



**STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION  
HONOLULU, HAWAII  
SPECIAL PROVISIONS  
PROPOSAL  
CONTRACT AND BOND**

**FOR**

**FREEWAY MANAGEMENT SYSTEM**

**PHASE 3, UNIT 1**

**FEDERAL-AID PROJECT NO. NH-0300(152)**

**DISTRICTS OF HONOLULU AND EWA**

**ISLAND OF OAHU**

**FY 2021**

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## FEDERAL PROJECTS

### NOTICE TO BIDDERS (Chapter 103D, HRS)

The receiving of SEALED BIDS for Freeway Management System, Phase 3, Unit 1, Federal-Aid Project No. NH-0300(152), will begin as advertised on in HIePRO. Bidders are to register and submit bids through HIePRO only. See the following HIePRO link for important information on registering: <https://hiepro.ehawaii.gov/welcome.html>.

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

Deadline to submit bids is Friday, October 8th, 2021 at 2:00 P.M. HST. Bids received after said due date and time shall not be considered.

The scope of work consists of **the installation of CCTV cameras, poles, footings, and associated power and communication infrastructure on the H-1 Freeway and H-2 Freeway on the Island of Oahu**. The estimated cost of construction is between \$6,000,000 and \$12,000,000.

To be eligible for award, bidders must possess a valid State of Hawaii General Engineering "A" – Contractor's license, prior to the award of the contract.

A pre-bid conference is scheduled for Thursday, September 23<sup>rd</sup>, 2021 at 11:00 A.M. HST, on Microsoft Teams. All prospective bidders or their representatives (employees) are encouraged to attend, but attendance is not mandatory. Due to the impacts of COVID-19, the pre-bid meeting will be conducted virtually. Questions applicable to the Project Specifications should be submitted to the Project Manager no later than two days prior to the scheduled date of the pre-bid meeting.

## FEDERAL PROJECTS

Contact Neal Honma, Project Manager, by phone at (808) 692-7670, by facsimile at (808) 692-7690, or by email at [neal.k.honma@hawaii.gov](mailto:neal.k.honma@hawaii.gov) to obtain the Microsoft Teams link for the pre-bid meeting.

ALL requests for information (RFI) shall be received in writing via HiePRO no less than 14 calendar days before bid opening. Questions received after the deadline will not be addressed. Verbal requests for information will not receive a response. Anything said at the conference is for clarification purposes and any changes to the bid documents will be made by addendum and posted in HiePRO.

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

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

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 Hawaii Department of Transportation (HDOT) will affirmatively ensure that the contract entered into pursuant to this advertisement will be awarded to the lowest responsible bidder without discrimination on the grounds of race, color, national origin or sex (as directed by 23 CFR Part 200).

## FEDERAL PROJECTS

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

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

Bidders are directed to read and be familiar with the Disadvantaged Business Enterprise (DBE) Requirements for Federal-Aid Projects, which establishes the DBE program requirements pursuant to Title 49, CFR, Part 26 and, particularly, the requirements of certification, method of award, and evidence of good faith. All Bidders must e-mail the Project Manager at [neal.k.honma@hawaii.gov](mailto:neal.k.honma@hawaii.gov), the Disadvantaged Business Enterprise (DBE) Contract Goal Verification and Good Faith Efforts (GFE) Documentation for Construction; Disadvantaged Business Enterprise (DBE) Confirmation and Commitment Agreement – Trucking Company; and Disadvantaged Business Enterprise (DBE) Confirmation and Commitment Agreement – Subcontractor, Manufacturer, or Supplier by 10/13/2021. Failure to provide these documents shall be cause for bid/proposal rejection.

Driving While Impaired (DWI) Education. HDOT encourages all organizations contracted with the 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.

## FEDERAL PROJECTS

For additional information, contact Neal Honma, Project Manager, by phone at (808) 692-7670, by fax at (808) 692-7690 or email at [neal.k.honma@hawaii.gov](mailto:neal.k.honma@hawaii.gov).

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



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JADE T. BUTAY  
Director of Transportation

Internet Posting: Wednesday, September 8<sup>th</sup>, 2021



## 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.

**NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL  
EMPLOYMENT OPPORTUNITY (EXECUTIVE ORDER 11246)**

1. The Bidder's attention is called to the "Equal Opportunity" and the "Specific Equal Employment Opportunity Responsibilities" set forth in the "Required Federal Aid Construction Contract Provisions."

2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work on this project are as follows:

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| CATEGORY                           | TIMETABLE  | GOAL                           |
|------------------------------------|------------|--------------------------------|
| Female participation in each trade | Indefinite | 6.9%                           |
| Minority participation in each     | None       | 69.1%<br>(Oahu)                |
| Trade (female included)            | None       | 70.4%<br>(Hawaii, Maui, Kauai) |

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These goals are applicable to all the Contractor's aggregate on-site construction workforce whether or not part of that workforce is performing work on a Federal or Federally assisted construction contract or subcontract.

The Contractor's compliance with the Executive Order shall be based on its implementation of the Equal Opportunity Clause, and its efforts to meet the goals established for the contract resulting from this solicitation. The hours of female and minority employment and training must be substantially uniform throughout the length of the contract, and in trade, and the Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract and Executive Order. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall provide written notification to the Area Director, Hawaii Area Office, Office of Federal Contract Compliance Programs, U.S. Department of Labor, 300 Ala Moana Blvd., P.O. Box 50149, Honolulu, Hawaii 96850, within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address, and telephone number of the subcontractor; employer identification number; estimated dollar amount of the subcontract; and estimated starting and completion dates of the subcontract. The Contractor shall indicate which are minority group subcontractors and the ethnic identity and sex of the owner(s) and policy-making official(s).

## **DISADVANTAGED BUSINESS ENTERPRISE REQUIREMENTS**

### **I. GENERAL**

This project is subject to Title 49, Code of Federal Regulations, 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. The following shall be incorporated as part of the contract documents for compliance. If any requirements herein are in 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**

It is the policy of the U.S. Department of Transportation ("USDOT") and the State of Hawaii, Department of Transportation and its political subdivisions ("Department") that Disadvantaged Business Enterprises ("DBE"), as defined in the DBE Regulations, have an equal opportunity to receive and participate in federally assisted contracts.

### **III. DBE ASSURANCES**

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 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**

All bidders/offerors are required to register with the Department's Office of Civil Rights (OCR), DBE Section, using the Bidder Registration Form, which can be downloaded from the Department's website at <http://hidot.hawaii.gov/administration/ocr/dbe/dbe-program-forms/>. Certified DBEs are considered registered with the Department and are not required to submit a Bidder Registration Form. All other bidders/offerors are required to complete this form which may be faxed to (808) 831-7944, e-mailed to:

HDOT-DBE@hawaii.gov, or mailed to the HDOT DBE Section at 200 Rodgers Boulevard, Honolulu, Hawaii 96819. Registered bidders/offerors are posted on the website listed above.

