCHEDULE: BOOMS OF 180 FEET UP TO AND INCLUDING 250 FEET 1.25 BOOMS OVER 250 FEET 1.75.....$ 57.94 35.68

POWER EQUIPMENT OPERATORS:, GROUP 4: BOOM TRUCK OR DUAL PURPOSE ""A"" FRAME TRUCK (5 TONS OR LESS);

CONCRETE PLACING BOOM (BUILDING CONSTRUCTION); DINKY OPERATOR; ELEVATOR OPERATOR; HOIST AND/OR WINCH (ONE DRUM); STRADDLE TRUCK (ROSS CARRIER, HYSTER AND SIMILAR). BOOMS AND/OR LEADS (HOURLY PREMIUMS): THE OPERATOR OF A CRANE (UNDER 50 TONS) WITH A BOOM OF 80 FEET OR MORE (INCLUDING JIB), OR OF A CRANE (UNDER 50 TONS) WITH LEADS OF 100 FEET OR MORE, SHALL RECEIVE A PER HOUR PREMIUM FOR EACH HOUR WORKED ON SAID CRANE (UNDER 50 TONS) IN ACCORDANCE WITH THE FOLLOWING SCHEDULE: BOOMS OF 80 FEET UP TO BUT NOT INCLUDING 130 FEET OR LEADS OF 100 FEET UP TO BUT NOT INCLUDING 130 FEET 0.50 BOOMS AND/OR LEADS OF 130 FEET UP TO BUT NOT INCLUDING 180 FEET 0.75 BOOMS AND/OR LEADS OF 180 FEET UP TO AND INCLUDING 250 FEET 1.15 BOOMS AND/OR LEADS OVER 250 FEET 1.50 THE OPERATOR OF A CRANE (50 TONS AND OVER) WITH A BOOM OF 180 FEET OR MORE (INCLUDING JIB) SHALL RECEIVE A PER HOUR PREMIUM FOR EACH HOUR WORKED ON SAID CRANE (50 TONS AND OVER) IN ACCORDANCE WITH THE FOLLOWING SCHEDULE: BOOMS OF 180 FEET UP TO AND INCLUDING 250 FEET 1.25 BOOMS OVER 250 FEET 1.75.....$ 58.21 35.68

POWER EQUIPMENT OPERATORS:, GROUP 5: ASPHALT PLANT FIREMAN; COMPRESSORS, PUMPS, GENERATORS AND WELDING MACHINES (""BANK"" OF 9 OR MORE, INDIVIDUALLY OR COLLECTIVELY); CONCRETE PUMPS OR PUMPCRETE GUNS; LUBRICATION AND SERVICE ENGINEER (GREASE RACK); SCREEDMAN BOOMS AND/OR LEADS (HOURLY PREMIUMS): THE OPERATOR OF A CRANE (UNDER 50 TONS) WITH A BOOM OF 80 FEET OR MORE (INCLUDING JIB), OR OF A CRANE (UNDER 50 TONS) WITH LEADS OF 100 FEET OR MORE, SHALL RECEIVE A PER HOUR PREMIUM FOR EACH HOUR WORKED ON SAID CRANE (UNDER 50 TONS) IN ACCORDANCE WITH THE FOLLOWING SCHEDULE: BOOMS OF 80 FEET UP TO BUT NOT INCLUDING 130 FEET OR LEADS OF 100 FEET UP TO BUT NOT INCLUDING 130 FEET 0.50 BOOMS AND/OR LEADS OF 130 FEET UP TO BUT NOT INCLUDING 180 FEET 0.75 BOOMS AND/OR LEADS OF 180 FEET UP TO AND INCLUDING 250 FEET 1.15 BOOMS AND/OR LEADS OVER 250 FEET 1.50 THE OPERATOR OF A CRANE (50 TONS AND OVER) WITH A BOOM OF 180 FEET OR MORE (INCLUDING JIB) SHALL RECEIVE A PER HOUR PREMIUM FOR EACH HOUR WORKED ON SAID CRANE (50 TONS AND OVER) IN ACCORDANCE WITH THE FOLLOWING SCHEDULE: BOOMS OF 180 FEET UP TO AND INCLUDING 250 FEET 1.25 BOOMS OVER 250 FEET 1.75.....$ 58.52 35.68

POWER EQUIPMENT OPERATORS:, GROUP 6: BOOM TRUCK OR DUAL PURPOSE ""A""FRAME TRUCK (OVER 5 TONS); COMBINATION LOADER/BACKHOE (UP TO AND INCLUDING 3/4 CU. YD.); CONCRETE BATCH PLANTS (WET OR DRY); CONCRETE CUTTER, GROOVER AND/OR GRINDER (SELF-PROPELLED UNIT ON STREETS, HIGHWAYS, AIRPORTS, AND CANALS); CONVEYOR OR CONCRETE PUMP (TRUCK OR EQUIPMENT MOUNTED); DRILLING MACHINERY (NOT TO APPLY TO WATERLINERS, WAGON DRILLS OR JACK HAMMERS); FORK LIFT (OVER 10 TONS); LOADER (UP TO AND INCLUDING 3 AND 1/2 CU. YDS); LULL HIGH LIFT (UNDER 40 FEET); LUBRICATION AND SERVICE ENGINEER (MOBILE); MAGINNIS INTERNAL FULL SLAB VIBRATOR (ON AIRPORTS, HIGHWAYS, CANALS AND WAREHOUSES); MAN OR MATERIAL HOIST; MECHANICAL CONCRETE FINISHER (LARGE

CLARY, JOHNSON BIDWELL, BRIDGE DECK AND SIMILAR); MOBILE TRUCK CRANE DRIVER; PORTABLE SHOTBLAST CONCRETE CLEANING MACHINE; PORTABLE BORING MACHINE (UNDER STREETS, HIGHWAYS, ETC.); PORTABLE CRUSHER; POWER JUMBO OPERATOR (SETTING SLIP FORMS, ETC., IN TUNNELS); ROLLERS (OVER 5 TONS); SELF-PROPELLED COMPACTOR (SINGLE ENGINE); SELF-PROPELLED PAVEMENT BREAKER; SKIDSTEER LOADER WITH ATTACHMENTS; SLIP FORM PUMPS (POWER DRIVEN BY HYDRAULIC, ELECTRIC, AIR, GAS, ETC., LIFTING DEVICE FOR CONCRETE FORMS); SMALL RUBBER TIRED TRACTORS; TRENCHER (UP TO AND INCLUDING 6 FEET); UNDERBRIDGE PERSONNEL AERIAL PLATFORM (50 FEET OF PLATFORM OR LESS). BOOMS AND/OR LEADS (HOURLY PREMIUMS): THE OPERATOR OF A CRANE (UNDER 50 TONS) WITH A BOOM OF 80 FEET OR MORE (INCLUDING JIB), OR OF A CRANE (UNDER 50 TONS) WITH LEADS OF 100 FEET OR MORE, SHALL RECEIVE A PER HOUR PREMIUM FOR EACH HOUR WORKED ON SAID CRANE (UNDER 50 TONS) IN ACCORDANCE WITH THE FOLLOWING SCHEDULE: BOOMS OF 80 FEET UP TO BUT NOT INCLUDING 130 FEET OR LEADS OF 100 FEET UP TO BUT NOT INCLUDING 130 FEET
0.50 BOOMS AND/OR LEADS OF 130 FEET UP TO BUT NOT INCLUDING 180 FEET 0.75 BOOMS AND/OR LEADS OF 180 FEET UP TO AND INCLUDING 250 FEET 1.15 BOOMS AND/OR LEADS OVER 250 FEET 1.50 THE OPERATOR OF A CRANE (50 TONS AND OVER) WITH A BOOM OF 180 FEET OR MORE (INCLUDING JIB) SHALL RECEIVE A PER HOUR PREMIUM FOR EACH HOUR WORKED ON SAID CRANE (50 TONS AND OVER) IN ACCORDANCE WITH THE FOLLOWING SCHEDULE: BOOMS OF 180 FEET UP TO AND INCLUDING 250 FEET 1.25 BOOMS OVER 250 FEET
1.75.....$ 59.17 35.68

POWER EQUIPMENT OPERATORS:, GROUP 7: CRUSHER PLANT ENGINEER, DOZER (D-4, CASE 450, JOHN DEERE 450, AND SIMILAR); DUAL DRUM MIXER, EXTEND LIFT; HOIST AND/OR WINCH (2 DRUMS); LOADER (OVER 3 AND 1/2 CU. YDS. UP TO AND INCLUDING 6 YARDS.); MECHANICAL FINISHER OR SPREADER MACHINE (ASPHALT), (BARBER GREENE AND SIMILAR) (SCREEDMAN REQUIRED); MINE OR SHAFT HOIST; MOBILE CONCRETE MIXER (OVER 5 TONS); PIPE BENDING MACHINE (PIPELINES ONLY); PIPE CLEANING MACHINE (TRACTOR PROPELLED AND SUPPORTED); PIPE WRAPPING MACHINE (TRACTOR PROPELLED AND SUPPORTED); ROLLER OPERATOR (ASPHALT); SELF-PROPELLED ELEVATING GRADE PLANE; SLUSHER OPERATOR; TRACTOR (WITH BOOM) (D-6, OR SIMILAR); TRENCHER (OVER 6 FEET AND LESS THAN 200 H.P.); WATER TANKER (PULLED BY EUCLIDS, T-PULLS, DW-10, 20 OR 21, OR SIMILAR); WINCHMAN (STERN WINCH ON DREDGE). BOOMS AND/OR LEADS (HOURLY PREMIUMS): THE OPERATOR OF A CRANE (UNDER 50 TONS) WITH A BOOM OF 80 FEET OR MORE (INCLUDING JIB), OR OF A CRANE (UNDER 50 TONS) WITH LEADS OF 100 FEET OR MORE, SHALL RECEIVE A PER HOUR PREMIUM FOR EACH HOUR WORKED ON SAID CRANE (UNDER 50 TONS) IN ACCORDANCE WITH THE FOLLOWING SCHEDULE: BOOMS OF 80 FEET UP TO BUT NOT INCLUDING 130 FEET OR LEADS OF 100 FEET UP TO BUT NOT INCLUDING 130 FEET
0.50 BOOMS AND/OR LEADS OF 130 FEET UP TO BUT NOT INCLUDING 180 FEET
0.75 BOOMS AND/OR LEADS OF 180 FEET UP TO AND INCLUDING 250 FEET 1.15
BOOMS AND/OR LEADS OVER 250 FEET 1.50 THE OPERATOR OF A CRANE (50 TONS AND OVER) WITH A BOOM

OF 180 FEET OR MORE (INCLUDING JIB) SHALL RECEIVE A PER HOUR PREMIUM FOR EACH HOUR WORKED ON SAID CRANE (50 TONS AND OVER) IN ACCORDANCE WITH THE FOLLOWING SCHEDULE: BOOMS OF 180 FEET UP TO AND INCLUDING 250 FEET 1.25 BOOMS OVER 250 FEET
1.75.....$ 59.49 35.68

POWER EQUIPMENT OPERATORS:, GROUP 8: ASPHALT PLANT OPERATOR; BARGE MATE (SEAGOING); CAST-IN-PLACE PIPE LAYING MACHINE; CONCRETE BATCH PLANT (MULTIPLE UNITS); CONVEYOR OPERATOR (TUNNEL); DECKMATE; DOZER (D-6 AND SIMILAR); FINISHING MACHINE OPERATOR (AIRPORTS AND HIGHWAYS); GRADESETTER; KOLMAN LOADER (AND SIMILAR); MUCKING MACHINE (CRAWLER-TYPE); MUCKING MACHINE (CONVEYOR-TYPE); NO-JOINT PIPE LAYING MACHINE; PORTABLE CRUSHING AND SCREENING PLANT; POWER BLADE OPERATOR (UNDER 12); SAURMAN TYPE DRAGLINE (UP TO AND INCLUDING 5 YDS.); STATIONARY PIPE WRAPPING, CLEANING AND BENDING MACHINE; SURFACE HEATER AND PLANER OPERATOR, TRACTOR (D-6 AND SIMILAR); TRI-BATCH PAVER; TUNNEL BADGER; TUNNEL MOLE AND/OR BORING MACHINE OPERATOR UNDERBRIDGE PERSONNEL AERIAL PLATFORM (OVER 50 FEET OF PLATFORM). BOOMS AND/OR LEADS (HOURLY PREMIUMS): THE OPERATOR OF A CRANE (UNDER 50 TONS) WITH A BOOM OF 80 FEET OR MORE (INCLUDING JIB), OR OF A CRANE (UNDER 50 TONS) WITH LEADS OF 100 FEET OR MORE, SHALL RECEIVE A PER HOUR PREMIUM FOR EACH HOUR WORKED ON SAID CRANE (UNDER 50 TONS) IN ACCORDANCE WITH THE FOLLOWING SCHEDULE: BOOMS OF 80 FEET UP TO BUT NOT INCLUDING 130 FEET OR LEADS OF 100 FEET UP TO BUT NOT INCLUDING 130 FEET 0.50 BOOMS AND/OR LEADS OF 130 FEET UP TO BUT NOT INCLUDING 180 FEET 0.75 BOOMS AND/OR LEADS OF 180 FEET UP TO AND INCLUDING 250 FEET
1.15 BOOMS AND/OR LEADS OVER 250 FEET
1.50 THE OPERATOR OF A CRANE (50 TONS AND OVER) WITH A BOOM OF 180 FEET OR MORE (INCLUDING JIB) SHALL RECEIVE A PER HOUR PREMIUM FOR EACH HOUR WORKED ON SAID CRANE (50 TONS AND OVER) IN ACCORDANCE WITH THE FOLLOWING SCHEDULE: BOOMS OF 180 FEET UP TO AND INCLUDING 250 FEET
1.25 BOOMS OVER 250 FEET
1.75.....$ 59.60 35.68

POWER EQUIPMENT OPERATORS:, GROUP 9: COMBINATION MIXER AND COMPRESSOR (GUNITE); DO-MOR LOADERAND ADAMS ELEGRADER; DOZER (D-7 OR EQUAL); WHEEL AND/OR LADDER TRENCHER (OVER 6 FEET AND 200 TO 749 H.P.). BOOMS AND/OR LEADS (HOURLY PREMIUMS): THE OPERATOR OF A CRANE (UNDER 50 TONS) WITH A BOOM OF 80 FEET OR MORE (INCLUDING JIB), OR OF A CRANE (UNDER 50 TONS) WITH LEADS OF 100 FEET OR MORE, SHALL RECEIVE A PER HOUR PREMIUM FOR EACH HOUR WORKED ON SAID CRANE (UNDER 50 TONS) IN ACCORDANCE WITH THE FOLLOWING SCHEDULE: BOOMS OF 80 FEET UP TO BUT NOT INCLUDING 130 FEET OR LEADS OF 100 FEET UP TO BUT NOT INCLUDING 130 FEET
0.50 BOOMS AND/OR LEADS OF 130 FEET UP TO BUT NOT INCLUDING 180 FEET 0.75 BOOMS AND/OR LEADS OF 180 FEET UP TO AND INCLUDING 250 FEET 1.15 BOOMS AND/OR LEADS OVER 250 FEET 1.50 THE OPERATOR OF A CRANE (50 TONS AND OVER) WITH A BOOM OF 180 FEET OR MORE (INCLUDING JIB) SHALL RECEIVE A PER HOUR PREMIUM FOR EACH HOUR WORKED ON SAID CRANE (50 TONS AND OVER) IN ACCORDANCE WITH THE FOLLOWING