Bidders/offerors, subcontractors, manufacturers, vendors or suppliers, and trucking companies shall fully inform themselves with respect to the requirements of the DBE Regulations. Particular attention is directed to the following matters:

- A. Bidders/offerors shall take all necessary steps to ensure that DBEs have an opportunity to participate in this contract.
- B. DBEs may participate as a consultant, prime contractor, subcontractor, trucking company, or vendor of materials or supplies. DBEs may also team with other DBE or non-DBE firms as part of a joint venture or partnership.
- C. Agreements between a bidder/offeror and a DBE in which a DBE promises not to provide subcontracting quotations to other bidders/offerors are strictly prohibited.
- D. A DBE shall be certified by the Department under the appropriate North American Industry Classification System (NAICS) code and work in their registered field of work in order for credit to be allowed.
- E. Information regarding the current certification status of DBEs is available on the Internet at <https://hidot.hawaii.gov/administration/ocr/dbe/>.
- F. Commercially Useful Function (“CUF”). A DBE must perform a CUF. This means that a DBE must be responsible for the execution of a distinct element of the work, must carry out its responsibility by actually performing, managing, and supervising at least 30% of the work involved by using its own employees and equipment, must negotiate price, determine quality and quantity, order and install material (when applicable), and must pay for the material itself.<sup>1</sup>

To determine whether a DBE is performing a CUF, the Department must evaluate the amount of work subcontracted, industry practices, whether the amount the firm is to be paid under the contract is commensurate with the work it is actually performing, the DBE credit claimed for performance of the work, and other relevant factors. The prime contractor is responsible to ensure that the DBE performs a CUF.

## V. PROPOSAL REQUIREMENTS

- A. DBEs must be certified by the bid opening date.

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<sup>1</sup> The use of joint checks payable to a DBE subcontractor and supplier may be allowed to purchase materials and supplies under limited circumstances. See VIII USE OF JOINT CHECKS UNDER THE DBE PROGRAM

B. DBE subcontractors, manufacturers, suppliers, trucking companies and any second tier subcontractors shall be listed on the respective DBE forms as specified below in order to receive credit.

C. The following forms are due **five (5) days after bid opening:**<sup>2</sup>

1. DBE Confirmation and Commitment Agreement. This form must be **signed by the bidder/offeror and each DBE** subcontractor, manufacturer, supplier, or trucking company and submitted to the State Project Manager. Information to be provided on the form shall include, among other things, the project number, the DBE's NAICS codes, description of work, bid items with corresponding price information, prime contractor name and contact information DBE name and contact information and subcontractor name and contact information if the DBE is a second tier subcontractor.
2. DBE Contract Goal Verification and Good Faith Efforts (GFE) Documentation for Construction. List the dollar amount of all subcontractors, manufacturers, suppliers, and trucking companies (both DBE and non-DBE firms). Bidder/offeror must also list the DBE project goal on this form (See paragraph D below regarding goal calculation). If the project goal is not met, the bidder/offeror shall submit documentation of good faith efforts including quotations for both DBE and non-DBE subcontractors when a non-DBE is selected over a DBE for the project.

**Failure to provide any of the above shall be cause for bid/proposal rejection.**

D. Calculation of the DBE contract goal for this project is the proportionate contract dollar value of work performed, materials, and goods to be supplied by DBEs. DBE credit shall not be given for mobilization, force account items and allowance items. This DBE contract goal is applicable to all the contract work performed for this project and is calculated as follows:

1. DBE contract goal percentage = Contract Dollar Value of the work to be performed by DBE subcontractors and manufacturers, plus 60% of the contract dollar value of DBE suppliers, divided by the sum of all contract items (sum of all contract items is the total amount for comparison of bids less mobilization, force account items, and allowance items).
2. The Department shall adjust the bidder's/offeror's DBE contract goal to the amount of the project goal if it finds that the bidder/offeror met the goal but erroneously calculated a lower percentage. If the amount the

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<sup>2</sup> In computing calendar days, the day from which the period begins to run is not counted, and when the last day of the period is a Saturday, Sunday, or Federal or State holiday, the period extends to the next day that is not a Saturday, Sunday, or holiday.

bidder/offeror submits as its contract goal exceeds the project goal, the bidder/offeror shall be held to the higher goal.

## **VI. COUNTING DBE PARTICIPATION TOWARDS CONTRACT GOAL**

- A. Count the entire amount of the portion of a contract (or other contract not covered by paragraph B below) that is performed by the DBE's own forces. Include the cost of supplies and materials obtained by the DBE for the work on the contract, including supplies purchased or equipment leased by the DBE (except supplies and equipment the DBE subcontractor purchases or leases from the prime contractor or its affiliate).
- B. Count the entire amount of fees or commissions charged by a DBE firm for providing a bona fide service, such as professional, technical, consultant, or managerial services, or for providing bonds or insurance specifically required for the performance of a USDOT-assisted contract, toward DBE goals, provided the Department determines the fee to be reasonable and not excessive as compared with fees customarily allowed for similar services.
- C. When a DBE subcontracts part of the work of its contract to another firm, the value of the subcontracted work may be counted toward DBE goals only if the DBE's subcontractor is itself a DBE. Work that a DBE subcontracts to a non-DBE firm does not count toward DBE goals.
- D. When a DBE performs as a participant in a joint venture, count a portion of the total dollar value of the contract equal to the distinct, clearly defined portion of the work of the contract that the DBE performs with its own forces toward DBE goals.
- E. Count expenditures to a DBE contractor toward DBE goals only if the DBE is performing a CUF on that contract.
- F. The following is a list of appropriate DBE credit to be allowed for work to be performed by a DBE subcontractor. Count expenditures with DBEs for materials or supplies toward DBE goals as provided in the following:
  - 1. If the materials or supplies are obtained from a DBE manufacturer, count 100 percent of the cost of the materials or supplies toward DBE goals;
  - 2. For purposes of determining DBE goal credit, a manufacturer is a firm that operates or maintains a factory or establishment that produces (on the premises) the materials, supplies, articles, or equipment required under the contract and of the general character described by the specifications;
  - 3. If the materials or supplies are purchased from a DBE regular dealer, count 60 percent of the cost of the materials or supplies toward DBE goals;
  - 4. For purposes of determining DBE goal credit, a regular dealer is a firm that owns, operates, or maintains a store, warehouse, or other

establishment in which the materials, supplies, articles or equipment of the general character described by the specifications and required under the contract are bought, kept in stock, and regularly sold or leased to the public in the usual course of business;

5. To be a regular dealer, the firm must be an established, regular business that engages, as its principal business and under its own name, in the purchase and sale or lease of the products in question;
6. A person may be a regular dealer in such bulk items as petroleum products, steel, cement, gravel, stone, or asphalt without owning, operating, or maintaining a place of business as provided in the DBE Regulations, if the person both owns and operates distribution equipment for the products. Any supplementing of a regular dealers' own distribution equipment shall be by a long-term lease agreement and not on an ad hoc or contract-by-contract basis;
7. Packagers, brokers, manufacturers' representatives, or other persons who arrange or expedite transactions are not regular dealers;
8. With respect to materials or supplies purchased from a DBE, which is neither a manufacturer nor a regular dealer, count the entire amount of fees or commissions charged for assistance in the procurement of the materials and supplies, or fees or transportation charges for the delivery of materials or supplies required on a job site, toward DBE goals, provided that the Department determines the fees to be reasonable and not excessive as compared with fees customarily allowed for similar services. Do not count any portion of the cost of the materials and supplies themselves toward DBE goals; however,
9. If a firm is not currently certified as a DBE in accordance with standards of this part at the time of the execution of the contract, do not count the firm's participation toward any DBE goals, except as provided for in §26.87(i);
10. Do not count the dollar value of work performed under a contract with a firm after it has ceased to be certified toward the Department's overall goal; and
11. Do not count the participation of a DBE subcontractor toward a contractor's final compliance with its DBE obligations on a contract until the amount being counted has actually been paid to the DBE.