SCHEDULE: BOOMS OF 180 FEET UP TO   AND INCLUDING
250 FEET   1.25 BOOMS
OVER 250 FEET
1.75.....$ 59.71   35.68
POWER EQUIPMENT OPERATORS:, GROUP 9A: DOZER (D-8
AND SIMILAR); GRADESETTER (WHEN REQUIRED BY THE
CONTRACTOR TO WORK FROM DRAWINGS, PLANS OR
SPECIFICATIONS WITHOUT THE DIRECT SUPERVISION OF A
FOREMAN OR SUPERINTENDENT); PUSH CAT; SCRAPERS (UP
TO AND INCLUDING 20 CU. YDS); SELF-PROPELLED
COMPACTOR WITH DOZER; SELF-PROPELLED, RUBBER-TIRED
EARTHMOVING EQUIPMENT (UP TO AND INCLUDING 20 CU.
YDS) (621 BAND AND SIMILAR); SHEEP'S FOOT; TRACTOR
(D-8 AND SIMILAR); TRACTORS WITH BOOM (LARGER THAN
D-6, AND SIMILAR). BOOMS AND/OR LEADS (HOURLY
PREMIUMS): THE OPERATOR OF A CRANE (UNDER 50 TONS)
WITH A BOOM OF 80 FEET OR MORE (INCLUDING JIB), OR
OF A CRANE (UNDER 50 TONS) WITH LEADS OF 100 FEET
OR MORE, SHALL RECEIVE A PER HOUR PREMIUM FOR EACH
HOUR WORKED ON SAID CRANE (UNDER 50 TONS) IN
ACCORDANCE WITH THE FOLLOWING SCHEDULE: BOOMS OF
80 FEET UP TO BUT   NOT INCLUDING 130 FEET OR
LEADS OF 100 FEET UP TO BUT   NOT INCLUDING 130
FEET   0.50 BOOMS
AND/OR LEADS OF 130 FEET   UP TO BUT NOT INCLUDING
180 FEET   0.75 BOOMS AND/OR LEADS OF 180
FEET UP   TO AND INCLUDING 250 FEET
        1.15 BOOMS AND/OR LEADS OVER 250 FEET
1.50 THE OPERATOR OF A CRANE (50 TONS AND OVER)
WITH A BOOM OF 180 FEET OR MORE (INCLUDING JIB)
SHALL RECEIVE A PER HOUR PREMIUM FOR EACH HOUR
WORKED ON SAID CRANE (50 TONS AND OVER) IN
ACCORDANCE WITH THE FOLLOWING SCHEDULE: BOOMS OF
180 FEET UP TO   AND INCLUDING 250 FEET
                1.25 BOOMS OVER 250 FEET
                        1.75.....$ 59.94   35.68
POWER EQUIPMENT OPERATORS:, GROUP 10: CHICAGO BOOM;
COLD PLANERS; HEAVY DUTY REPAIRMAN OR WELDER; HOIST
AND/OR WINCH (3 DRUMS); HYDRAULIC SKOOPER (KOEHRING
AND SIMILAR); LOADER (OVER 6 CU. YDS. UP TO AND
INCLUDING 12 CU. YDS.); SAURMAN TYPE DRAGLINE (OVER
5 CU. YDS.); SELF-PROPELLED, RUBBER-TIRED
EARTHMOVING EQUIPMENT (OVER 20 CU. YDS. UP TO AND
INCLUDING 31 CU. YDS.) (637D AND SIMILAR); SOIL
STABILIZER (P & H OR EQUAL); SUB-GRADER (GURRIES OR
OTHER AUTOMATIC TYPE); TRACTORS (D-9 OR EQUIVALENT,
ALL ATTACHMENTS); TRACTOR (TANDEM SCRAPER); WATCH
ENGINEER. BOOMS AND/OR LEADS (HOURLY PREMIUMS):
THE OPERATOR OF A CRANE (UNDER 50 TONS) WITH A BOOM
OF 80 FEET OR MORE (INCLUDING JIB), OR OF A CRANE
(UNDER 50 TONS) WITH LEADS OF 100 FEET OR MORE,
SHALL RECEIVE A PER HOUR PREMIUM FOR EACH HOUR
WORKED ON SAID CRANE (UNDER 50 TONS) IN ACCORDANCE
WITH THE FOLLOWING SCHEDULE: BOOMS OF 80 FEET UP
TO BUT   NOT INCLUDING 130 FEET OR   LEADS OF 100
FEET UP TO BUT   NOT INCLUDING 130 FEET
                  0.50 BOOMS AND/OR LEADS OF 130
FEET   UP TO BUT NOT INCLUDING 180 FEET
0.75 BOOMS AND/OR LEADS OF 180 FEET UP   TO AND
INCLUDING 250 FEET   1.15
BOOMS AND/OR LEADS OVER 250 FEET   1.50 THE
OPERATOR OF A CRANE (50 TONS AND OVER) WITH A BOOM
OF 180 FEET OR MORE (INCLUDING JIB) SHALL RECEIVE A
PER HOUR PREMIUM FOR EACH HOUR WORKED ON SAID CRANE
(50 TONS AND OVER) IN ACCORDANCE WITH THE FOLLOWING
SCHEDULE: BOOMS OF 180 FEET UP TO   AND INCLUDING
250 FEET   1.25 BOOMS

OVER 250 FEET
1.75.....$ 60.00 35.68
POWER EQUIPMENT OPERATORS:, GROUP 10A: BOAT OPERATOR; CABLE-OPERATED CRAWLER CRANE (UP TO AND INCLUDING 25 TONS); CABLE-OPERATED POWER SHOVEL, CLAMSHELL, DRAGLINE AND BACKHOE (UP TO AND INCLUDING 1 CU. YD.); DOZER D9-L; DOZER (D-10, HD41 AND SIMILAR) (ALL ATTACHMENTS); GRADALL (UP TO AND INCLUDING 1 CU. YD.); HYDRAULIC BACKHOE (OVER 3/4 CU. YDS. UP TO AND INCLUDING 2 CU. YDS.); MOBILE TRUCK CRANE OPERATOR (UP TO AND INCLUDING 25 TONS) (MOBILE TRUCK CRANE DRIVER REQUIRED); SELF-PROPELLED BOOM TYPE LIFTING DEVICE (CENTER MOUNT) (UP TO AND INCLUDING 25 TONS) (GROVE, DROTT, P&H, PETTIBONE AND SIMILAR; TRENCHER (OVER 6 FEET AND 750 H.P. OR MORE); WATCH ENGINEER (STEAM OR ELECTRIC). BOOMS AND/OR LEADS (HOURLY PREMIUMS): THE OPERATOR OF A CRANE (UNDER 50 TONS) WITH A BOOM OF 80 FEET OR MORE (INCLUDING JIB), OR OF A CRANE (UNDER 50 TONS) WITH LEADS OF 100 FEET OR MORE, SHALL RECEIVE A PER HOUR PREMIUM FOR EACH HOUR WORKED ON SAID CRANE (UNDER 50 TONS) IN ACCORDANCE WITH THE FOLLOWING SCHEDULE: BOOMS OF 80 FEET UP TO BUT NOT INCLUDING 130 FEET OR LEADS OF 100 FEET UP TO BUT NOT INCLUDING 130 FEET
0.50 BOOMS AND/OR LEADS OF 130 FEET UP TO BUT NOT INCLUDING 180 FEET
0.75 BOOMS AND/OR LEADS OF 180 FEET UP TO AND INCLUDING 250 FEET
1.15 BOOMS AND/OR LEADS OVER 250 FEET
1.50 THE OPERATOR OF A CRANE (50 TONS AND OVER) WITH A BOOM OF 180 FEET OR MORE (INCLUDING JIB) SHALL RECEIVE A PER HOUR PREMIUM FOR EACH HOUR WORKED ON SAID CRANE (50 TONS AND OVER) IN ACCORDANCE WITH THE FOLLOWING SCHEDULE: BOOMS OF 180 FEET UP TO AND INCLUDING 250 FEET
1.25 BOOMS OVER 250 FEET
1.75.....$ 60.15 35.68
POWER EQUIPMENT OPERATORS:, GROUP 11: AUTOMATIC SLIP FORM PAVER (CONCRETE OR ASPHALT); BAND WAGON (IN CONJUNCTION WITH WHEEL EXCAVATOR); CABLE-OPERATED CRAWLER CRANES (OVER 25 TONS BUT LESS THAN 50 TONS); CABLE-OPERATED POWER SHOVEL, CLAMSHELL, DRAGLINE AND BACKHOE (OVER 1 CU. YD. UP TO 7 CU. YDS.); GRADALL (OVER 1 CU. YDS. UP TO 7 CU. YDS.); DW-10, 20, ETC. (TANDEM); EARTHMOVING MACHINES (MULTIPLE PROPULSION POWER UNITS AND 2 OR MORE SCRAPERS) (UP TO AND INCLUDING 35 CU. YDS.,"" STRUCK"" M.R.C.); HIGHLINE CABLEWAY; HYDRAULIC BACKHOE (OVER 2 CU. YDS. UP TO AND INCLUDING 4 CU. YDS.); LEVERMAN; LIFT SLAB MACHINE; LOADER (OVER 12 CU. YDS); MASTER BOAT OPERATOR; MOBILE TRUCK CRANE OPERATOR (OVER 25 TONS BUT LESS THAN 50 TONS); (MOBILE TRUCK CRANE DRIVER REQUIRED); PRE-STRESS WIRE WRAPPING MACHINE; SELF-PROPELLED BOOM-TYPE LIFTING DEVICE (CENTER MOUNT) (OVER 25 TONS M.R.C); SELF-PROPELLED COMPACTOR (WITH MULTIPLE-PROPULSION POWER UNITS); SINGLE ENGINE RUBBER TIRED EARTHMOVING MACHINE (WITH TANDEM SCRAPER); TANDEM CATS; TRENCHER (PULLING ATTACHED SHIELD). BOOMS AND/OR LEADS (HOURLY PREMIUMS): THE OPERATOR OF A CRANE (UNDER 50 TONS) WITH A BOOM OF 80 FEET OR MORE (INCLUDING JIB), OR OF A CRANE (UNDER 50 TONS) WITH LEADS OF 100 FEET OR MORE, SHALL RECEIVE A PER HOUR PREMIUM FOR EACH HOUR WORKED ON SAID CRANE (UNDER 50 TONS) IN ACCORDANCE WITH THE FOLLOWING SCHEDULE: BOOMS OF 80 FEET UP TO BUT NOT

INCLUDING 130 FEET OR LEADS OF 100 FEET UP TO BUT NOT INCLUDING 130 FEET
0.50 BOOMS AND/OR LEADS OF 130 FEET UP TO BUT NOT INCLUDING 180 FEET 0.75 BOOMS AND/OR LEADS OF 180 FEET UP TO AND INCLUDING 250 FEET 1.15 BOOMS AND/OR LEADS OVER 250 FEET 1.50 THE OPERATOR OF A CRANE (50 TONS AND OVER) WITH A BOOM OF 180 FEET OR MORE (INCLUDING JIB) SHALL RECEIVE A PER HOUR PREMIUM FOR EACH HOUR WORKED ON SAID CRANE (50 TONS AND OVER) IN ACCORDANCE WITH THE FOLLOWING SCHEDULE: BOOMS OF 180 FEET UP TO AND INCLUDING 250 FEET 1.25 BOOMS OVER 250 FEET
1.75.....$ 60.30 35.68

POWER EQUIPMENT OPERATORS:, GROUP 12 CLAMSHELL OR DIPPER OPERATOR; DERRICKS; DRILL RIGS; MULTI-PROPULSION EARTHMOVING MACHINES (2 OR MORE SCRAPERS) (OVER 35 CU. YDS ""STRUCK""M.R.C.); OPERATORS (DERRICKS, PILEDRIVERS AND CRANES); POWER SHOVELS AND DRAGLINES (7 CU. YDS. M.R.C. AND OVER); SELF-PROPELLED RUBBER-TIRED EARTHMOVING EQUIPMENT (OVER 31 CU. YDS.) (657B AND SIMILAR); WHEEL EXCAVATOR (UP TO AND INCLUDING 750 CU. YDS. PER HOUR); WHEEL EXCAVATOR (OVER 750 CU. YDS. PER HOUR). BOOMS AND/OR LEADS (HOURLY PREMIUMS): THE OPERATOR OF A CRANE (UNDER 50 TONS) WITH A BOOM OF 80 FEET OR MORE (INCLUDING JIB), OR OF A CRANE (UNDER 50 TONS) WITH LEADS OF 100 FEET OR MORE, SHALL RECEIVE A PER HOUR PREMIUM FOR EACH HOUR WORKED ON SAID CRANE (UNDER 50 TONS) IN ACCORDANCE WITH THE FOLLOWING SCHEDULE: BOOMS OF 80 FEET UP TO BUT NOT INCLUDING 130 FEET OR LEADS OF 100 FEET UP TO BUT NOT INCLUDING 130 FEET
0.50 BOOMS AND/OR LEADS OF 130 FEET UP TO BUT NOT INCLUDING 180 FEET 0.75 BOOMS AND/OR LEADS OF 180 FEET UP TO AND INCLUDING 250 FEET 1.15 BOOMS AND/OR LEADS OVER 250 FEET 1.50 THE OPERATOR OF A CRANE (50 TONS AND OVER) WITH A BOOM OF 180 FEET OR MORE (INCLUDING JIB) SHALL RECEIVE A PER HOUR PREMIUM FOR EACH HOUR WORKED ON SAID CRANE (50 TONS AND OVER) IN ACCORDANCE WITH THE FOLLOWING SCHEDULE: BOOMS OF 180 FEET UP TO AND INCLUDING 250 FEET 1.25 BOOMS OVER 250 FEET
1.75.....$ 60.66 35.68