G. The following factors are used in counting DBE participation for trucking companies:

1. The DBE must be responsible for the management and supervision of the entire trucking operation for which it is responsible on a particular contract, and there cannot be a contrived arrangement for the purpose of meeting DBE goals;
2. The DBE must itself own and operate at least one (1) fully licensed, insured, and operational truck used on the contract;

3. The DBE receives credit for the total value of the transportation services it provides on the contract using trucks it owns, insures, and operates using drivers it employs;
4. The DBE may lease trucks from another DBE firm, including an owner-operator who is certified as a DBE. The DBE who leases trucks from another DBE receives credit for the total value of the transportation services the lessee DBE provides on the contract;
5. The DBE may also lease trucks from a non-DBE firm, including from an owner-operator. The DBE that leases trucks equipped with drivers from a non-DBE is entitled to credit for the total value of transportation services provided by non-DBE leased trucks equipped with drivers not to exceed the value of transportation services on the contract provided by DBE-owned trucks or leased trucks with DBE employee drivers. Additional participation by non-DBE owned trucks equipped with drivers receives credit only for the fee or commission it receives as a result of the lease arrangement. If a recipient chooses this approach, it must obtain written consent from the appropriate Department operating administration.

EXAMPLE: DBE firm X uses two (2) of its own trucks on a contract, leases two (2) trucks from DBE Firm Y and six (6) trucks from non-DBE Firm Z. DBE credit would be awarded for the total value of transportation services provided by Firm X and Firm Y, and may also be awarded for the total value of transportation services provided by four (4) of the six (6) trucks provided by Firm Z. In all, full credit would be allowed for the participation of eight (8) trucks. With respect to the other two (2) trucks provided by Firm Z, DBE credit could be awarded only for the fees or commissions pertaining to those trucks Firm X receives as a result of the lease with Firm Z;

6. The DBE may lease trucks without drivers from a non-DBE truck leasing company. If the DBE leases trucks from a non-DBE truck leasing company and uses its own employees as drivers, it is entitled to credit for the total value of these hauling services.

EXAMPLE: DBE Firm X uses two (2) of its own trucks on a contract. It leases two (2) additional trucks from non-DBE Firm Z. Firm X uses its own employees to drive the trucks leased from Firm Z. DBE credit would be awarded for the total value of the transportation services provided by all four (4) trucks; and

7. For purposes of determining whether a trucking firm performs a CUF, a lease must indicate that the DBE has exclusive use of and control over the truck. This does not preclude the leased truck from working for others during the term of the lease with the consent of the DBE, so long as the lease gives the DBE absolute priority for use of the leased truck. Leased trucks must display the name and identification number of the DBE.

- H. The bidder/offeror may be a joint venture or partnership that has a certified DBE as a partner. A "Joint Venture" means an association between a DBE firm and one (1) or more other firms to carry out a single, for-profit, business enterprise for



which the parties combine their property, capital, efforts, skills and knowledge, and in which the DBE is responsible for a distinct, clearly defined portion of the work of the contract, and whose share in the capital contribution, control, management, risks and profits are commensurate with its ownership interest.

- I. Effects of a Summary Suspension of a DBE. When a DBE's certification is suspended, the DBE may not be considered to meet a contract goal on a new contract and any work it does on a contract received during the suspension shall not be counted towards the overall goal. The DBE may continue to perform work under an existing contract executed before the DBE received a Notice of Suspension and may be counted towards the contract goal during the period of suspension as long as the DBE is performing a CUF under the existing contract.
- J. Effects of Decertification of a DBE. Should a DBE become decertified during the term of the subcontract for reasons beyond the control of and with no fault or negligence on the part of the contractor, the work remaining under the subcontract may be credited towards the contract goal, but are not included in the overall accomplishments.

Should the DBE be decertified after contract award and before notice to proceed, the contractor must still meet the DBE goal by either; a) withdrawing the subcontract from the DBE and expending good faith efforts to replace it with a DBE that is currently certified for that same work; or b) continuing with the subcontract with the decertified firm and expending good faith efforts to find other work not already subcontracted out to DBEs in an amount to meet the DBE goal either by; 1) increasing the participation of other DBEs on the project; 2) documenting good faith efforts; or 3) by a combination of the above.

## **VII. USE OF JOINT CHECKS UNDER THE DBE PROGRAM**

- A. The following guidelines apply to the use of joint checks:
  - 1. The second party (typically the prime contractor) acts solely as a guarantor;
  - 2. The DBE must release the check to the supplier;
  - 3. The use of joint checks is a commonly recognized business practice;
  - 4. The Department must approve the use of joint checks prior to use by contractors and/or DBEs. As part of this approval process the Department will analyze industry practice to confirm that the use of joint checks is commonly employed outside of the DBE program for non-DBE subcontractors on both federal and state funded contracts. Using joint checks shall not be approved if it conflicts with other aspects of the DBE regulations regarding CUF; and
  - 5. The Department will monitor the use of joint checks closely to avoid abuse.

- B. Contractors and DBEs should review the following general guidelines when determining whether to use joint checks closely to avoid abuse:
1. That standard industry practice applies to all contractors (federal and state contracts);
  2. Use of joint checks must be available to all subcontractors;
  3. Material industry sets the standard industry practice, not prime contractors;
  4. Short term, not to exceed reasonable time (i.e., one (1) year, two (2) years) to establish/increase a credit line with the material supplier;
  5. No exclusive arrangement between one (1) prime and one (1) DBE in the use of joint checks that might bring the independence of the DBE into question;
  6. Non-proportionate ratio of DBE's normal capacity to size of contract and quantity of material to be provided under the contract;
  7. The DBE is normally responsible to install and furnish the work item; and
  8. The DBE must be more than an extra participant in releasing the check to the material supplier.
- C. The Department shall allow the use of joint checks if the following general conditions are met:
1. DBE submits request to the Department for action;
  2. There is a formalized agreement between all parties that specify the conditions under which the arrangement shall be permitted;
  3. There is a full and prompt disclosure of the expected use of joint checks;
  4. The Department will provide prior approval;
  5. DBE remains responsible for all other elements of 49 CFR 26.55(c)(1);
  6. The agreement states clearly and determines that independence is not threatened because the DBE retains final decision making responsibility;
  7. The Department will determine that the request is not an attempt to artificially inflate DBE participation;
  8. Standard industry practice is only one (1) factor;
  9. The Department will monitor and maintain oversight of the arrangement by reviewing cancelled checks and/or certification statement of payment; and
  10. The Department will verify there is no requirement by prime contractor that the DBE is to use a specific supplier nor the prime contractor's negotiated unit price.

## **VIII. DEMONSTRATION OF GOOD FAITH EFFORTS FOR CONTRACT AWARD**

- A. When a project goal is not met, the Department shall conduct the initial review of GFE submitted by the bidder/offeror and shall determine whether the bidder/offeror has performed the quality, quantity, and intensity of efforts that demonstrate a reasonably active and aggressive attempt to meet the contract goal in accordance with 49 CFR Part 26, Appendix A.
- B. The bidder/offeror bears the responsibility of demonstrating that it met the contract goal, or if the contract goal was not met, by documenting the GFE it made in an attempt to meet the goal. It is the sole responsibility of the bidder/offeror to submit any and all documents, logs, correspondence, and any other records or information to the Department that will demonstrate that the bidder/offeror made good faith efforts to meet the DBE goal.
- C. In its good faith evaluation, the Department shall perform the following as part of its evaluation: a) request additional information and documents from the bidder/offeror; b) compare the bidder's/offeror's bid against the bids/offers of other bidders/offerors, and compare the DBEs and DBE work areas utilized by the bidder/offeror with the DBEs listed in other bids/offers submitted for this contract (If other bidders obtained DBEs in a particular work area in which the low bidder did not, the Department shall take this into consideration in its evaluation); c) verify contacts by bidders/offerors with DBEs; and d) compare the DBE and the categories of DBE work targeted by the bidder/offeror for participation in the contract, with the total pool of available DBEs ready, willing and able to perform work on each particular subcontract targeted by the bidder/offeror.
- D. Actions on the part of the bidder/offeror that will be considered demonstrative of good faith efforts include, but are not limited to, the following:
  - 1. Whether the bidder/offeror submitted the required information at the time of bid opening (i.e. DBE name, address, NAICS code, description of work, project name, and number), and dollar amounts for all subcontractors, within five (5) days of bid opening;
  - 2. Whether the bidder/offeror solicited through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising and/or written notices) the interest of all certified DBEs who have the capability to perform part or all of the work to be included under the contract. The Department will also consider whether the bidder/offeror solicited the participation of potential DBEs as early in the procurement process as practicable, and allowed sufficient time for the DBEs to properly inquire about the project and respond to the solicitation. The Department will also review whether the bidder/offeror took appropriate steps to follow up with interested DBEs in a timely manner to facilitate participation by DBEs in this project;
  - 3. Whether the bidder/offeror identified and broke up portions of work that can be performed by DBEs in order to increase the likelihood that a DBE will be able to participate, and that the DBE goal could be achieved (e.g. breaking out contract items into economically feasible units to facilitate

- DBE participation even when the bidder/offeror might otherwise prefer to self-perform these work items with its own forces);
4. Whether the bidder/offeror made available or provided interested DBEs with adequate information about the plans, specifications, and requirements of the project in a timely manner, and assisted them in responding to the bidder's/offeror's solicitation;
  5. Whether the bidder/offeror negotiated in good faith with interested DBEs. Evidence of such negotiations includes documenting: a) the names, addresses and telephone numbers of DBEs that were contacted; b) a description of the information that was provided to DBEs regarding the plans and specifications; and c) detailed explanation for not utilizing individual DBEs on the project;
  6. Whether the bidder/offeror solely relied on price in determining whether to use a DBE. The fact that there may be additional or higher costs associated with finding and utilizing DBEs are not, by itself, sufficient reasons for a bidder's/offeror's refusal to utilize a DBE, or the failure to meet the DBE goal, provided that such additional costs are not unreasonable. Also, the ability or desire of a bidder/offeror to perform a portion of the work with its own forces, that could have been undertaken by an available DBE, does not relieve the bidder/offeror of the responsibility to make good faith efforts to meet the DBE goal, and to make available and solicit DBE participation in other areas of the project to meet the DBE goal;
  7. Whether the bidder/offeror rejected DBEs as being unqualified without sound reasons based on a thorough investigation of their capabilities. The DBEs standing within the industry, membership in specific groups, organizations or associations, and political or social affiliation are not legitimate basis for the rejection or non-solicitation of bids from particular DBEs;
  8. Whether the bidder/offeror made efforts to assist interested DBEs in obtaining bonding, lines of credit, or insurance;
  9. Whether the bidder/offeror made efforts to assist interested DBEs in obtaining necessary equipment, supplies, materials or related assistance or services;
  10. Whether the bidder/offeror effectively used the services of available minority/women community organizations, minority/women business groups, contractors' groups, and local, state and federal minority/women business assistance offices or other organizations to provide assistance in recruitment and placement of DBEs;
  11. Whether the bidder/offeror, who selects a non-DBE over a DBE subcontractor, has quotes of each DBE and non-DBE subcontractor submitted to the bidder for work on the contract; and for each DBE that was contacted but not utilized by the bidder/offeror for a contract, the bidder/offeror has a detailed written explanation for each DBE detailing the reasons for the bidder's/offeror's failure or inability to utilize, or to allow the DBE to participate in the contract; and
  12. Whether other bidders/offerors met the goal and whether the apparent successful bidder/offeror could have met the goal with additional efforts.

The Department may determine that an apparent successful bidder/offeror who fell short of meeting the goal, made good faith efforts when it met or exceeded the average DBE participation obtained by other bidders/offerors.

**IX. ADMINISTRATIVE RECONSIDERATION.**

If it is determined by the Department that the apparent successful bidder/offeror has failed to meet the provisions of 49 CFR Section 26.53(a), the bidder/offeror may submit a request for administrative reconsideration. If under the provisions of 49 CFR, Section 26.53(d), it is determined by the Department that the apparent successful bidder/offeror has failed to meet the provisions of this subsection, the bidder/offeror may submit a written request for administrative reconsideration.

- A. Within five (5) working days of being informed in writing by the Department that the bidder/offeror has not documented sufficient GFE, a bidder/offeror may request administrative reconsideration. Bidders/offerors should make this request in writing to the following official:

Director of Transportation  
Hawaii Department of Transportation  
869 Punchbowl Street, Room 509  
Honolulu, Hawaii 96813

- B. The reconsideration official, or his or her designee (referred to as “reconsideration official”), shall not have played any role in the original determination that the bidder/offeror failed to meet the goal or make adequate good faith efforts to do so.
- C. As part of this reconsideration, the bidder/offeror will have the opportunity to provide written documentation or argument concerning the issue of whether it met the goal or made adequate GFE to do so. The bidder/offeror will have the opportunity to meet in person with the reconsideration official to discuss the issue of whether it met the goal or made adequate GFE to do so.
- D. In an administrative reconsideration, the reconsideration official will review all previously submitted documents, oral and written arguments, and other evidence presented in the reconsideration, in making the decision.
- E. The Department shall inform the bidder/offeror of the decision within thirty (30) days of the proceeding. The decision will state the Department’s findings, and explain the basis of those findings, with respect to whether or not the bidder/offeror met the contract goal, or whether or not the bidder/offeror made adequate GFE to achieve the contract goal.
- F. The reconsideration decision is not administratively appealable to USDOT but is appealable under HRS 103D-709.

**X. AWARD OF CONTRACT**

- A. In a sealed bid procurement, the Department reserves the right to reject any or all bids. The award of contract, if it is awarded, will be to the lowest responsive and responsible bidder who meets or exceeds the DBE project goal, or who makes good faith efforts to meet or exceed the DBE project goal, as determined by the Department.
- B. If the lowest responsible bidder does not meet the DBE project goal and does not demonstrate to the satisfaction of the Department that it made good faith efforts to meet the DBE project goal, such bid shall be rejected as non-responsive. The Department will then consider the next lowest responsive and responsible bidder for award in accordance with paragraph A above.

**XI. REPLACEMENT OF A DBE ON A PROJECT WITH A CONTRACT GOAL**

Under this contract, the prime contractor shall utilize the specific DBE listed to perform the work and supply the materials for which each is listed unless the contractor obtains written consent from the Department to replace a DBE. If the Department's consent is not provided, the contractor shall not be entitled to any payment for work or material unless it is performed or supplied by the listed DBE. The Department reserves the right to request copies of all DBE subcontracts.