POWER EQUIPMENT OPERATORS:, GROUP 12A: DOZER (D-11 OR SIMILAR OR LARGER); HYDRAULIC EXCAVATORS (OVER 4 CU. YDS.); LIFTING CRANES (50 TONS AND OVER); PIONEERING DOZER/BACKHOE (INITIAL CLEARING AND EXCAVATION FOR THE PURPOSE OF PROVIDING ACCESS FOR OTHER EQUIPMENT WHERE THE TERRAIN WORKED INVOLVES 1-TO-1 SLOPES THAT ARE 50 FEET IN HEIGHT OR DEPTH, THE SCOPE OF THIS WORK DOES NOT INCLUDE NORMAL CLEARING AND GRUBBING ON USUAL HILLY TERRAIN NOR THE EXCAVATION WORK ONCE THE ACCESS IS PROVIDED); POWER BLADE OPERATOR (CAT 12 OR EQUIVALENT OR OVER); STRADDLE LIFTS (OVER 50 TONS); TOWER CRANE, MOBILE; TRAVELING TRUSS CRANES; UNIVERSAL, LIEBHER, LINDEN, AND SIMILAR TYPES OF TOWER CRANES (IN THE ERECTION, DISMANTLING, AND MOVING OF EQUIPMENT THERE SHALL BE AN ADDITIONAL OPERATING ENGINEER OR HEAVY DUTY REPAIRMAN); YO-YO CAT OR DOZER. BOOMS AND/OR LEADS (HOURLY PREMIUMS): THE OPERATOR OF A CRANE (UNDER 50 TONS) WITH A BOOM OF 80 FEET OR MORE (INCLUDING JIB), OR OF A CRANE (UNDER 50 TONS)

WITH LEADS OF 100 FEET OR MORE, SHALL RECEIVE A PER HOUR PREMIUM FOR EACH HOUR WORKED ON SAID CRANE (UNDER 50 TONS) IN ACCORDANCE WITH THE FOLLOWING SCHEDULE: BOOMS OF 80 FEET UP TO BUT NOT INCLUDING 130 FEET OR LEADS OF 100 FEET UP TO BUT NOT INCLUDING 130 FEET
0.50 BOOMS AND/OR LEADS OF 130 FEET UP TO BUT NOT INCLUDING 180 FEET 0.75 BOOMS AND/OR LEADS OF 180 FEET UP TO AND INCLUDING 250 FEET 1.15 BOOMS AND/OR LEADS OVER 250 FEET 1.50 THE OPERATOR OF A CRANE (50 TONS AND OVER) WITH A BOOM OF 180 FEET OR MORE (INCLUDING JIB) SHALL RECEIVE A PER HOUR PREMIUM FOR EACH HOUR WORKED ON SAID CRANE (50 TONS AND OVER) IN ACCORDANCE WITH THE FOLLOWING SCHEDULE: BOOMS OF 180 FEET UP TO AND INCLUDING 250 FEET 1.25 BOOMS OVER 250 FEET 1.75.....$ 61.02 35.68

POWER EQUIPMENT OPERATORS:, GROUP 13: TRUCK DRIVER (UTILITY, FLATBED, ETC.).....$ 57.94 35.68

POWER EQUIPMENT OPERATORS:, GROUP 13A: DUMP TRUCK, 8 CU.YDS. AND UNDER (WATER LEVEL); WATER TRUCK (UP TO AND INCLUDING 2,000 GALLONS).....$ 58.21 35.68

POWER EQUIPMENT OPERATORS:, GROUP 13B: WATER TRUCK (OVER 2,000 GALLONS); TANDEM DUMP TRUCK, OVER 8 CU. YDS. (WATER LEVEL).....$ 58.52 35.68

POWER EQUIPMENT OPERATORS:, GROUP 13C: TRUCK DRIVER (SEMI-TRAILER. ROCK CANS, SEMI-DUMP OR ROLL-OFFS)...$ 59.17 35.68

POWER EQUIPMENT OPERATORS:, GROUP 13D: TRUCK DRIVER (SLIP-IN OR PUP).....$ 59.49 35.68

POWER EQUIPMENT OPERATORS:, GROUP 13E: END DUMPS, UNLICENSED (EUCLID, MACK, CATERPILLAR OR SIMILAR); TRACTOR TRAILER (HAULING EQUIPMENT); TANDEM TRUCKS HOOKED UP TO TRAILER (HAULING EQUIPMENT) .....$ 59.60 35.68

STAND-BY DIVER: (AQUA LUNG) (SCUBA).....$ 62.97 35.68

STAND-BY DIVER: OTHER THAN AQUA LUNG.....$ 62.97 35.68

ENGI0003-004 09/01/2025

	Rates	Fringes
DREDGING (BOAT OPERATORS): BOAT DECKHAND.....	$ 57.94	35.68
DREDGING (BOAT OPERATORS): BOAT OPERATOR.....	$ 60.15	35.68
DREDGING (BOAT OPERATORS): MASTER BOAT OPERATOR.....	$ 60.30	35.68
DREDGING:, CLAMSHELL OR DIPPER DREDGING: GROUP 1: CLAMSHELL OR DIPPER OPERATOR.....	$ 60.66	35.68
DREDGING:, CLAMSHELL OR DIPPER DREDGING: GROUP 2: MECHANIC OR WELDER; WATCH ENGINEER.....	$ 60.00	35.68
DREDGING:, CLAMSHELL OR DIPPER DREDGING: GROUP 3: BARGE MATE; DECKMATE.....	$ 59.60	35.68
DREDGING:, CLAMSHELL OR DIPPER DREDGING: GROUP 4: BARGEMAN; DECKHAND; FIREMAN; OILER. HYDRAULIC SUCTION DREDGING CLASSIFICATIONS.....	$ 57.94	35.68
DREDGING:, DERRICKS: GROUP 1: OPERATORS (DERRICKS, PILEDRIVERS AND CRANES).	$ 60.66	35.68
DREDGING:, DERRICKS: GROUP 2: SAURMAN TYPE DRAGLINE (OVER 5 CUBIC YARDS).	$ 60.00	35.68
DREDGING:, DERRICKS: GROUP 3: DECKMATE; SAURMAN TYPE DRAGLINE (UP TO AND INCLUDING 5 YARDS).	$ 59.60	35.68
DREDGING:, DERRICKS: GROUP 4: DECKHAND, FIREMAN, OILER.....	$ 57.94	35.68
DREDGING:, HYDRAULIC SUCTION DREDGES: GROUP 1: LEVERMAN.	$ 60.30	35.68
DREDGING:, HYDRAULIC SUCTION DREDGES: GROUP 2: WATCH ENGINEER (STEAM OR ELECTRIC).	$ 60.15	35.68
DREDGING:, HYDRAULIC SUCTION DREDGES: GROUP 3:		

MECHANIC OR WELDER.	$ 60.00	35.68
DREDGING:, HYDRAULIC SUCTION DREDGES: GROUP 4:		
DOZER OPERATOR.	$ 59.94	35.68
DREDGING:, HYDRAULIC SUCTION DREDGES: GROUP 5:		
DECKMATE.	$ 59.60	35.68
DREDGING:, HYDRAULIC SUCTION DREDGES: GROUP 6:		
WINCHMAN (STERN WINCH ON DREDGE).....	$ 59.49	35.68
DREDGING:, HYDRAULIC SUCTION DREDGES: GROUP 7:		
DECKHAND (CAN OPERATE ANCHOR SCOW UNDER DIRECTION		
OF DECKMATE); FIREMAN; LEVEEMAN; OILER.....	$ 57.94	35.68

ENGI0003-044 09/01/2025

	Rates	Fringes
POWER EQUIPMENT OPERATORS (PAVING): ASPHALT		
CONCRETE MATERIAL TRANSFER.....	$ 58.67	34.86
POWER EQUIPMENT OPERATORS (PAVING): ASPHALT PLANT		
OPERATOR.....	$ 59.07	34.86
POWER EQUIPMENT OPERATORS (PAVING): ASPHALT RAKER...	$ 57.68	34.86
POWER EQUIPMENT OPERATORS (PAVING): ASPHALT		
SPREADER OPERATOR.....	$ 59.16	34.86
POWER EQUIPMENT OPERATORS (PAVING): COLD PLANER.....	$ 59.47	34.86
POWER EQUIPMENT OPERATORS (PAVING): COMBINATION		
LOADER/BACKHOE (OVER 3/4 CU.YD.).....	$ 57.68	34.86
POWER EQUIPMENT OPERATORS (PAVING): COMBINATION		
LOADER/BACKHOE (UP TO 3/4 CU.YD.).....	$ 56.70	34.86
POWER EQUIPMENT OPERATORS (PAVING): CONCRETE SAWS		
AND/OR GRINDER (SELF-PROPELLED UNIT ON STREETS,		
HIGHWAYS, AIRPORTS AND CANALS).....	$ 58.64	34.86
POWER EQUIPMENT OPERATORS (PAVING): GRADER.....	$ 59.47	34.86
POWER EQUIPMENT OPERATORS (PAVING): LABORER, HAND		
ROLLER.....	$ 57.18	34.86
POWER EQUIPMENT OPERATORS (PAVING): LOADER (2 1/2		
CU. YDS. AND UNDER).....	$ 58.64	34.86
POWER EQUIPMENT OPERATORS (PAVING): LOADER (OVER 2		
1/2 CU. YDS. TO AND INCLUDING 5 CU. YDS.).....	$ 58.96	34.86
POWER EQUIPMENT OPERATORS (PAVING): ROLLER OPERATOR		
(FIVE TONS AND UNDER).....	$ 57.41	34.86
POWER EQUIPMENT OPERATORS (PAVING): ROLLER OPERATOR		
(OVER FIVE TONS).....	$ 58.84	34.86
POWER EQUIPMENT OPERATORS (PAVING): SCREED PERSON...	$ 58.64	34.86
POWER EQUIPMENT OPERATORS (PAVING): SOIL STABILIZER.	$ 59.47	34.86

IRON0625-001 09/01/2025

	Rates	Fringes
IRONWORKERS A. EMPLOYEES WILL BE PAID $.50 PER		
HOUR MORE WHILE WORKING IN TUNNELS AND COFFER DAMS;		
$1.00 PER HOUR MORE WHEN REQUIRED TO WORK UNDER OR		
ARE COVERED WITH WATER (SUBMERGED) AND WHEN THEY		
ARE REQUIRED TO WORK ON THE SUMMIT OF MAUNA KEA,		
MAUNA LOA OR HALEAKALA.....	$ 50.50	43.46

LABO0368-001 09/02/2024

	Rates	Fringes
LABORERS: DRILLER.....	$ 44.75	25.96
LABORERS: FINAL CLEAN UP.....	$ 31.40	21.37
LABORERS: GUNITE/SHOTCRETE OPERATOR AND HIGH SCALER.	$ 42.25	25.96
LABORERS: MASON TENDER/HOD CARRIER.....	$ 42.25	25.96
LABORERS: POWDERMAN.....	$ 42.75	25.96
LABORERS: WINDOW WASHER (BOSUN CHAIR).....	$ 41.25	25.96
SEE LABORERS: LABORER I IN FOOTER.....	$ 41.75	25.96
SEE LABORERS: LABORER II IN FOOTER.....	$ 39.15	25.96

LABO0368-002 09/03/2024

	Rates	Fringes
LANDSCAPE & IRRIGATION LABORERS, GROUP 1: INSTALLATION OF NON-POTABLE PERMANENT OR TEMPORARY IRRIGATION WATER SYSTEMS PERFORMED FOR THE PURPOSES OF LANDSCAPING AND IRRIGATION ARCHITECTURAL HORTICULTURAL WORK; THE INSTALLATION OF DRINKING FOUNTAINS AND PERMANENT OR TEMPORARY IRRIGATION SYSTEMS USING POTABLE WATER FOR LANDSCAPING AND IRRIGATION ARCHITECTURAL HORTICULTURAL PURPOSES ONLY. THIS WORK INCLUDES (A) THE INSTALLATION OF ALL HEADS, RISERS, VALVES, VALVE BOXES, VACUUM BREAKERS (PRESSURE AND NON-PRESSURE), LOW VOLTAGE ELECTRICAL LINES AND, PROVIDED SUCH WORK INVOLVES ELECTRICAL WIRING THAT WILL CARRY 24 VOLTS OR LESS, THE INSTALLATION OF SENSORS, MASTER CONTROL PANELS, DISPLAY BOARDS, JUNCTION BOXES, CONDUCTORS, INCLUDING ALL OTHER COMPONENTS FOR CONTROLLERS, (B) AND METALLIC (COPPER, BRASS, GALVANIZED, OR SIMILAR) PIPE, AS WELL AS PVC OR OTHER PLASTIC PIPE INCLUDING ALL WORK INCIDENTAL THERETO, I.E., UNLOADING, HANDLING AND DISTRIBUTION OF ALL PIPES FITTINGS, TOOLS, MATERIALS AND EQUIPMENT, (C) ALL SOLDERING WORK IN CONNECTION WITH THE ABOVE WHETHER DONE BY TORCH, SOLDERING IRON, OR OTHER MEANS; (D) TIE-IN TO MAIN LINES, THRUST BLOCKS (BOTH PRECAST AND POURED IN PLACE), PIPE HANGERS AND SUPPORTS INCIDENTAL TO INSTALLATION OF THE ENTIRE IRRIGATION SYSTEM, (E) MAKING OF PRESSURE TESTS, START-UP TESTING, FLUSHING, PURGING, WATER BALANCING, PLACING INTO OPERATION ALL IRRIGATION EQUIPMENT, FIXTURES AND APPURTENANCES INSTALLED UNDER THIS AGREEMENT, AND (F) THE FABRICATION, REPLACEMENT, REPAIR AND SERVICING OFLANDSCAPING AND IRRIGATION SYSTEMS. OPERATION OF HAND-HELD GAS, AIR, ELECTRIC, OR SELF-POWERED TOOLS AND EQUIPMENT USED IN THE PERFORMANCE OF LANDSCAPE AND IRRIGATION WORK IN CONNECTION WITH ARCHITECTURAL HORTICULTURE; CHOKE-SETTING, SIGNALING, AND RIGGING FOR EQUIPMENT OPERATORS ON JOB-SITE IN THE PERFORMANCE OF SUCH LANDSCAPING AND IRRIGATION WORK; CONCRETE WORK (WET OR DRY) PERFORMED IN CONNECTION WITH SUCH LANDSCAPING AND IRRIGATION WORK. THIS WORK SHALL ALSO INCLUDE THE SETTING OF ROCK, STONE, OR RIPRAP IN CONNECTION WITH SUCH LANDSCAPE, WATERSCAPE, ROCKSCAPE, AND IRRIGATION WORK; GRUBBING, PICK AND SHOVEL EXCAVATION, AND HAND ROLLING OR TAMPING IN CONNECTION WITH THE PERFORMANCE OF SUCH LANDSCAPING AND IRRIGATION WORK; SPRIGGING, HANDSEEDING, AND PLANTING OF TREES, SHRUBS, GROUND COVERS, AND OTHER PLANTINGS AND THE PERFORMANCE OF ALL TYPES OF GARDENING AND HORTICULTURAL WORK RELATING TO SAID PLANTING; OPERATION OF FLAT BED TRUCKS (UP TO AND INCLUDING 2 1/2 TONS).:	$ 28.40	17.15
LANDSCAPE & IRRIGATION LABORERS, GROUP 3: MAINTENANCE OF TREES, SHRUBS, GROUND COVERS, LAWNS AND OTHER PLANTED AREAS, INCLUDING THE REPLANTING OF TREES, SHRUBS, GROUND COVERS, AND OTHER PLANTINGS THAT DID NOT ""TAKE"" OR WHICH ARE DAMAGED; PROVIDED, HOWEVER, THAT RE-PLANTING THAT REQUIRES THE USE OF EQUIPMENT, MACHINERY, OR POWER TOOLS SHALL BE PAID FOR AT THE RATE OF PAY SPECIFIED UNDER LANDSCAPE AND IRRIGATION LABORER, GROUP 1; RAKING, MOWING, TRIMMING, AND RUNING, INCLUDING THE USE OF ""WEED EATERS"", HEDGE TRIMMERS, VACUUMS, BLOWERS, AND OTHER HAND-HELD GAS, AIR, ELECTRIC, OR SELF-POWERED TOOLS, AND THE OPERATION OF LAWN MOWERS (NOTE: THE OPERATION OF SIT-DOWN TYPE AND		