The Department will require a contractor to make good faith efforts to replace a DBE that is terminated or has otherwise failed to complete its work on a contract with another certified DBE, to the extent needed to meet the contract goal. A prime contractor's inability to find a replacement DBE at the original price is not sufficient to demonstrate that good faith efforts have been made to replace the original DBE. The fact that the contractor has the ability and/or desire to perform the contract work with its own forces does not relieve the contractor of the obligation to make good faith efforts to find a replacement DBE, and it is not a sound basis for rejecting a prospective replacement DBE's reasonable quote.

The Department will require the prime contractor to promptly provide written notice to the project manager of the DBE's inability or unwillingness to perform and provide reasonable documentation.

The written notice by the contractor must include the following:

1. The date the contractor determined the certified DBE to be unwilling, unable or ineligible to perform work on the contract;
2. The projected date that the contractor shall require a substitution or replacement DBE to commence work if consent is granted by the Department;
3. Documentation of facts that describe and cite specific actions or inactions on the part of the affected DBE that led to the contractor's conclusion that the DBE is unwilling, unable, or ineligible to perform work on the contract;

4. A brief statement of the affected DBE's capacity and ability or inability to perform the work as determined by the contractor;
5. Documentation of contractor's good faith efforts to enable affected DBE to perform the work;
6. The current percentage of work completed on each bid item by the affected DBE;
7. The total dollar amount currently paid per bid item for work performed by the affected DBE;
8. The total dollar amount per bid item remaining to be paid to the DBE for work completed but for which the DBE has not received payment, and with which the contractor has no dispute; and
9. The total dollar amount per bid item remaining to be paid to the DBE for work completed, for which the DBE has not received payment, and with which the contractor and DBE have a dispute.

The prime contractor shall send a copy of the written notice to replace a certified DBE on a contract to the affected DBE. The affected DBE may submit a written response within five (5) calendar days to the Department to explain its position on its performance on the committed work. The Department shall consider both the prime contractor's request and DBE's stated position before approving the termination or substitution request, or determining if any action shall be taken against the contractor.

There shall be no substitution or termination of a DBE subcontractor at any time without the prior written consent of the Department. The Department will provide written consent only if the contractor has good cause, as determined by the Department, to terminate the DBE. Good cause may include, but is not limited to the following circumstances:

1. The DBE subcontractor fails or refuses to execute a written contract;
2. The listed DBE subcontractor fails or refuses to perform the work of its subcontract in a way consistent with normal industry standards;
3. The listed DBE subcontractor fails or refuses to meet the prime contractor's reasonable, nondiscriminatory bond requirements;
4. The listed DBE subcontractor becomes bankrupt, insolvent, or exhibits credit unworthiness;
5. The listed DBE subcontractor is ineligible to work on public works projects because of suspension and debarment proceedings pursuant to 2 CFR Parts 180, 215 and 1200 or applicable state law;
6. The Department has determined that the listed DBE subcontractor is not a responsible contractor;
7. The listed DBE subcontractor voluntarily withdraws from the project and provides to the Department written notice of its withdrawal;
8. The listed DBE is ineligible to receive DBE credit for the type of work required; and

9. A DBE owner dies or becomes disabled with the result that the listed DBE contractor is unable to complete its work on the contract.

Upon approval from the Department to replace a DBE, the contractor's good faith efforts shall be documented and submitted to the Department within seven (7) calendar days. This time period may be extended for another seven (7) calendar days upon request by the prime contractor.

If a DBE subcontractor is unable to perform work under the contract, and is to be replaced, the contractor's failure to obtain a substitute certified DBE or to make good faith effort to obtain such a substitute DBE subcontractor to perform said work, may constitute a breach of this contract for which the Department may terminate the contract or pursue such remedy as deemed appropriate by the Department.

## **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 Certification and Contract Compliance Management System (hereafter referred to as "online tracking system"). 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. The Department 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. The Department will not withhold any amount from any payment to the contractor, including retainage.
- B. The contractor shall pay all subcontractors within ten (10) calendar days after receipt of any progress payments from the Department. This clause applies to both DBE and non-DBE subcontractors, and all tiers of subcontracts.



- C. The Contractor will verify that payment or retainage has been released to the subcontractors or its suppliers within the specified time through entries in the Department'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 the Department's satisfaction, will be reported by the Contractor or the subcontractor.

- D. 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 ten (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 the Department. The contractor must obtain the prior written approval from the Department before it can continue to withhold retainage from any subcontractor who has completed its portion of the work. This clause applies to both DBE and non-DBE subcontractors, and all tiers of subcontracts.

#### **XIV. RECORDS**

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

1. The names, race/ethnicity, gender, address, phone number, and contact person of all DBE and non-DBE consultants, subcontractors, manufacturers, suppliers, truckers and vendors identified as DBEs (for vendor to identify whether it is a supplier or manufacturer);
2. The nature of work of each DBE and non-DBE consultant, subcontractor, manufacturer, supplier, trucker and vendor;
3. The dollar amount contracted with each DBE and non-DBE consultant, subcontractor, manufacturer, supplier, trucker and vendor; and
4. Cumulative dollar amount of all change orders to the subcontract.

**XV. FAILURE TO COMPLY WITH DBE 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 and suppliers are hereby advised that failure to carry out all DBE 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 the Department 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.

**REQUIRED CONTRACT PROVISIONS  
FEDERAL-AID CONSTRUCTION CONTRACTS**

- I. General
- II. Nondiscrimination
- III. Nonsegregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Compliance with Governmentwide Suspension and Debarment Requirements
- XI. Certification Regarding Use of Contract Funds for Lobbying

**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. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements 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 shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

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. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

**II. NONDISCRIMINATION**

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

**1. Equal Employment Opportunity:** Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under

this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.

b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

**2. EEO Officer:** The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

**3. Dissemination of Policy:** All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

**4. Recruitment:** When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

**5. Personnel Actions:** Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

**6. Training and Promotion:**

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are

applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

**7. Unions:** If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

**8. Reasonable Accommodation for Applicants / Employees with Disabilities:** The contractor must be familiar

with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

**9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment:** The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

**10. Assurance Required by 49 CFR 26.13(b):**

a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.

b. The contractor 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 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 contracting agency deems appropriate.

**11. Records and Reports:** The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on [Form FHWA-1391](#). The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor

will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

### III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

### IV. 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). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

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

a. All laborers and mechanics employed or working upon the site of the work, 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 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.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions

of paragraph 1.d. 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 shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). 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 classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH-1321) shall 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. (1) The contracting officer shall 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 shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore 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 utilized 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) 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 shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. 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.

(3) 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 shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour 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.

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall 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.

c. 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 shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

d. 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, 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.

## 2. Withholding

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, 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.

## 3. Payrolls and basic records

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, 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 section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) 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 section 1(b)(2)(B) of the Davis-

Bacon Act, the contractor shall 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. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

b.(1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency..

(2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed 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 Regulations, 29 CFR part 3;

(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 of work performed, as specified in the applicable wage determination incorporated into the contract.

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.

(4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, 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 may be grounds for debarment action pursuant to 29 CFR 5.12.

#### 4. Apprentices and trainees

##### a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed 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 Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall 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 the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly

rate specified in the applicable wage determination. Apprentices shall 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, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

##### b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.



d. 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 IV. 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 journeymen 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.

**6. Subcontracts.** The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 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.

**9. Disputes concerning labor standards.** 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 he or she) 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 section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

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

**V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT**

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 watchmen 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.

**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. 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 watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 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.

**3. Withholding for unpaid wages and liquidated damages.** The FHWA or the contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or 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, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.

**4. Subcontracts.** The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

## VI. SUBLETTING OR ASSIGNING THE CONTRACT

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

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" 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:

(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.

2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI 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. 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.

5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

## VII. 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 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.

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 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).

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).

## VIII. 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 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 1, 1916, (39 Stat. 355), as amended and supplemented;

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

## **IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT**

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

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.

2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

## **X. 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.

### **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.

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.

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.

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 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee 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 grantee or subgrantee 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.

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.

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. 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 Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

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. 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) 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;

(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; 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.

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

### **2. 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)

a. By signing and submitting this proposal, the prospective lower tier 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.

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 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 grantee or subgrantee 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 grantee or subgrantee 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.

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.

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 Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

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.

\* \* \* \* \*

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

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.

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

\* \* \* \* \*

**XI. 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 20).

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.

**ATTACHMENT A - EMPLOYMENT AND MATERIALS PREFERENCE FOR APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS ROAD CONTRACTS**

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 23 CFR 633.207(e) 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".

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

3  
 4 **“DIVISION 100 - GENERAL PROVISIONS**

5  
 6  
 7 **SECTION 101 - TERMS, ABBREVIATIONS, AND DEFINITIONS**

8  
 9 **101.01 Meaning of Terms.** The specifications are generally written in the  
 10 imperative mood. In sentences using the imperative mood, the subject, “the  
 11 Contractor shall”, is implied. In the material specifications, the subject may also  
 12 be the supplier, fabricator, or manufacturer supplying material, products, or  
 13 equipment for use on the project. The word “will” generally pertains to decisions  
 14 or actions of the State. Must and shall when used in a directive to or describing the  
 15 use of an action needed to be done by the Contractor are considered a mandatory  
 16 contractual duty of the Contractor.

17  
 18 When a publication is specified, it refers to the most recent date of issue,  
 19 including interim publications, before the bid opening date for the project, unless a  
 20 specific date or year of issue is provided.

21  
 22 **101.02 Abbreviations.** Meanings of abbreviations used in the specifications,  
 23 on the plans, or in other contract documents are as follows:

|    |        |   |
|----|--------|---|
| 24 |        |   |
| 25 | AAN    | American Association of Nurserymen                                    |
| 26 |        |   |
| 27 | AASHTO | American Association of State Highway and<br>Transportation Officials |
| 28 |        |   |
| 29 |        |   |
| 30 | ACI    | American Concrete Institute   |
| 31 |        |   |
| 32 | ADA    | Americans with Disabilities Act                                       |
| 33 |        |   |
| 34 | ADAAG  | Americans with Disabilities Act Accessibility Guidelines              |
| 35 |        |   |
| 36 | AGC    | Associated General Contractors of America                             |
| 37 |        |   |
| 38 | AIA    | American Institute of Architects                                      |
| 39 |        |   |
| 40 | AISC   | American Institute of Steel Construction                              |
| 41 |        |   |
| 42 | AISI   | American Iron and Steel Institute                                     |
| 43 |        |   |
| 44 | ANSI   | American National Standards Institute                                 |
| 45 |        |   |



|    |       |  |
|----|-------|--|
| 46 | APA   | American Plywood Association   |
| 47 |       |  |
| 48 | ARA   | American Railway Association   |
| 49 |       |  |
| 50 | AREA  | American Railway Engineering Association   |
| 51 |       |  |
| 52 | ASA   | American Standards Association   |
| 53 |       |  |
| 54 | ASCE  | American Society of Civil Engineers  |
| 55 |       |  |
| 56 | ASLA  | American Society of Landscape Architects   |
| 57 |       |  |
| 58 | ASTM  | American Society for Testing and Materials   |
| 59 |       |  |
| 60 | AWG   | American Wire Gauge  |
| 61 |       |  |
| 62 | AWPA  | American Wood Preserver's Association  |
| 63 |       |  |
| 64 | AWS   | American Welding Society   |
| 65 |       |  |
| 66 | AWWA  | American Water Works Association   |
| 67 |       |  |
| 68 | BMP   | Best Management Practice   |
| 69 |       |  |
| 70 | CCO   | Contract Change Order  |
| 71 |       |  |
| 72 | CFR   | Code of Federal Regulations  |
| 73 |       |  |
| 74 | CRSI  | Concrete Reinforcing Steel Institute   |
| 75 |       |  |
| 76 | DCAB  | Disability and Communication Access Board, Department of<br>Health, State of Hawaii                  |
| 77 |       |  |
| 78 |       |  |
| 79 | DOTAX | Department of Taxation, State of Hawaii  |
| 80 |       |  |
| 81 | EPA   | U.S. Environmental Protection Agency   |
| 82 |       |  |
| 83 | FHWA  | Federal Highway Administration,<br>U.S. Department of Transportation                                 |
| 84 |       |  |
| 85 |       |  |
| 86 | FSS   | Federal Specifications and Standards,<br>General Services Administration, U.S. Department of Defense |
| 87 |       |  |
| 88 |       |  |
| 89 | HAR   | Hawaii Administrative Rules  |
| 90 |       |  |

|     |       |   |
|-----|-------|---|
| 91  | HDOT  | Department of Transportation, State of Hawaii             |
| 92  |       |   |
| 93  | HIOSH | Occupational Safety and Health, Department of Labor and   |
| 94  |       | Industrial Relations, State of Hawaii                     |
| 95  |       |   |
| 96  | HMA   | Hot Mix Asphalt   |
| 97  |       |   |
| 98  | HRS   | Hawaii Revised Statutes                                   |
| 99  |       |   |
| 100 | ICEA  | Insulated Cable Engineers Association (formerly IPCEA)    |
| 101 |       |   |
| 102 | IMSA  | International Municipal Signal Association                |
| 103 |       |   |
| 104 | IRS   | Internal Revenue Service                                  |
| 105 |       |   |
| 106 | ITE   | Institute of Transportation Engineers                     |
| 107 |       |   |
| 108 | MASH  | AASHTO's Manual for Assessing Safety Hardware             |
| 109 |       |   |
| 110 | MTRB  | HDOT's Material and Testing Branch                        |
| 111 |       |   |
| 112 | MUTCD | Manual on Uniform Traffic Control Devices for Streets and |
| 113 |       | Highways, FHWA, U.S. Department of Transportation         |
| 114 |       |   |
| 115 | NCHRP | National Cooperative Highway Research Program             |
| 116 |       |   |
| 117 | NEC   | National Electric Code                                    |
| 118 |       |   |
| 119 | NEMA  | National Electrical Manufacturers Association             |
| 120 |       |   |
| 121 | NFPA  | National Forest Products Association                      |
| 122 |       |   |
| 123 | NPDES | National Pollutant Discharge Elimination System           |
| 124 |       |   |
| 125 | OSHA  | Occupational Safety and Health Administration/Act,        |
| 126 |       | U.S. Department of Labor                                  |
| 127 |       |   |
| 128 | SAE   | Society of Automotive Engineers                           |
| 129 |       |   |
| 130 | SI    | International Systems of Units                            |
| 131 |       |   |
| 132 | UFAS  | Uniform Federal Accessibility Standards                   |
| 133 |       |   |
| 134 | UL    | Underwriter's Laboratory                                  |
| 135 |       |   |