""GANG"" MOWERS SHALL BE PAID FOR AT THE RATE OF PAY SPECIFIED UNDER LANDSCAPE & IRRIGATION LABORER, GROUP 2); GUYWIRING, STAKING, PROPPING, AND SUPPORTING TREES; FERTILIZING, CHEMICAL SPRAYING USING SPRAY EQUIPMENT WITH LESS THAN 200 GALLON CAPACITY, MAINTAINING IRRIGATION AND SPRINKLER SYSTEMS, INCLUDING THE STAKING, CLAMPING, AND ADJUSTMENT OF RISERS, AND THE ADJUSTMENT AND/OR REPLACEMENT OF SPRINKLER HEADS, (NOTE: THE CLEANING AND GLUING OF PIPE AND FITTINGS SHALL BE PAID FOR AT THE RATE OF PAY SPECIFIED UNDER LANDSCAPE & IRRIGATION LABORER(GROUP 1); WATERING BY HAND OR SPRINKLER SYSTEM AND THE PEFORMANCE OF OTHER TYPES OF GARDENING, YARDMAN, AND HORTICULTURAL-RELATED WORK.....$ 23.00 17.15

LANDSCAPE & IRRIGATION LABORERS,GROUP 2: LAYOUT OF IRRIGATION AND OTHER NON-POTABLE IRRIGATION WATER SYSTEMS AND THE LAYOUT OF DRINKING FOUNTAINS AND OTHER POTABLE IRRIGATION WATER SYSTEMS IN CONNECTION WITH SUCH LANDSCAPING AND IRRIGATION WORK. THIS INCLUDES THE LAYOUT OF ALL HEADS, RISERS, VALVES, VALVE BOXES, VACUUM BREAKERS, LOW VOLTAGE ELECTRICAL LINES, HYDRAULIC AND ELECTRICAL CONTROLLERS, AND METALLIC (COPPERS, BRASS, GALVANIZED, OR SIMILAR) PIPE, AS WELL AS PVC OR OTHER PLASTIC PIPE. THIS WORK ALSO INCLUDES THE READING AND INTERPRETATION OF PLANS AND SPECIFICATIONS IN CONNECTION WITH THE LAYOUT OF LANDSCAPING, ROCKSCAPE, WATERSCAPE, AND IRRIGATION WORK; OPERATION OF HYDRO-MULCHING MACHINES (SPRAYMAN AND DRIVER), DRILLERS, TRENCHERS (RIDING TYPE, DAVIS T-66, AND SIMILAR) AND FORK LIFTS USED IN CONNECTION WITH THE PERFORMANCE OF SUCH LANDSCAPING AND IRRIGATION WORK; TREE CLIMBERS AND CHAIN SAW TREE TRIMMERS, SPORADIC OPERATION (WHEN USED IN CONNECTION WITH LANDSCAPING, ROCKSCAPE, WATERSCAPE, AND IRRIGATION WORK) OF SKID-STEER LOADERS (BOBCAT AND SIMILAR), CRANES (BANTAM, GROVE, AND SIMILAR), HOPTOS, BACKHOES, LOADERS, ROLLERS, AND DOZERS (CASE, JOHN DEERE, AND SIMILAR), WATER TRUCKS, TRUCKS REQUIRING A STATE OF HAWAII PUBLIC UTILITIES COMMISSION TYPE 5 AND/OR TYPE 7 LICENSE, SIT-DOWN TYPE AND ""GANG"" MOWERS, AND OTHER SELF-PROPELLED, SIT-DOWN OPERATED MACHINES NOT LISTED UNDER LANDSCAPE & IRRIGATION MAINTENANCE LABORER; CHEMICAL SPRAYING USING SELF-PROPELLED POWER SPRAYING EQUIPMENT (200 GALLON CAPACITY OR MORE).....$ 29.40 17.15

LANDSCAPE & IRRIGATION LABORERS: GROUP 2 LAYOUT OF IRRIGATION AND OTHER NON-POTABLE IRRIGATION WATER SYSTEMS AND THE LAYOUT OF DRINKING FOUNTAINS AND OTHER POTABLE IRRIGATION WATER SYSTEMS IN CONNECTION WITH SUCH LANDSCAPING AND IRRIGATION WORK. THIS INCLUDES THE LAYOUT OF ALL HEADS, RISERS, VALVES, VALVE BOXES, VACUUM BREAKERS, LOW VOLTAGE ELECTRICAL LINES, HYDRAULIC AND ELECTRICAL CONTROLLERS, AND METALLIC (COPPERS, BRASS, GALVANIZED, OR SIMILAR) PIPE, AS WELL AS PVC OR OTHER PLASTIC PIPE. THIS WORK ALSO INCLUDES THE READING AND INTERPRETATION OF PLANS AND SPECIFICATIONS IN CONNECTION WITH THE LAYOUT OF LANDSCAPING, ROCKSCAPE, WATERSCAPE, AND IRRIGATION WORK; OPERATION OF HYDRO-MULCHING MACHINES (SPRAYMAN AND DRIVER), DRILLERS, TRENCHERS (RIDING TYPE, DAVIS T-66, AND SIMILAR) AND FORK LIFTS USED IN CONNECTION WITH THE PERFORMANCE OF SUCH LANDSCAPING AND IRRIGATION WORK; TREE CLIMBERS AND

CHAIN SAW TREE TRIMMERS, SPORADIC OPERATION (WHEN USED IN CONNECTION WITH LANDSCAPING, ROCKSCAPE, WATERSCAPE, AND IRRIGATION WORK) OF SKID-STEER LOADERS (BOBCAT AND SIMILAR), CRANES (BANTAM, GROVE, AND SIMILAR), HOPTOS, BACKHOES, LOADERS, ROLLERS, AND DOZERS (CASE, JOHN DEERE, AND SIMILAR), WATER TRUCKS, TRUCKS REQUIRING A STATE OF HAWAII PUBLIC UTILITIES COMMISSION TYPE 5 AND/OR TYPE 7 LICENSE, SIT-DOWN TYPE AND ""GANG"" MOWERS, AND OTHER SELF-PROPELLED, SIT-DOWN OPERATED MACHINES NOT LISTED UNDER LANDSCAPE & IRRIGATION MAINTENANCE LABORER; CHEMICAL SPRAYING USING SELF-PROPELLED POWER SPRAYING EQUIPMENT (200 GALLON CAPACITY OR MORE)	$ 29.40	17.15

LABO0368-003 09/02/2024

	Rates	Fringes
UNDERGROUND LABORER, GROUP 1: WATCHMEN; CHANGE HOUSE ATTENDANT	$ 42.35	25.91
UNDERGROUND LABORER, GROUP 2: SWAMPER; BRAKEMAN; BULL GANG-MUCKERS, TRACKMEN; DUMPMEN (ANY METHOD); CONCRETE CREW (INCLUDES RODDING AND SPREADING); GROUT CREW; REBOUNDMEN	$ 43.85	25.91
UNDERGROUND LABORER, GROUP 3: CHUCKTENDERS AND CABLETENDERS; POWDERMAN (PRIME HOUSE); VIBRATORMAN, PAVEMENT BREAKERS	$ 44.35	25.91
UNDERGROUND LABORER, GROUP 4: MINERS - TUNNEL (INCLUDING TOP AND BOTTOM MAN ON SHAFT AND RAISE WORK); TIMBERMAN, RETIMBERMAN (WOOD OR STEEL OR SUBSTITUTE MATERIALS THEREOF); BLASTERS, DRILLERS, POWDERMAN (IN HEADING); MICROTUNNEL LABORER; HEADMAN; CHERRY PICKERMAN (WHERE CAR IS LIFTED); NIPPER; GROUT GUNMEN; GROUT PUMPMAN & POTMAN; GUNITE, SHOTCRETE GUNMEN & POTMEN; CONCRETE FINISHER (IN TUNNEL); CONCRETE SCREED MAN; BIT GRINDER; STEEL FORM RAISERS & SETTERS; HIGH PRESSURE NOZZLEMAN; NOZZLEMAN (ON SLICK LINE); SANDBLASTER-POTMAN (COMBINATION WORK ASSIGNMENT INTERCHANGEABLE); TUGGER	$ 45.35	25.91
UNDERGROUND LABORER, GROUP 5: SHAFT WORK & RAISE (BELOW ACTUAL OR EXCAVATED GROUND LEVEL); DIAMOND DRILLER; GUNITE OR SHOTCRETE NOZZLEMAN; RODMAN; GROUNDMAN	$ 45.70	25.91
UNDERGROUND LABORER, GROUP 6: SHIFTER	$ 45.95	25.91
UNDERGROUND LABORER, GROUP 7: SHIFTER (SHAFT WORK & RAISER)	$ 46.40	25.91

PAIN1791-001 07/01/2025

	Rates	Fringes
PAINTERS: BRUSH	$ 44.05	30.05
PAINTERS: SANDBLASTER; SPRAY	$ 44.05	30.05

PAIN1889-001 07/01/2025

	Rates	Fringes
GLAZIERS	$ 48.50	40.20

PAIN1926-001 03/02/2025

	Rates	Fringes
SOFT FLOOR LAYERS	$ 43.27	35.18

PAIN1944-001 01/01/2025

	Rates	Fringes

TAPER.....$ 47.36 32.00

PLAS0630-001 09/04/2023

	Rates	Fringes
PLASTERER	$ 46.12	34.53

PLAS0630-002 09/04/2023

	Rates	Fringes
CEMENT MASONS	$ 44.12	33.63
CEMENT MASONS: TROWEL MACHINE OPERATORS	$ 44.27	33.63

PLUM0675-001 07/06/2025

	Rates	Fringes
PLUMBER, PIPEFITTER, STEAMFITTER & SPRINKLER FITTER	$ 53.83	33.19

ROOF0221-001 11/06/2022

	Rates	Fringes
ROOFERS (INCLUDING BUILT UP, COMPOSITION AND SINGLE PLY)	$ 43.15	21.21

SHEE0293-001 03/02/2025

	Rates	Fringes
SHEET METAL WORKER	$ 50.16	33.32

SUHI1997-002 09/15/1997

	Rates	Fringes
DRAPERY INSTALLER	$ 13.60	1.20
FENCE ERECTOR (CHAIN LINK FENCE)	$ 9.33	1.65

LABORERS: LABORER I: AIR BLASTING RUN BY ELECTRIC OR PNEUMATIC COMPRESSOR; ASPHALT LABORER, IRONER, RAKER, LUTEMAN, & HANDROLLER, AND ALL TYPES OF ASPHALT SPREADER BOXES; ASPHALT SHOVELER; ASSEMBLY & INSTALLATION OF MULTIPLATES, LINER PLATES, RINGS, MESH, MATS; BATCHING PLANT (PORTABLE & TEMPORARY); BORING MACHINE OPERATOR (UNDER STREETS & SIDEWALKS); BUGGYMOBILE; BURNING & WELDING; CHAINSAW, FALLER, LOGLOADER, & BUCKER; COMPACTORS (JACKSON JUMPING JACK & SIMILAR); CONCRETE BUCKET DUMPMAN; CONCRETE CHIPPING; CONCRETE CHUTEMAN/HOSEMAN (POURING CONCRETE) (THE HANDLING OF THE CHUTE FROM READY-MIX TRUCKS FOR SUCH JOBS AS WALLS, SLABS, DECKS, FLOORS, FOUNDATIONS, FOOTINGS, CURBS, GUTTERS, & SIDEWALKS); CONCRETE CORE CUTTER (WALLS, FLOORS, & CEILING); CONCRETE GRINDING OR SANDING; CONCRETE: HOOKING ON, SIGNALING, DUMPING OF CONCRETE FOR TREME WORK OVER WATER ON CAISSONS, PILINGS, ABUTMENTS, ETC.; CONCRETE: MIXING, HANDLING, CONVEYING, POURING, VIBRATING, OTHERWISE PLACING OF CONCRETE OR AGGREGATES OR BY ANY OTHER PROCESS; CONCRETE: OPERATION OF MOTORIZED WHEELBARROWS OR BUGGIES OR MACHINES OF SIMILAR CHARACTER, WHETHER RUN BY GAS, DIESEL, OR ELECTRIC POWER; CONCRETE PLACEMENT MACHINE OPERATOR: OPERATION OF SOMERO HAMMERHEAD, COPPERHEADS, OR SIMILAR MACHINES; CONCRETE PUMP MACHINE (LAYING, COUPLING, UNCOUPLING OF ALL CONNECTIONS & CLEANING OF EQUIPMENT); CONCRETE SHOVELERS/LABORERS (WET OR DRY); CONCRETE SCREEDING FOR ROUGH STRIKE-OFF: RODDING OR STRIKING-OFF, BY HAND OR MECHANICAL MEANS PRIOR TO FINISHING; CONCRETE VIBRATOR OPERATOR; CORING HOLES: WALLS, FOOTINGS, PIERS OR OTHER OBSTRUCTIONS FOR PASSAGE OF PIPES OR CONDUITS FOR ANY PURPOSE & THE POURING OF CONCRETE TO SECURE THE HOLE; CRIBBERS, SHORER, LAGGING, SHEETING, & TRENCH JACKING & BRACING, HAND-GUIDED LAGGING HAMMER WHALING BRACING; CURBING (CONCRETE & ASPHALT); CURING OF CONCRETE (IMPERVIOUS MEMBRANE & FORM OILER) MORTAR & OTHER MATERIALS BY ANY MODE OR METHOD; CUT GRANITE CURB SETTER (SETTING, LEVELING & GROUTING OF ALL PRECAST CONCRETE OR STONE CURBS); CUTTING & BURNING TORCH (DEMOLITION); DRI PAK-IT MACHINE; ENVIRONMENTAL ABATEMENT: REMOVAL OF ASBESTOS, LEAD, & BIO HAZARDOUS MATERIALS (EPA &/OR OSHA CERTIFIED); FALLING, BUCKING, YARDING, LOADING OR BURNING OF ALL TREES OR TIMBER ON CONSTRUCTION SITE; FORKLIFT (9 FT. & UNDER); GAS, PNEUMATIC,