136 USGS U.S. Geological Survey  
137  
138 VECP Value Engineering Cost Proposal  
139

140 **101.03 Definitions.** Whenever the following words, terms, or pronouns are  
141 used in the contract documents, unless otherwise prescribed therein and without  
142 regards to the use or omission of uppercase letters, the intent and meaning shall  
143 be interpreted as follows:  
144

145 **Addendum (plural - Addenda)** - A written or graphic document, including  
146 drawings and specifications, issued by the Director during the bidding period. This  
147 document modifies or interprets the bidding documents by additions, deletions,  
148 clarifications or corrections.  
149

150 **Addition** (to the contract sum) - Amount added to the contract sum by change  
151 order.  
152

153 **Advertisement** - A public announcement inviting bids for work to be performed or  
154 materials to be furnished.  
155

156 **Amendment** - A written document issued to amend the existing contract between  
157 the State and Contractor and properly executed by the Contractor and Director.  
158

159 **Award** - Written notification to the bidder that the bidder has been awarded a  
160 contract.  
161

162 **Bad Weather Day (or Unworkable Day)** - A day when weather or other conditions  
163 prevent a minimum of four hours of work with the Contractor's normal work force  
164 on critical path activities at the site.  
165

166 **Bag** - 94 pounds of cement.  
167

168 **Barrel** - 376 pounds of cement.  
169

170 **Base Course** - The layer or layers of specified material or selected material of a  
171 designed thickness placed on a subbase or subgrade to support a surface course.  
172

173 **Basement Material** - The material in excavation or embankments underlying the  
174 lowest layer of subbase, base, pavement, surfacing or other specified layer.  
175

176 **Bid** - See Proposal.  
177

178 **Bidder** - An individual, partnership, corporation, joint venture or other legal entity  
179 submitting, directly or through a duly authorized representative or agent, a  
180 proposal for the work or construction contemplated.  
181

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

185

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

190

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

194

195 **Calendar Day** - See Day.

196

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

206

207 **Completion** - See Substantial Completion and Final Completion.

208

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

211

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

214

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

220

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

223

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

226

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

234

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

237

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

240

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

243

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

250

251 **Contracting Officer** - See Engineer.

252

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

256

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

259

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

263

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

266

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

269

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

273

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

276

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

278

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

285

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

290

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

293

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

298

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

302

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

305

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

308

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

311

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

315

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

318

319 **Informational Submittal** - A submittal, e.g., additional-advance-direct submittal  
320 by e-mail by the contractor to the Material Testing and Research Branch, of such  
321 things as but not limited to: a final copy of fully executed contract change order  
322 with attachments, contractor QC test results or schedules, or other documents that  
323 are designated as an Informational Submittal. It is a process to inform the receiver  
324 of a task that has been performed or will soon be performed. Submitted for  
325 workload scheduling purposes; it does not require a response or action from the  
326 designated receiver, in general, is not used for payment purposes unless the  
327 Engineer or MTRB designated it as such. Nor does it count as one of the other  
328 required submittals in number.

329

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

332

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

335

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

338

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

341

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

346

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

349

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

352

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

357

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

362

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

365

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

369  
370 **Payment Bond** - The security executed by the Contractor and surety or sureties  
371 furnished to the Department to guarantee payment by the Contractor to laborers,  
372 material suppliers and subcontractors in accordance with the terms of the contract.

373  
374 **Physical Work** - Physical construction activities on the project site or at  
375 appurtenant facilities including staging areas. It includes; (i) building or installing  
376 any structures or facilities including, but not limited to sign erection; BMP  
377 installation; field office site grading and building; (ii) removal, adjustment, or  
378 demolition of physical obstructions on site; (iii) any ground breaking activities; and  
379 (iv) any utility work. It does not include pre-construction environmental testing  
380 (such as water quality baseline measurements) that may be required as part of  
381 contract.

382  
383 **Pre-Final Inspection** - Inspection scheduled when Contractor notifies Engineer  
384 that all physical work on the project, with the exception of planting period and plant  
385 establishment period, has been completed. Notice from Contractor of substantial  
386 completion will suspend contract time until Contractor receives punchlist from  
387 Engineer.

388  
389 **Profile Grade** - The elevation or gradient of a vertical plane intersecting the top  
390 surface of the proposed pavement.

391  
392 **Project Acceptance Date** - The calendar day on which the Engineer accepts the  
393 project as completed. See Final Completion.

394  
395 **Proposal (Bid)** - The executed document submitted by a Bidder in response to a  
396 solicitation request, to perform the work required by the proposed contract  
397 documents, for the price quoted and within the time allotted.

398  
399 **Public Traffic** - Vehicular or pedestrian movement on a public way.

400  
401 **Punchlist** - A list compiled by the Engineer specifying work yet to be completed or  
402 corrected by the Contractor in order to substantially complete the contract.

403  
404 **Questionnaire** - The specified forms on which the bidder shall furnish required  
405 information as to its ability to perform and finance the work.

406  
407 **Request for Change Proposal** - A written notice from the Engineer to the  
408 Contractor requesting that the Contractor provide a price and/or time proposal for  
409 contemplated changes preparatory to the issuance of a field order or change order.

410



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

413  
414 **Roadbed** - The graded portion of a highway within top and side slopes, prepared  
415 as a foundation for the pavement structure and shoulders.

416  
417 **Roadside** - The area between the outside edges of the shoulders and the right-of-  
418 way boundaries. Unpaved median areas between inside shoulders of divided  
419 highways and infield areas of interchanges are included.

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

422  
423 **Shop Drawings** - All drawings, diagrams, illustrations, schedules and other data  
424 or information which are specifically prepared or assembled by or for the  
425 Contractor and submitted by the Contractor to illustrate some portion of the work.

426  
427 **Shoulder** - The portion of the roadway next to the traveled way for:  
428 accommodation of stopped vehicles, placement of underground facilities,  
429 emergency use, and lateral support of base and surface courses.

430  
431 **Sidewalk** - That portion of the roadway primarily constructed for use by  
432 pedestrians.

433  
434 **Solicitation** - An invitation to bid or request for proposals or any other document  
435 issued by the Department to solicit bids or offers to perform a contract. The  
436 solicitation may indicate the time and place to receive the bids or offers and the  
437 location, nature and character of the work, construction or materials to be provided.

438  
439 **Specifications** - Compilation of provisions and requirements to perform  
440 prescribed work.

441  
442 **(A) Standard Specifications.** Standard Specifications. Specifications  
443 by the State intended for general application and repetitive use, i.e., State  
444 of Hawaii Standard Specifications for Road and Bridge Construction.

445  
446 **(B) Special Provisions.** Revisions and additions to the standard  
447 specifications applicable to an individual project.

448  
449 **Standard Plans** - Drawings provided by the State for specific items of work  
450 approved for repetitive use.

451  
452 **State** - The State of Hawaii, its Departments and agencies, acting through its  
453 authorized representative(s).

454  
455 **State Waters** - All waters, fresh, brackish, or salt, around and within the State,  
456 including, but not limited to, coastal waters, streams, rivers, drainage ditches,  
457 ponds, reservoirs, canals, ground waters, and lakes; provided that drainage

458 ditches, ponds, and reservoirs required as a part of a water pollution control system  
459 are excluded.