& ELECTRIC TOOLS; GRATING & GRILL WORK FOR DRAINS OR OTHER PURPOSES; GREEN CUTTER OF CONCRETE OR AGGREGATE IN ANY FORM, BY HAND, MECHANICAL MEANS, GRINDSTONE OR AIR &/OR WATER; GROUT: SPREADING FOR ANY PURPOSE; GUINEA CHASER (GRADE CHECKER) FOR GENERAL UTILITY TRENCHES, SITEWORK, & EXCAVATION; HEADERBOARD MAN (ASPHALT OR CONCRETE); HEAT WELDER OF PLASTIC (LABORERS' AGC CERTIFIED WORKERS) (WHEN WORK INVOLVES WATERPROOFING FOR WATERPONDS, ARTIFICIAL LAKES & RESERVOIR) HEAT WELDING FOR SEWER PIPES & FUSION OF HDPE PIPES; HEAVY HIGHWAY LABORER (RIGGING, SIGNALING, HANDLING, & INSTALLATION OF PRE-CAST CATCH BASINS, MANHOLES, CURBS & GUTTERS); HIGH PRESSURE NOZZLEMAN - HYDRAULIC MONITOR (OVER 100# PRESSURE); JACKHAMMER OPERATOR; JACKING OF SLIP FORMS: ALL SEMI & UNSKILLED WORK CONNECTED THEREWITHIN; LAYING OF ALL MULTI-CELL CONDUIT OR MULTI-PURPOSE PIPE; MAGNESITE & MASTIC WORKERS (WET OR DRY) (INCLUDING MIXER OPERATOR);MORTAR MAN; MORTAR MIXER (BLOCK, BRICK, MASONRY, & PLASTERING); NOZZLEMAN (SANDBLASTING &/OR WATER BLASTING): HANDLING, PLACING & OPERATION OF NOZZLE; OPERATION, MANUAL OR HYDRAULIC JACKING OF SHIELDS & THE USE OF SUCH OTHER MECHANICAL EQUIPMENT AS MAY BE NECESSARY; PAVEMENT BREAKERS; PAVING, CURBING & SURFACING OF STREETS, WAYS, COURTS, UNDER & OVERPASSES, BRIDGES, APPROACHES, SLOPE WALLS, & ALL OTHER LABOR CONNECTED THEREWITH; PILECUTTERS; PIPE ACCESSMENT IN PLACE, BOLTING & LINING UP OF SECTIONAL METAL OR OTHER PIPE INCLUDING CORRUGATED PIPE; PIPELAYER PERFORMING ALL SERVICES IN THE LAYING & INSTALLATION OF PIPE FROM THE POINT OF RECEIVING PIPE IN THE DITCH UNTIL COMPLETION OF OPERATION, INCLUDING ANY & ALL FORMS OF TUBULAR MATERIAL, WHETHER PIPE, HDPE, METALLIC OR NON-METALLIC, CONDUIT, & ANY OTHER STATIONARY-TYPE OF TUBULAR DEVICE USED FOR CONVEYING OF ANY SUBSTANCE OR ELEMENT, WHETHER WATER, SEWAGE, SOLID, GAS, AIR, OR OTHER PRODUCT WHATSOEVER & WITHOUT REGARD TO THE NATURE OF MATERIAL FROM WHICH TUBULAR MATERIAL IS FABRICATED; NO-JOINT PIPE & STRIPPING OF SAME, PIPEWRAPPER, CAULKER, BANDER, KETTLEMEN, & MEN APPLYING ASPHALT, LAYKOLD, TREATING CREOSOTE & SIMILAR-TYPE MATERIALS (6-INCH) PIPE & OVER); PIPING: RESURFACING & PAVING OF ALL DITCHES IN PREPARATION FOR LAYING OF ALL PIPES; PIPE LAYING OF LATERAL SEWER PIPE FROM MAIN OR SIDE SEWER TO BUILDINGS OR STRUCTURE (EXCEPT CONTACTOR MAY DIRECT WORK BE DONE UNDER PROPER SUPERVISION); PIPE LAYING, LEVELING & MARKING OF THE JOINT USED FOR MAIN OR SIDE SEWERS & STORM SEWERS; LAYING OF ALL CLAY, TERRA COTTA, IRONSTONE, VITRIFIED CONCRETE, HDPE OR OTHER PIPE FOR DRAINAGE; PLACING & SETTING OF WATER MAINS, GAS MAINS & ALL PIPE INCLUDING REMOVAL OF SKIDS; PLASTER MORTAR MIXER/PUMP; PNEUMATIC IMPACT WRENCH; PORTABLE SAWMILL OPERATION: CHOKER SETTERS, OFF BEARERS, & LUMBER HANDLERS CONNECTED WITH CLEARING; POSTHOLE DIGGER (HAND HELD, GAS, AIR & ELECTRIC); POWDERMAN'S TENDER; POWER BROOM SWEEPERS (SMALL); PREPARATION & COMPACTION OF ROADBEDS FOR RAILROAD TRACK LAYING, HIGHWAY CONSTRUCTION, & THE PREPARATION OF TRENCHES, FOOTINGS, ETC., FOR CROSS-COUNTRY TRANSMISSION BY PIPELINES, ELECTRICAL TRANSMISSION OR UNDERGROUND LINES OR CABLES (BY MECHANICAL MEANS); RAISING OF STRUCTURE BY MANUAL OR HYDRAULIC JACKS OR OTHER METHODS & RESETTING OF STRUCTURE IN NEW LOCATIONS, INCLUDING ALL CONCRETE WORK; RAMMING OR COMPACTION; RIGGING IN CONNECTION WITH LABORERS' WORK (EXCEPT DEMOLITION), SIGNALING (INCLUDING THE USE OF WALKIE TALKIE) CHOKE SETTING, TAG LINE USAGE; TAGGING & SIGNALING OF BUILDING MATERIALS INTO HIGH RISE UNITS; RIPRAP, STONEPAVER, & ROCK SLINGER (INCLUDES PLACEMENT OF STACKED CONCRETE, WET OR DRY & LOADING, UNLOADING, SIGNALING, SLINGING & SETTING OF OTHER SIMILAR MATERIALS); ROTARY SCARIFIER (INCLUDING MULTIPLE HEAD CONCRETE CHIPPING SCARIFIER); SALAMANDER HEATER, DRYING OF PLASTER, CONCRETE MORTAR OR OTHER AGGREGATE; SCAFFOLD ERECTOR LEADMAN; SCAFFOLDS: (SWING & HANGING) INCLUDING MAINTENANCE THEREOF; SCALER; SEPTIC TANK/CESSPOOL & DRAIN FIELDS DIGGER & INSTALLER; SHREDDER/CHIPPER (TREE BRANCHES, BRUSH, ETC.); STRIPPING & SETTING FORMS; STRIPPING OF FORMS: OTHER THAN PANEL FORMS WHICH ARE TO BE RE-USED IN THEIR ORIGINAL FORM, & STRIPPING OF FORMS ON ALL FLAT ARCH WORK; TAMPERS (BARKO, WACKER, & SIMILAR TYPE); TANK SCALER & CLEANERS; TARMAN; TREE CLIMBERS & TRIMMERS; TRENCHER (INCLUDES HAND-HELD, DAVIS T-66 & SIMILAR TYPE); TRUCKS (FLATBED UP TO & INCLUDING 2 1/2 TONS WHEN USED IN CONNECTION WITH ON-SITE LABORERS'WORK; TRUCKS (REFUSE & GARBAGE DISPOSAL) (FROM JOB SITE TO DUMP); VIBRA-SCREED (BULL FLOAT IN CONNECTION WITH LABORERS' WORK); WELL POINTS, INSTALLATION OF OR ANY OTHER DEWATERING SYSTEM.

LABORERS: LABORER II: ASPHALT PLANT LABORER; BORING MACHINE TENDER; BRIDGE LABORER; BURNING OF ALL DEBRIS (CRATES, BOXES, PACKAGING WASTE MATERIALS); CHAINMAN, RODMEN, & GRADE MARKERS; CLEANING, CLEARING, GRADING &/OR REMOVAL FOR STREETS, HIGHWAYS, ROADWAYS, APRONS, RUNWAYS, SIDEWALKS, PARKING AREAS, AIRPORTS, APPROACHES, & OTHER SIMILAR INSTALLATIONS; CLEANING OR RECONDITIONING OF STREETS, WAYS, SEWERS & WATERLINES, ALL MAINTENANCE WORK & WORK OF AN UNSKILLED & SEMI-SKILLED NATURE; CONCRETE BUCKET TENDER (GROUNDMAN) HOOKING & UNHOOKING OF BUCKET; CONCRETE FORMS; MOVING, CLEANING, OILING & CARRYING TO THE NEXT POINT OF ERECTION OF ALL FORMS; CONCRETE PRODUCTS PLANT LABORERS; CONVEYOR TENDER

(CONVEYING OF BUILDING MATERIALS); CRUSHED STONE YARDS & GRAVEL & SAND PIT LABORERS & ALL OTHER SIMILAR PLANTS; DEMOLITION, WRECKING & SALVAGE LABORERS: WRECKING & DISMANTLING OF BUILDINGS & ALL STRUCTURES, WITH USE OF CUTTING OR WRECKING TOOLS, BREAKING AWAY, CLEANING & REMOVAL OF ALL FIXTURES, ALL HOOKING, UNHOOKING, SIGNALING OF MATERIALS FOR SALVAGE OR SCRAP REMOVED BY CRANE OR DERRICK; DIGGING UNDER STREETS, ROADWAYS, APRONS OR OTHER PAVED SURFACES; DRILLER'S TENDER; CHUCK TENDER, OUTSIDE
NIPPER; DRY-PACKING OF CONCRETE (PLUGGING & FILLING OF SHE-BOLT HOLES); FENCE &/OR GUARDRAIL ERECTOR: DISMANTLING &/OR RE-INSTALLATION OF ALL FENCE; FINEGRADER; FIREWATCHER; FLAGMAN (CONING, PREPARING, STABLISHING & REMOVING PORTABLE ROADWAY BARRICADE DEVICES); SIGNAL MEN ON ALL CONSTRUCTION WORK DEFINED HEREIN, INCLUDING TRAFFIC CONTROL SIGNAL MEN AT CONSTRUCTION SITE; GENERAL EXCAVATION; BACKFILLING, GRADING & ALL OTHER LABOR CONNECTED THEREWITH; DIGGING OF TRENCHES, DITCHES & MANHOLES & THE LEVELING, GRADING & OTHER PREPARATION PRIOR TO LAYING PIPE OR CONDUIT FOR ANY PURPOSE; EXCAVATIONS & FOUNDATIONS FOR BUILDINGS, PIERS, FOUNDATIONS & HOLES, & ALL OTHER CONSTRUCTION. PREPARATION OF STREET WAYS & BRIDGES; GENERAL LABORER: CLEANING & CLEARING OF ALL DEBRIS & SURPLUS MATERIAL. CLEAN-UP OF RIGHT-OF-WAY. CLEARING & SLASHING OF BRUSH OR TREES BY HAND OR MECHANICAL CUTTING. GENERAL CLEAN UP: SWEEPING, CLEANING, WASH-DOWN, WIPING OF CONSTRUCTION FACILITY & EQUIPMENT (OTHER THAN ""LIGHT CLEAN UP (JANITORIAL) LABORER. GARBAGE & DEBRIS HANDLERS & CLEANERS. APPLIANCE HANDLING (JOB SITE) (AFTER DELIVERY UNLADING IN STORAGE AREA); GROUND & SOIL TREATMENT WORK (PEST CONTROL); GUNITE/SHOTCRETE OPERATOR TENDER; JUNK YARD LABORERS (SAME AS SALVAGE YARD); LASER BEAM ""TARGET MAN"" IN CONNECTION WITH LABORERS' WORK; LAYOUT PERSON FOR PLASTIC (WHEN WORK INVOLVES WATERPROOFING FOR WATERPONDS, ARTIFICIAL LAKES & RESERVOIRS); LIMBERS, BRUSH LOADERS, & PILERS; LOADING, UNLOADING, CARRYING, DISTRIBUTING & HANDLING OF ALL RODS & MATERIAL FOR USE IN REINFORCING CONCRETE CONSTRUCTION (EXCEPT WHEN A DERRICK OR OUTRIGGER OPERATED BY OTHER THAN HAND POWER IS USED); LOADING, UNLOADING, SORTING, STOCKPILING, HANDLING & DISTRIBUTION OF WATER MAINS, GAS MAINS & ALL PIPES; LOADING & UNLOADING OF ALL MATERIALS, FIXTURES, FURNISHINGS & APPLIANCES FROM POINT OF DELIVERY TO STOCKPILE TO POINT OF INSTALLATION; HOOKING & SIGNALING FROM TRUCK, CONVEYANCE OR STOCKPILE; MATERIAL YARD LABORERS; PIPELAYER TENDER; PIPEWRAPPER, CAULKER, BANDER, KETTLEMEN, & MEN APPLYING ASPHALT, LAYKOLD, CREOSOTE, & SIMILAR-TYPE MATERIALS (PIPE UNDER 6 INCHES); PLASTERER LABORER; PREPARATION, CONSTRUCTION & MAINTENANCE OF ROADBEDS & SUB-GRADE FOR ALL PAVING, INCLUDING EXCAVATION, DUMPING, & SPREADING OF SUB-GRADE MATERIAL; PRESTRESSED OR PRECAST CONCRETE SLABS, WALLS, OR SECTIONS: ALL LOADING, UNLOADING, STOCKPILING, HOOKING ON OF SUCH SLABS, WALLS OR SECTIONS; QUARRY LABORERS; RAILROAD, STREETCAR, & RAIL TRANSIT MAINTENANCE & REPAIR; ROUSTABOUT; RUBBISH TRUCKS IN CONNECTION WITH BUILDING CONSTRUCTION PROJECTS (EXCLUDING CLEARING, GRUBBING, & EXCAVATING); SALVAGE YARD: ALL WORK CONNECTED WITH CUTTING, CLEANING, STORING, STOCKPILING OR HANDLING OF MATERIALS, ALL CLEANUP, REMOVAL OF DEBRIS, BURNING, BACK-FILLING & LANDSCAPING OF THE SITE; SANDBLASTING TENDER (POT TENDER): HOSES & POTS OR MARKERS; SCAFFOLDS: ERECTION, PLANKING & REMOVAL OF ALL SCAFFOLDS USED FOR SUPPORT FOR LATHERS, PLASTERS, BRICK LAYERS, MASONS, & OTHER CONSTRUCTION TRADES CRAFTS; SCAFFOLDS: (SPECIALLY DESIGNED BY CARPENTERS) LABORERS SHALL TEND SAID CARPENTER ON ERECTION & DISMANTLING THEREOF, PREPARATION FOR FOUNDATION OR MUDSILLS, MAINTENANCE; SCRAPING OF FLOORS; SCREEDS: HANDLING OF ALL SCREEDS TO BE REUSED; HANDLING, DISMANTLING & CONVEYANCE OF SCREEDS; SETTING, LEVELING & SECURING OR BRACING OF METAL OR OTHER ROAD FORMS & EXPANSION JOINTS; SHEETING PILING/TRENCH SHORING (HANDLING & PLACING OF SKIP SHEET OR WOOD PLANK TRENCH SHORING); SHIP SCALERS; SHIPWRIGHT TENDER; SIGN ERECTOR (SUBDIVISION TRAFFIC, REGULATORY, & STREET-NAME SIGNS); SLOPER; SLURRY SEAL CREWS (MIXER OPERATOR, APPLICATOR, SQUEEGEE MAN, SHUTTLE MAN, TOP MAN); SNAPPING OF WALL TIES & REMOVAL OF TIE RODS; SOIL TEST OPERATIONS OF SEMI & UNSKILLED LABOR SUCH AS FILLING SAND BAGS; STRIPER (ASPHALT, CONCRETE OR OTHER PAVED SURFACES); TOOL ROOM ATTENDANT (JOB SITE); TRAFFIC DELINEATING DEVICE APPLICATOR; UNDERPINNING, LAGGING, BRACING, PROPPING & SHORING, LOADING, SIGNALING, RIGHT-OF-WAY CLEARANCE ALONG THE ROUTE OF MOVEMENT, THE CLEARANCE OF NEW SITE, EXCAVATION OF FOUNDATION WHEN MOVING A HOUSE OR STRUCTURE FROM OLD SITE TO NEW SITE; UTILITIES EMPLOYEES; WATER MAN; WATERSCAPE/HARDSCAPE LABORERS; WIRE MESH PULLING (ALL CONCRETE POURING OPERATIONS); WRECKING, STRIPPING, DISMANTLING & HANDLING CONCRETE FORMS AN FALSE WORK.

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at https://www.dol.gov/agencies/whd/government-contracts.

Note: Executive Order 13658 generally applies to contracts subject to the Davis-Bacon Act that were awarded on or between January 1, 2015 and January 29, 2022, and that have not been renewed or extended on or after January 30, 2022. Executive Order 13658 does not apply to contracts subject only to the Davis-Bacon Related Acts regardless of when they were awarded. If a contract is subject to Executive Order 13658, the contractor must pay all covered workers at least $13.65 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract from May 11, 2026, through December 31, 2026. The applicable Executive Order minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under Executive Order 13658 is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (iii)).

The body of each wage determination lists the classifications and wage rates that have been found to be prevailing for the type(s) of construction and geographic area covered by the wage determination. The classifications are listed in alphabetical order under rate identifiers indicating whether the particular rate is a union rate (current union negotiated rate), a survey rate, a weighted union average rate, a state adopted rate, or a supplemental classification rate.

Union Rate Identifiers

A four-letter identifier beginning with characters other than ?SU?, ?UAVG?, ?SA?, or ?SC? denotes that a union rate was prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2024. PLUM is an identifier of the union whose collectively bargained rate prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. The date, 07/01/2024 in the example, is the effective date of the most current negotiated rate.

Union prevailing wage rates are updated to reflect all changes over time that are reported to WHD in the rates in the collective bargaining agreement (CBA) governing the

classification.

Union Average Rate Identifiers

The UAVG identifier indicates that no single rate prevailed for those classifications, but that 100% of the data reported for the classifications reflected union rates. EXAMPLE: UAVG-OH-0010 01/01/2024. UAVG indicates that the rate is a weighted union average rate. OH indicates the State of Ohio. The next number, 0010 in the example, is an internal number used in producing the wage determination. The date, 01/01/2024 in the example, indicates the date the wage determination was updated to reflect the most current union average rate.

A UAVG rate will be updated once a year, usually in January, to reflect a weighted average of the current rates in the collective bargaining agreements on which the rate is based.

Survey Rate Identifiers

The ?SU? identifier indicates that either a single non-union rate prevailed (as defined in 29 CFR 1.2) for this classification in the survey or that the rate was derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As a weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SUFL2022-007 6/27/2024. SU indicates the rate is a single non-union prevailing rate or a weighted average of survey data for that classification. FL indicates the State of Florida. 2022 is the year of the survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 6/27/2024 in the example, indicates the survey completion date for the classifications and rates under that identifier.

?SU? wage rates typically remain in effect until a new survey is conducted. However, the Wage and Hour Division (WHD) has the discretion to update such rates under 29 CFR 1.6(c)(1).

State Adopted Rate Identifiers

The ?SA? identifier indicates that the classifications and prevailing wage rates set by a state (or local) government were adopted under 29 C.F.R 1.3(g)-(h). Example: SAME2023-007 01/03/2024. SA reflects that the rates are state adopted. ME refers to the State of Maine. 2023 is the year during which the state completed the survey on which the listed classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 01/03/2024 in the example, reflects the date on which the classifications and rates under the ?SA? identifier took effect under state law in the state from which the rates were adopted.

WAGE DETERMINATION APPEALS PROCESS

1) Has there been an initial decision in the matter? This can be:

- a) a survey underlying a wage determination
- b) an existing published wage determination
- c) an initial WHD letter setting forth a position on a wage determination matter
- d) an initial conformance (additional classification and rate) determination

On survey related matters, initial contact, including requests for summaries of surveys, should be directed to the WHD Branch of Wage Surveys. Requests can be submitted via email to

davisbaconinfo@dol.gov or by mail to:
Branch of Wage Surveys
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210
Regarding any other wage determination matter such as conformance decisions, requests for initial decisions should be directed to the WHD Branch of Construction Wage Determinations. Requests can be submitted via email to BCWD-Office@dol.gov or by mail to:
Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210
2) If an initial decision has been issued, then any interested party (those affected by the action) that disagrees with the decision can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Requests for review and reconsideration can be submitted via email to dba.reconsideration@dol.gov or by mail to:
Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210
The request should be accompanied by a full statement of the interested party’s position and any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:
Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210.
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END OF GENERAL DECISION"

STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

HIGHWAYS DIVISION

HONOLULU, HAWAII

P R O P O S A L

6/02/98

PROPOSAL TO THE

STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

PROJECT: **Asphalt Pavement Preservation, Resurfacing, Reconstruction, and Pavement Striping at Various Locations, Island of Oahu**

FEDERAL-AID PROJECT NO.: **STP-0300(236)**

TERM OF CONTRACT: **Twenty-Four (24) Months from the date indicated in the Notice to Proceed, with the option to extend for three (3) additional twelve (12) month periods. The maximum contract period is sixty (60) months.**

DBE PROJECT GOAL: **None specified**

DESIGN PROJECT MANAGER:

NAME	**Amy Sunahara**
ADDRESS	**601 Kamokila Boulevard, Room 688, Kapolei, Hawaii 96707**
PHONE NO.	**(808) 692-7575**
FAX NO.	**(808) 692-7590**

ELECTRONIC SUBMITTAL: **Bidders shall submit and upload the complete proposal to HIePRO prior to the bid opening date and time. Any additional support documents explicitly designated as confidential and/or proprietary shall be uploaded as a separate file to HIePRO. See SPECIAL PROVISIONS 102.09 DELIVERY OF PROPOSALS for complete details. FAILURE TO UPLOAD THE COMPLETE PROPOSAL TO HIePRO SHALL BE GROUNDS FOR REJECTION OF THE BID.**

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.

4. It will not maintain for its employees any segregated facilities at any of its establishments.

5. Does not and will not permit its employees to perform their services at any location under its control, where segregated facilities are maintained.

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 1032D-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. Unless amended by Special Provision, 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.

7. The undersigned Bidder further agrees to the following: Pursuant to HRS §103D-405(d), any contractor (including consultants) paid for services to develop or prepare specifications or work statements shall be precluded from submitting an offer or receiving a contract for that particular solicitation. This includes the preparation of reports relied upon by HDOT in the development of the project scope.

The Bidder acknowledges receipt of and certifies that it has completely examined the following listed items: Hawaii Standard Specifications for Road and Bridge Construction, 2005, and/or the General Provisions for Construction Projects for AIR and WATER Transportation Facilities Division dated 2016, as applicable, the Notice to Bidders, Special Provisions, Proposal, Contract, Bond Forms, and 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 Subcontractor or Joint Contractor and the nature of work to be done by each on the following page. 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.

SUBCONTRACTOR LISTING

(Attach additional sheets if necessary.)

	NAME OF FIRM	NATURE OF WORK
SUBCONTRACTOR:		
1.	_____	_____
1a[1].	_____	_____
2.	_____	_____
2a.	_____	_____
3.	_____	_____
3a.	_____	_____
4.	_____	_____
4a.	_____	_____
5.	_____	_____
5a.	_____	_____
6.	_____	_____
6a.	_____	_____
7.	_____	_____
7a.	_____	_____

NOTES:

The Name of Firm and Nature of Work shall be indicated for all listed firms. The Bidder must adequately and unambiguously disclose the unique nature and scope of the work to be performed by each Sub- or Joint Contractor.

For each listed firm, the Bidder declares the respective firm is a Sub- or Joint Contractor and subject to evaluation as a Sub- or Joint Contractor.

[1] Second tier subcontractors

JOINT CONTRACTOR LISTING

(Attach additional sheets if necessary.)

	NAME OF FIRM	NATURE OF WORK
JOINT CONTRACTOR:		
1.	_____	_____
1a[1].	_____	_____
2.	_____	_____
2a.	_____	_____
3.	_____	_____
3a.	_____	_____
4.	_____	_____
4a.	_____	_____
5.	_____	_____
5a.	_____	_____
6.	_____	_____
6a.	_____	_____
7.	_____	_____
7a.	_____	_____

NOTES:

The Name of Firm and Nature of Work shall be indicated for all listed firms. The Bidder must adequately and unambiguously disclose the unique nature and scope of the work to be performed by each Sub- or Joint Contractor.

For each listed firm, the Bidder declares the respective firm is a Sub- or Joint Contractor and subject to evaluation as a Sub- or Joint Contractor.

[1] Second tier joint contractors

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)

_____
Authorized Signature

_____
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 ofthe 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.

PROPOSAL SCHEDULE - AREA 2

ITEM NO.	ITEM DESCRIPTION	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
209.0100	Installation, Maintenance, Monitoring, and Removal of BMP	F.A.	F.A.	F.A.	$ 500,000.00
301.0100	3 Inch HMA Base Course (5,000-50,000 SY)	50,000	SY	$	$
301.0110	3 Inch HMA Base Course (50,001-100,000 SY)	100,000	SY	$	$
301.0120	3 Inch HMA Base Course (100,001-150,000 SY)	150,000	SY	$	$
301.0200	4 Inch HMA Base Course (5,000-50,000 SY)	50,000	SY	$	$
301.0201	4 Inch HMA Base Course (50,001-100,000 SY)	100,000	SY	$	$
301.0202	4 Inch HMA Base Course (100,001-150,000 SY)	150,000	SY	$	$
301.0300	5 Inch HMA Base Course (5,000-50,000 SY)	50,000	SY	$	$
301.0301	5 Inch HMA Base Course (50,001-100,000 SY)	100,000	SY	$	$
301.0302	5 Inch HMA Base Course (100,001-150,000 SY)	150,000	SY	$	$
301.0400	3 Inch HMA Base Course (with PMA) (5,000-50,000 SY)	50,000	SY	$	$
301.0401	3 Inch HMA Base Course (with PMA) (50,001-100,000 SY)	100,000	SY	$	$
301.0402	3 Inch HMA Base Course (with PMA) (100,001-150,000 SY)	150,000	SY	$	$
301.0500	4 Inch HMA Base Course (with PMA) (5,000-50,000 SY)	50,000	SY	$	$
301.0501	4 Inch HMA Base Course (with PMA) (50,001-100,000 SY)	100,000	SY	$	$
301.0502	4 Inch HMA Base Course (with PMA) (100,001-150,000 SY)	150,000	SY	$	$
301.0600	5 Inch HMA Base Course (with PMA) (5,000-50,000 SY)	50,000	SY	$	$
301.0601	5 Inch HMA Base Course (with PMA) (50,001-100,000 SY)	100,000	SY	$	$
301.0602	5 Inch HMA Base Course (with PMA) (100,001-150,000 SY)	150,000	SY	$	$
401.0100	HMA Pavement, Mix No. V Leveling (50-500 Ton)	500	Ton	$	$
401.0101	HMA Pavement, Mix No. V Leveling (501-5000 Ton)	5,000	Ton	$	$

PROPOSAL SCHEDULE - AREA 2

ITEM NO.	ITEM DESCRIPTION	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
401.0420	2 Inch HMA Pavement, Mix No. IV (5,000-50,000 SY)	50,000	SY	$	$
401.0421	2 Inch HMA Pavement, Mix No. IV (50,001-100,000 SY)	100,000	SY	$	$
401.0422	2 Inch HMA Pavement, Mix No. IV (100,001-150,000 SY)	150,000	SY	$	$
401.0510	3 Inch HMA Pavement, Mix No. IV (5,000-50,000 SY)	50,000	SY	$	$
401.0511	3 Inch HMA Pavement, Mix No. IV (50,001-100,000 SY)	100,000	SY	$	$
401.0512	3 Inch HMA Pavement, Mix No. IV (100,001-150,000 SY)	150,000	SY	$	$
401.0700	2 Inch PMA Pavement, Mix No. IV (5,000-50,000 SY)	50,000	SY	$	$
401.0701	2 Inch PMA Pavement, Mix No. IV (50,001-100,000 SY)	100,000	SY	$	$
401.0702	2 Inch PMA Pavement, Mix No. IV (100,001-150,000 SY)	150,000	SY	$	$
401.0710	3 Inch PMA Pavement, Mix No. IV (5,000-50,000 SY)	50,000	SY	$	$
401.0711	3 Inch PMA Pavement, Mix No. IV (50,001-100,000 SY)	100,000	SY	$	$
401.0712	3 Inch PMA Pavement, Mix No. IV (100,001-150,000 SY)	150,000	SY	$	$
401.0740	Pavement Smoothness Incentive	Allow.	Allow.	Allow.	$ 100,000.00
404.0100	Slurry Seal (5,000-50,000 SY)	50,000	SY	$	$
404.0101	Slurry Seal (50,001-100,000 SY)	100,000	SY	$	$
404.0102	Slurry Seal (100,001-150,000 SY)	150,000	SY	$	$
406.0420	2 Inch SMA Pavement (5,000-50,000 SY)	50,000	SY	$	$
406.0421	2 Inch SMA Pavement (50,001-100,000 SY)	100,000	SY	$	$
406.0422	2 Inch SMA Pavement (100,001-150,000 SY)	150,000	SY	$	$
406.0510	3 Inch SMA Pavement (5,000-50,000 SY)	50,000	SY	$	$
406.0511	3 Inch SMA Pavement (50,001-100,000 SY)	100,000	SY	$	$

PROPOSAL SCHEDULE - AREA 2

ITEM NO.	ITEM DESCRIPTION	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
406.0512	3 Inch SMA Pavement (100,001-150,000 SY)	150,000	SY	$	$
414.0110	Excavation of Weakened Pavement Areas, 3 Inch (5,000-50,000 SY)	50,000	SY	$	$
414.0111	Excavation of Weakened Pavement Areas, 3 Inch (50,001-100,000 SY)	100,000	SY	$	$
414.0112	Excavation of Weakened Pavement Areas, 3 Inch (100,001-150,000 SY)	150,000	SY	$	$
414.0113	Excavation of Weakened Pavement Areas, 4 Inch (5,000-50,000 SY)	50,000	SY	$	$
414.0114	Excavation of Weakened Pavement Areas, 4 Inch (50,001-100,000 SY)	100,000	SY	$	$
414.0115	Excavation of Weakened Pavement Areas, 4 Inch (100,001-150,000 SY)	150,000	SY	$	$
414.0116	Excavation of Weakened Pavement Areas, 5 Inch (5,000-50,000 SY)	50,000	SY	$	$
414.0117	Excavation of Weakened Pavement Areas, 5 Inch (50,001-100,000 SY)	100,000	SY	$	$
414.0118	Excavation of Weakened Pavement Areas, 5 Inch (100,001-150,000 SY)	150,000	SY	$	$
414.0119	Excavation of Weakened Pavement Areas, 6 Inch (5,000-50,000 SY)	50,000	SY	$	$
414.0120	Excavation of Weakened Pavement Areas, 6 Inch (50,001-100,000 SY)	100,000	SY	$	$
414.0121	Excavation of Weakened Pavement Areas, 6 Inch (100,001-150,000 SY)	150,000	SY	$	$
414.0122	Excavation of Weakened Pavement Areas, 7 Inch (5,000-50,000 SY)	50,000	SY	$	$
414.0123	Excavation of Weakened Pavement Areas, 7 Inch (50,001-100,000 SY)	100,000	SY	$	$
414.0124	Excavation of Weakened Pavement Areas, 7 Inch (100,001-150,000 SY)	150,000	SY	$	$
414.0125	Excavation of Weakened Pavement Areas, 8 Inch (5,000-50,000 SY)	50,000	SY	$	$
414.0126	Excavation of Weakened Pavement Areas, 8 Inch (50,001-100,000 SY)	100,000	SY	$	$
414.0127	Excavation of Weakened Pavement Areas, 8 Inch (100,001-150,000 SY)	150,000	SY	$	$
415.0100	2 Inch Cold Planing (5,000-50,000 SY)	50,000	SY	$	$
415.0101	2 Inch Cold Planing (50,001-100,000 SY)	100,000	SY	$	$

PROPOSAL SCHEDULE - AREA 2

ITEM NO.	ITEM DESCRIPTION	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
415.0102	2 Inch Cold Planing (100,001-150,000 SY)	150,000	SY	$	$
415.0200	3 Inch Cold Planing (5,000-50,000 SY)	50,000	SY	$	$
415.0201	3 Inch Cold Planing (50,001-100,000 SY)	100,000	SY	$	$
415.0202	3 Inch Cold Planing (100,001-150,000 SY)	150,000	SY	$	$
416.0150	Scarify Existing Pavement (5,000-50,000 SY)	50,000	SY	$	$
416.0151	Scarify Existing Pavement (50,001-100,000 SY)	100,000	SY	$	$
416.0152	Scarify Existing Pavement (100,001-150,000 SY)	150,000	SY	$	$
417.1000	Cut Cores to Determine Existing Pavement Condition (1-50 Each)	50	Each	$	$
604.0100	Adjusting Manhole Cast Iron Frame and Cover (1-100 Each)	100	Each	$	$
615.0110	16-Inch Milled Rumble Strip, Centerline (5,000-50,000 LF)	50,000	LF	$	$
615.0111	16-Inch Milled Rumble Strip, Centerline (50,001-100,000 LF)	100,000	LF	$	$
615.1113	12-Inch Milled Rumble Strip, Edgeline (5,000-50,000 LF)	50,000	LF	$	$
615.1114	12-Inch Milled Rumble Strip, Edgeline (50,001-100,000 LF)	100,000	LF	$	$
621.0100	Invasive Species Management	F.A.	F.A.	F.A.	$ 50,000.00
623.0100	Loop Detector Sensing Unit (6 Ft x 6 Ft) (1-100 Each)	100	Each	$	$
623.0101	Loop Detector Sensing Unit (6 Ft Diameter) (1-100 Each)	100	Each	$	$
623.0300	Approach-Only Microwave Vehicle Detector (1-50 Each)	50	Each	$	$
627.0100	Vehicular Counting and Classification System Sensor Replacement	F.A.	F.A.	F.A.	$ 30,000.00
629.1000	4-Inch Pavement Striping (Thermoplastic Hot Spray) (1,000-10,000 LF)	10,000	LF	$	$
629.1010	4-Inch Pavement Striping (Thermoplastic Extrusion) (1,000-10,000 LF)	10,000	LF	$	$
629.1011	4-Inch Pavement Striping (Thermoplastic Extrusion) (10,001-50,000 LF)	50,000	LF	$	$

PROPOSAL SCHEDULE - AREA 2

ITEM NO.	ITEM DESCRIPTION	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
629.1012	4-Inch Pavement Striping (Thermoplastic Extrusion) (50,001-100,000 LF)	100,000	LF	$	$
629.1013	6-Inch Pavement Striping (Thermoplastic Hot Spray) (1,000-10,000 LF)	10,000	LF	$	$
629.1014	6-Inch Pavement Striping (Thermoplastic Extrusion) (1,000-10,000 LF)	10,000	LF	$	$
629.1015	6-Inch Pavement Striping (Thermoplastic Extrusion) (10,001-50,000 LF)	50,000	LF	$	$
629.1016	6-Inch Pavement Striping (Thermoplastic Extrusion) (50,001-100,000 LF)	100,000	LF	$	$
629.1017	6-Inch Pavement Striping (Thermoplastic Extrusion) (100,001-250,000 LF)	250,000	LF	$	$
629.1018	8-Inch Pavement Striping (Thermoplastic Extrusion) (1,000-10,000 LF)	10,000	LF	$	$
629.1019	8-Inch Pavement Striping (Thermoplastic Extrusion) (10,001-50,000 LF)	50,000	LF	$	$
629.1020	8-Inch Pavement Striping (Thermoplastic Extrusion) (50,001-100,000 LF)	100,000	LF	$	$
629.1021	12-Inch Pavement Striping (Thermoplastic Extrusion) (1,001-10,000 LF)	10,000	LF	$	$
629.1022	12-Inch Pavement Striping (Thermoplastic Extrusion) (10,001-50,000 LF)	50,000	LF	$	$
629.1023	Double 4-Inch Pavement Striping (Thermoplastic Hot Spray) (1,000-10,000 LF)	10,000	LF	$	$
629.1024	Double 4-Inch Pavement Striping (Thermoplastic Extrusion) (1,000-10,000 LF)	10,000	LF	$	$
629.1025	Double 4-Inch Pavement Striping (Thermoplastic Extrusion) (10,001-50,000 LF)	50,000	LF	$	$
629.1026	Double 4-Inch Pavement Striping (Thermoplastic Extrusion) (50,001-100,000 LF)	100,000	LF	$	$
629.1027	Double 4-Inch Pavement Striping (Thermoplastic Extrusion) (100,001-250,000 LF)	250,000	LF	$	$
629.1028	4-Inch Pavement Striping (Profiled Thermoplastic) (1,000-10,000 LF)	10,000	LF	$	$
629.1029	4-Inch Pavement Striping (Profiled Thermoplastic) (10,001-50,000 LF)	50,000	LF	$	$
629.1030	4-Inch Pavement Striping (Profiled Thermoplastic) (50,001-100,000 LF)	100,000	LF	$	$
629.1031	4-Inch Pavement Striping (Profiled Thermoplastic) (100,001-250,000 LF)	250,000	LF	$	$
629.1100	Crosswalk Marking (Thermoplastic Extrusion) (1-100 Lanes)	100	LN	$	$

PROPOSAL SCHEDULE - AREA 2

ITEM NO.	ITEM DESCRIPTION	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
629.1101	Pavement Arrow (Thermoplastic Extrusion) (1-100 EA)	100	EA	$	$
629.1102	Pavement Arrow (Thermoplastic Extrusion) (101-500 EA)	500	EA	$	$
629.1103	Pavement Word (Thermoplastic Extrusion) (1-100 EA)	100	EA	$	$
629.1104	Pavement Word (Thermoplastic Extrusion) (101-500 EA)	500	EA	$	$
629.1105	Pavement Symbol (Thermoplastic Extrusion (1-100 EA)	100	EA	$	$
629.1106	Pavement Symbol (Thermoplastic Extrusion (101-500 EA)	500	EA	$	$
629.1107	Yield Line (Thermoplastic Extrusion) (1-100 Lanes)	100	LN	$	$
629.2010	Type A Pavement Markers (50-5,000 EA)	5,000	EA	$	$
629.2011	Type C Pavement Markers (50-5,000 EA)	5,000	EA	$	$
629.2012	Type C Pavement Markers (5,001-25,000 EA)	25,000	EA	$	$
629.2013	Type D Pavement Markers (50-5,000 EA)	5,000	EA	$	$
629.2014	Type D Pavement Markers (5,001-25,000 EA)	25,000	EA	$	$
629.2015	Type H Pavement Markers (50-5,000 EA)	5,000	EA	$	$
629.2016	Type H Pavement Markers (5,001-25,000 EA)	25,000	EA	$	$
629.2017	Type J Pavement Markers (50-5,000 EA)	5,000	EA	$	$
629.3000	Pavement Marking Layout for New Pavement (10,000-50,000 LF)	50,000	LF	$	$
629.3001	Pavement Marking Layout for New Pavement (50,001-100,000 LF)	100,000	LF	$	$
632.1000	Reflector Marker, Type A Delineator (RM-1) (50-1,000 EA)	1,000	EA	$	$
632.1100	Reflector Marker, Type A Delineator (RM-2) (50-1,000 EA)	1,000	EA	$	$
632.1200	Reflector Marker, Type A Delineator (RM-3) (50-1,000 EA)	1,000	EA	$	$
645.0100	Traffic Control (Shoulder Closure, per day, Not to Exceed $4,000) (10-120 WD)	120	WD	$	$

PROPOSAL SCHEDULE - AREA 2

ITEM NO.	ITEM DESCRIPTION	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
645.0200	Traffic Control (Flagging Operation for Contra-Flow, per day, Not to Exceed $6,000) (10-120 WD)	120	WD	$	$
645.0300	Traffic Control (Lane Closures, per lane, per day, Not to Exceed $3,000) (10-120 WD)	120	WD	$	$
645.1000	Electronic Message Board (each, per day, Not to Exceed $1,500) (10-120 WD)	120	WD	$	$
645.2000	Additional Police Officers, Additional Traffic Control Devices, and Advertisement	F.A.	F.A.	F.A.	$ 50,000.00
a. Total Amount for Comparison of Bids - Area 2 …					$

Note: Bidders shall complete all unit prices and amounts. Failure to do so shall be grounds for rejection of bid. The maximum Approx Quantity multiplied by the Unit Price shall be used for comparison of bids to determine the Total Amount for Comparison of Bids.

PROPOSAL SCHEDULE

The bidder is directed to Subsection 105.16 – Subcontracts.

If the bid price for any proposal item having a maximum allowable bid indicated therefore in any of the contract documents is in excess of such a maximum amount, the bid price for such proposal item shall be adjusted to reflect the limitation thereon. The comparison of bids to determine the successful bidder and the amount of contract to be awarded shall be determined after such adjustments are made, and such adjustments shall be binding upon the bidder.

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

Notes:

1. Bids shall include all Federal, State, County and other applicable taxes and fees.

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

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

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

5. Bidders shall submit and upload the complete proposal to HIePRO prior to the bid opening date and time. Proposals received after said due date and time shall not be considered. Any additional support documents explicitly designated as confidential and/or proprietary shall be uploaded as a separate file to HIePRO. Bidders shall not include confidential and/or proprietary documents with the proposal. The record of each bidder and respective bid shall be open to public inspection. Original (wet ink, hard copy) proposal documents are not required to be submitted. Contract award shall be based on evaluation of proposals submitted and uploaded to HIePRO. FAILURE TO UPLOAD THE COMPLETE PROPOSAL TO HIePRO SHALL BE GROUNDS FOR REJECTION OF THE BID. If there is a conflict between the specification document and the HIePRO solicitation, the specifications shall govern and control, unless otherwise specified.

6. Any contract which is awarded shall be an open-ended contract since the exact value of work to be performed during the contract period cannot be determined beforehand. The unit price for each item of work on any particular work order shall be that which corresponds to

the quantity of work for that item actually performed for each work order.

7. The quantities on the proposal schedule are for bidding purposes only, and this is no guarantee of the quantity of work that will be issued.

8. Bid prices are for travel time, mileage and furnishing all labor, tools, traffic controls, all applicable taxes, fees and equipment necessary for all work shown and called for in accordance with the true intent and meaning of the specifications.

9. The sum of all work and materials required to perform the required repairs are issued on a "single work order." A single work order shall be a work order submitted by the Engineer for work that can be performed by the Contractor without relocating a distance of more than 1 mile between any two adjacent repair locations.

The bidder is directed to Section 717 – Cullet and Cullet-Made Materials regarding recycling of waste glass.

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 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

_____
Print Name and Title

_____
Name of Surety (Seal)

_____
Signature

_____
Print Name and Title

STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

HONOLULU, HAWAII

SAMPLE FORMS

Contract

Performance Bond (Surety)

Performance Bond

Labor and Material Payment Bond (Surety)

Labor and Material Payment Bond

Disclosure of Lobbying Activities (Standard Form - LLL and LLL-A)

Statement of Compliance (Form WH-348)

Chapter 104, HRS Compliance Certificate

C O N T R A C T

THIS AGREEMENT, made this day _____, by and between the STATE OF HAWAII, by its Director of Transportation, hereinafter referred to as "STATE", and «CONTRACTOR», «STATE_OF_INCORPORATON», whose business/post office address is «ADDRESS» hereinafter referred to as "CONTRACTOR",

WITNESSETH: That for and in consideration of the payments hereinafter mentioned, the CONTRACTOR hereby covenants and agrees with the STATE to complete in place, furnish and pay for all labor and materials necessary for

"«PROJECT_NAME_AND_NO»",

or such a part thereof as shall be required by the STATE, the total amount of which labor, materials and construction shall be computed at the unit and/or lump sum prices set forth in the attached proposal schedule and shall be the sum of «BASIC»----- DOLLARS ($«BASIC_NUMERIC») as follows:

SAMPLE

TOTAL AMOUNT FOR COMPARISON OF BIDS…….…...……$«BASIC_NUMERIC»

which shall be provided from the following funds:

Federal Funds.....……..……..…...
State Funds.....……..
TOTAL AMOUNT.....……..….

all in accordance with the specifications, the special provisions, if any, the notice to bidders, the instructions to bidders, the proposal and plans for «PROJECT_NO_ONLY», and any supplements thereto, on file in the office of the Director of Transportation. These documents, together with all alterations, amendments, and additions thereto and deductions therefrom, are attached hereto or incorporated herein by reference and made a part of this contract.

The CONTRACTOR hereby covenants and agrees to complete such construction within «WORKING_DAYS» , from the date indicated in the notice to proceed from the STATE, subject, however, to such extensions as may be provided for under the specifications.

For and in consideration of the covenants, undertakings and agreements of the CONTRACTOR herein set forth and upon the full and faithful performance thereof by the CONTRACTOR, the STATE hereby agrees to pay the CONTRACTOR the sum of «BASIC»-----DOLLARS ($«BASIC_NUMERIC») in lawful money, but not more than such part of the same as is actually earned according to the STATE's determination of the actual quantities of work performed and materials furnished by the CONTRACTOR at the unit or lump sum prices set forth in the attached proposal schedule. Such payment, including any extras, shall be made, subject to such additions or deductions hereto or hereafter made in the manner and at the time prescribed in the specifications and this contract.

An additional sum of «EXTRAS»-----DOLLARS ($«EXTRA_NUMERIC») is hereby provided for extra work and shall be provided from the following funds:

SAMPLE

Federal Funds…….....……
State Funds……
Total……..…….…...

Where Federal funds are involved, it is covenanted and agreed by and between the parties hereto that the sum of ----«FEDERAL_BASIC»----DOLLARS ($«FEDERAL_BASIC_NUMERIC») and ----«FEDERAL_EXTRAS»----DOLLARS ($«FEDERAL_EXTRAS_NUMERIC»), a portion of the contract price and extras, respectively, shall be paid out of the applicable Federal funds, and that this contract shall be construed to be an agreement to pay said sums to the Contractor only out of the aforesaid Federal funds if and when such Federal funds shall be received from the Federal Government, and that this contract shall not be construed to be a general agreement to pay said portions at all events out of any funds other than those which may be so received from the Federal Government; provided, that if the Federal share of the cost of the project is not immediately forthcoming from the Federal Government, the STATE may advance the CONTRACTOR the anticipated Federal reimbursement of the cost of the completed portions of the work from funds which have been appropriated by the STATE for its pro rata share.

All words used herein in the singular shall extend to and include the plural. All words used in the plural shall extend to and include the singular. The use of any gender shall extend to and include all genders.

SAMPLE

IN WITNESS WHEREOF, the parties hereto have caused this instrument to be duly executed the day and year first above written.

STATE OF HAWAII

_____
Director of Transportation

«CONTRACTOR»

_____
Signature

_____
Print name

_____
Print Title

_____
Date

SAMPLE

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 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 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

DISCLOSURE OF LOBBYING ACTIVITIES

Complete this form to disclose lobbying activities pursuant to 31 U.S.C. 1352
(See reverse for public burden disclosure.)

Approved by
0348-0046

1. Type of Federal Action:	2. Status of Federal Action:	3. Report Type:
❒ a. contract b. grant c. cooperative agreement d. loan e. loan guarantee f. loan insurance	❒ a. bid/offer/application b. initial award c. post-award	❒ a. initial filing b. material change For Material Change Only: year _____ quarter _____ date of last report _____

4. Name and Address of Reporting Entity: ❒ Prime ❒ Subawardee Tier _____, ***if known***: Congressional District, ***if known***:	5. If Reporting Entity in No. 4 is Subawardee, Enter Name and Address of Prime Congressional District, ***if known***:
6. Federal Department/Agency:	7. Federal Program Name/Destination: CFDA Number, ***if applicable***:
8. Federal Action Number, ***if known***:	9. Award Amount, ***if known:*** $
10. a. Name and address of Lobbying Entity ***(if individual, last name, first name, MI):***	b. Individuals Performing Services ***(including address if different from No. 10a)*** ***(last name, first name, MI):***

(attach Continuation Sheet(s) SF-LLL-A, if necessary)

11. Amount of Payment (***check all that apply***): $ _____ ❒ actual ❒ planned	13. Type of Payment (***check all that apply***): ❒ a. retainer ❒ b. one-time fee ❒ c. commission ❒ d. contingent fee ❒ e. deferred ❒ f. other; specify: _____
12. Form of Payment (***check all that apply***): ❒ a. cash ❒ b. in-kind; specify: nature _____ value _____	

14. Brief Description of Services Performed or to be Performed and Date(s) of Service, including officer(s), employees(s) or Member(s) contacted, for Payment Indicated in Item 11:

(attach Continuation Sheet(s) SF-LLL-A, if necessary)

15. Continuation Sheet(s) SF-LLL-A attached: ❒ Yes ❒ No

16. Information requested through this form is authorized by title 31 U.S.C. section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when this transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be reported to the Congress semi-annually and will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.	Signature: _____ Print Name: _____ Title: _____ Telephone No.: _____ Date: _____

Federal Use Only:	Authorized for Local Reproduction Standard Form - LLL

INSTRUCTIONS FOR COMPLETION OF SF-LLL, DISCLOSURE OF LOBBYING ACTIVITIES

This disclosure form shall be completed by the reporting entity, whether subawardee or prime Federal recipient, at the initiation or receipt of a covered Federal action, or a material change to a previous filing, pursuant to title 31 U.S.C. section 1352. The filing of a form is required for each payment or agreement to make payment to any lobbying entity for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with a covered Federal action. Use the SF-LLL-A Continuation Sheet for additional information if the space on the form is inadequate. Complete all items that apply for both the initial filing and material change report. Refer to the implementing guidance published by the Office of Management and Budget for additional information.

1. Identify the type of covered Federal action for which lobbying activity is and/or has been secured to influence the outcome of a covered Federal action.

2. Identify the status of the covered Federal action.

3. Identify the appropriate classification of this report. If this is a followup report caused by a material change to the information previously reported, enter the year and quarter in which the change occurred. Enter the date of the last previously submitted report by this reporting entity for this covered Federal action.

4. Enter the full name, address, city, state and zip code of the reporting entity. Include Congressional District, if known. Check the appropriate classification of the reporting entity that designates if it is, or expects to be, a prime or subaward recipient. Identify the tier of the subawardee, e.g., the first subawardee of the prime is the 1st tier. Subawards include but are not limited to subcontracts, subgrants and contract awards under grants.

5. If the organization filing the report in item 4 checks "Subawardee", then enter the full name, address, city, state and zip code of the prime Federal recipient. Include Congressional District, if known.

6. Enter the name of the Federal agency making the award or loan commitment. Include at least one organizational level below agency name, if known. For example, Department of Transportation, United States Coast Guard.

7. Enter the Federal program name or description for the covered Federal action (item 1). If known, enter the full Catalog of Domestic Assistance (CFDA) number for grants, cooperative agreements, loans, and loan commitments.

8. Enter the most appropriate Federal identifying number available for the Federal action identified in item 1 (e.g., Request for Proposal (RFP) number; Invitation for Bid (IFB) number; grant announcement number; the contract, grant, or loan award number; the application/proposal control number assigned by the Federal Agency). Include prefixes, e.g., "RFP-DE-90-001."

9. For a covered Federal action where there has been an award or loan commitment by the Federal agency, enter the Federal amount of the award/loan commitment for the prime entity identified in item 4 or 5.

10. (a) Enter the full name, address, city, state and zip code of the lobbying entity engaged by the reporting entity identified in item 4 to influence the covered Federal action.

    (b) Enter the full names of the individual(s) performing services, and include full address if different from 10(a). Enter Last Name, First Name, and Middle Initial (MI).

11. Enter the amount of compensation paid or reasonably expected to be paid by the reporting entity (item 4) to the lobbying entity (item 10). Indicate whether the payment has been made (actual) or will be made (planned). Check all boxes that apply. If this is a material change report, enter the cumulative amount of payment made or planned to be made.

12. Check the appropriate box(es). Check all boxes that apply. If payment is made through an in-kind contribution, specify the nature and value of the in-kind payment.

13. Check the appropriate box(es). Check all boxes that apply. If other, specify nature.

14. Provide a specific and detailed description of the services that the lobbyist has performed, or will be expected to perform, and the date(s) of any services rendered. Include all preparatory and related activity, not just time spent in actual contact with Federal officials. Identify the federal official(s) or employee(s) contacted or the officer(s), employee(s), or Member(s) or Congress that were contacted.

15. Check whether or not a SF-LLL-A Continuation Sheet(s) is attached.

16. The certifying official shall sign and date the form, print his/her name, title, and telephone number.

Public reporting burden for this collection of information is estimated to average 30 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction (0348-0046), Washington, D.C. 20503.

DISCLOSURE OF LOBBYING ACTIVITIES
CONTINUATION SHEET

Approved by
0348-0046

Reporting Entity:_____ Page _____ of _____

Authorized for Local Reproduction
Standard Form - LLL-A

U.S. DEPARTMENT OF LABOR
WAGE AND HOUR AND PUBLIC CONTRACTS DIVISION

STATEMENT OF COMPLIANCE

Form Approved
Budget Bureau No. 44 R1093

Date _____

I, _____ do hereby state:
(Name of signatory party) (Title)

(1) That I pay or supervise the payment of the persons employed by _____ on
(Contractor or subcontractor)
the _____; that during the payroll period commencing on the _____ day of _____,
(Building or work)
_____ and ending the _____ day of _____, _____ all persons employed on said project have been paid the full weekly wages earned, that no rebates have been or will be made either directly or indirectly to or on behalf of said _____ from the full weekly wages earned by any person and that no deductions have
(Contractor or subcontractor)
been made either directly or indirectly from the full wages earned by any person, other than permissible deductions as defined in Regulations, Part 3 (29 CFR Subtitle A), issued by the Secretary of Labor under the Copeland Act, as amended (48 Stat. 948.63 Stat. 108, 72 Stat. 967; 76 Stat. 357; 40 U.S.C. 276c), and described below:

_____

_____

_____

(2) That any payrolls otherwise under this contract required to be submitted for the above period are correct and complete; that the wage rates for laborers or mechanics contained therein are not less than the applicable wage rates contained in any wage determination incorporated into the contract; that the classifications set forth therein for each laborers or mechanic conform with the work he performed.

(3) That any apprentices employed in the above period are duly registered in a bona fide apprenticeship program registered with a State apprenticeship agency recognized by the Bureau of Apprenticeship and Training, United States Department of Labor, or if no such recognized agency exists in a State, are registered with the Bureau of Apprenticeship and Training, United States Department of Labor.

(4) That:

(a) WHERE FRINGE BENEFITS ARE PAID TO APPROVED PLANS, FUNDS, OR PROGRAMS

☐ In addition to the basic hourly wage rates paid to each laborer or mechanic listed in the above-Referenced payroll, payments of fringe benefits as listed in the contract have been or will be made to appropriate program for the benefit of such employees, except as noted in Section 4(c) below.

(b) WHERE FRINGE BENEFITS ARE PAID IN CASH

☐ Each Laborer or mechanic listed in the above referenced payroll has been paid as indicated on the payroll, an amount not less than the sum of the applicable basic hourly wage rate plus the amount of the required fringe benefits as listed in the contract, except as noted in Section 4(c) below.

(c) EXCEPTIONS

EXCEPTION (CRAFT)	EXPLANATION

REMARK

NAME AND TITLE	SIGNATURE

THE WILFUL FALSIFICATION OF ANY OF THE ABOVE STATEMENTS MAY SUBJECT THE CONTRACTOR OR SUBCONTRACTOR TO CIVIL OR CRIMINAL PROSECUTION. SEE SECTION 1001 OF TITLE 18 AND SECTION 231 OF TITLE 31 OF THE UNITED STATES CODE.

INSTRUCTIONS FOR PREPARATION OF STATEMENT OF COMPLIANCE

This statement of compliance meets needs resulting form the amendment of the Davis-Bacon Act to include fringe benefits provisions. Under this amended law, the contractor is required to pay fringe benefits as predetermined by the Department of Labor, in addition to payment of the minimum rates. The contractor's obligation to pay fringe benefits may be met by payment of the fringes to the various plans, funds, or programs or by making these payments to the employees as cash in lieu of fringes.

The contractor should show on the face of his payroll all monies paid to the employees whether as basic or as cash in lieu of fringes. The contractor shall represent in the statement of compliance that he is paying to others fringes required by the contract and not paid as cash in lieu of fringes. Detailed instructions follow:

Contractors who pay all required fringe benefits:

A contractor who pays fringe benefits to approved plans, funds, or programs in amounts not less than were determined in the applicable wage decision of the Secretary of Labor shall continue to show on the face of his payroll the basic cash hourly rate and overtime rate paid to his employees, just as he has always done. Such a contractor shall check paragraph 4(a) of the statement to indicate that he is also paying to approved plans, funds, or programs not less than the amount predetermined as fringe benefits for each craft. Any exception shall be noted in Section 4(c).

Contractors who pay no fringe benefits:

A contractor who pays no fringe benefits shall pay to the employee and insert in the straight time hourly rate column of his payroll an amount not less than the predetermined rate for each classification plus the amount of fringe benefits determined for each classification in the applicable wage decision. Inasmuch as it is not necessary to pay time and a half on cash paid in lieu of fringes, the overtime rate shall be not less than the sum of the basic predetermined rate, plus the half time premium on the basic or regular rate plus the required cash in lieu of fringes at the straight time rate. To simplify computation of overtime, it is suggested that the straight time basic rate and cash in lieu of fringes be separately stated in the hourly rate column, thus $3.25/.40. In addition, the contractor shall check paragraph 4(b) of the statement to indicate that he is paying fringe benefits in cash directly to his employees. Any exceptions shall be noted in Section 4(c).

Use of Section 4(c), Exceptions

Any contractor who is making payment to approved plans, funds, or programs in amounts less than the wage determination requires is obliged to pay the deficiency directly to the employees as cash in lieu of fringes. Any exceptions to Section 4(a) or 4(b), whichever the contractor may check, shall be entered in Section 4(c). Enter in the Exception column the craft, and enter in the Explanation column the hourly amount paid the employees as cash in lieu of fringes, and the hourly amount paid to plans, funds, or programs as fringes.

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 _____