460

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

463

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

467

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

470

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

474

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

479

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

482

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

486

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

490

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

495

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

499

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

501

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

505

506

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

507

508

509

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

510

511

512

**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.

513

514

515

**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.

516

517

518

519

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

520

521

522

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

523

524

525

**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.

526

527

528

529

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

530

531

532

533

**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.

534

535

536

537

**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.

538

539

540

541

542

**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

543

544

545

546

547

548

549

550

551 standards, treatment and pretreatment standards, or standards of performance for  
552 new sources adopted by the Department of Health.

553  
554 **Work** - The furnishing of all labor, material, equipment, and other incidentals  
555 necessary or convenient for the successful execution of all the duties and  
556 obligations imposed by the contract.

557  
558 **Working Day** - A calendar day in which a Contractor is capable of working four or  
559 more hours with its normal work force, exclusive of:

560  
561 (1) Saturdays, Sundays, and recognized legal State holidays and such  
562 other days specified by the contract documents as non-working days,

563  
564 (2) Day in which the Engineer suspends work for four or more hours  
565 through no fault of the Contractor.”

566  
567  
568  
569  
570

**END OF SECTION 101**

1 Make this section a part of the Standard Specifications:

2  
3 **“SECTION 102 - BIDDING REQUIREMENTS AND CONDITIONS**

4  
5  
6 **102.01 Prequalification of Bidders.** Prospective bidders shall be capable of  
7 performing the work for which they are bidding.

8  
9 In accordance with HRS Chapter 103D-310, the Department may require  
10 any prospective bidder to submit answers to questions contained in the 'Standard  
11 Qualification Questionnaire For Prospective Bidders On Public Works Contracts'  
12 furnished by the Department, properly executed and notarized, setting forth a  
13 complete statement of the experience of such prospective bidder and its  
14 organization in performing similar work and a statement of the equipment  
15 proposed to be used, together with adequate proof of the availability of such  
16 equipment. Whenever it appears to the Department, from answers to the  
17 questionnaire or otherwise, that the prospective bidder is not fully qualified and  
18 able to perform the intended work, the Department will, after affording the  
19 prospective bidder an opportunity to be heard and if still of the opinion that the  
20 bidder is not fully qualified to perform the work, refuse to receive or consider any  
21 bid offered by the prospective bidder. All information contained in the answers to  
22 the questionnaire shall be kept confidential. Questionnaire so submitted shall be  
23 returned to the bidders after serving their purpose.

24  
25 No person, firm or corporation may bid where (1) the person, firm, or  
26 corporation, or (2) a corporation owned substantially by the person, firm, or  
27 corporation, or (3) a substantial stockholder or an officer of the corporation, or (4)  
28 a partner or substantial investor in the firm is in arrears in payments owed to the  
29 State or its political subdivisions or is in default as a surety or failure to do  
30 faithfully and diligently previous contracts with the State.

31  
32 **102.02 Contents of Proposal Forms.** The Department will furnish  
33 prospective bidders with proposal forms posted in HlePRO stating:

- 34  
35 (1) The location,  
36  
37 (2) Description of the proposed work,  
38  
39 (3) The approximate quantities,  
40  
41 (4) Items of work to be done or materials to be furnished,  
42  
43 (5) A schedule of items, and  
44  
45 (6) The time in which the work shall be completed.  
46

47 Papers bound with or attached to the proposal form are part of the  
48 proposal. The bidder shall not detach or alter the papers bound with or attached  
49 to the proposal when the bidder submits its proposal through HlePRO.  
50

51 Also, the bidder shall consider other documents including the plans and  
52 specifications a part of the proposal form whether attached or not.  
53

54 **102.03 (Unassigned).**  
55

56 **102.04 Estimated Quantities.** The quantities shown in the contract are  
57 approximate and are for the comparison of bids only. The actual quantity of work  
58 may not correspond with the quantities shown in the contract. The Department  
59 will make payment to the Contractor for unit price items in accordance with the  
60 contract for only the following:  
61

62 (1) Actual quantities of work done and accepted, not the estimated  
63 quantities; or  
64

65 (2) Actual quantities of materials furnished, not the estimated  
66 quantities.  
67

68 The Department may increase, decrease, or omit each scheduled  
69 quantities of work to be done and materials to be furnished. When the  
70 Department increases or decreases the estimated quantity of a contract item by  
71 more than 15% the Department will make payment for such items in accordance  
72 with Subsection 104.06 - Methods of Price Adjustment.  
73

74 **102.05 Examination of Contract and Site of Work.** The bidder shall  
75 examine carefully the site of the proposed work and contract before submitting a  
76 proposal.  
77

78 By the act of submitting a bid for the proposed contract, the bidder  
79 warrants that:  
80

81 (1) The bidder and its Subcontractors have reviewed the contract  
82 documents and found them free from ambiguities and sufficient for the  
83 purpose intended;  
84

85 (2) The bidder and its workers, employees and subcontractors have  
86 the skills and experience in the type of work required by the contract  
87 documents bid upon;  
88

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

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

95  
96 Also, the bidder warrants that the bidder has examined the site of the  
97 work. From its investigations, the bidder acknowledges satisfaction on:  
98

- 99 (1) The nature and location of the work;  
100  
101 (2) The character, quality, and quantity of materials;  
102  
103 (3) The difficulties to be encountered; and  
104  
105 (4) The kind and amount of equipment and other facilities needed.  
106

107 Subsurface information or hydrographic survey data furnished are for the  
108 bidders' convenience only. The data and information furnished are the product of  
109 the Department's interpretation gathered in investigations made at the specific  
110 locations. These conditions may not be typical of conditions at other locations  
111 within the project area or that such conditions remain unchanged. Also,  
112 conditions found at the time of the subsurface explorations may not be the same  
113 conditions when work starts. The bidder shall be solely responsible for  
114 assumptions, deductions, or conclusions the bidder may derive from the  
115 subsurface information or data furnished.  
116

117 If the Engineer determines that the natural conditions differ from that  
118 originally anticipated or contemplated by the Contractor in the items of  
119 excavation, the State may treat the difference in natural conditions, as falling  
120 within the meaning of Subsection 104.02 – Changes.  
121

122 **102.06 Preparation of Proposal.** The submittal of its proposal shall be on  
123 forms furnished by the Department. The bidder shall specify in words or figures:  
124

- 125 (1) A unit price for each pay item with a quantity given;  
126  
127 (2) The products of the respective unit prices and quantities;  
128  
129 (3) The lump sum amount; and  
130  
131 (4) The total amount of the proposal obtained by adding the amounts  
132 of the several items.  
133

134 The words and figures shall be in ink or typed. If a discrepancy occurs  
135 between the prices written in words and those written in figures, the prices written  
136 in words shall govern.  
137

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

141  
142 The bidder shall sign the proposal properly in ink. A duly authorized  
143 representatives of the bidder or by an agent of the bidder legally qualified and  
144 acceptable to the Department shall sign, including one or more partners of the  
145 bidder and one or more representatives of each entity comprising a joint venture.

146  
147 When an agent, other than the officer(s) of a corporation authorized to  
148 sign contracts for the corporation or a partner of a partnership, signs the  
149 proposals, a 'Power of Attorney' shall be on file with the Department or submitted  
150 with the proposal. Otherwise, the Department will reject the proposal as irregular  
151 and unauthorized.

152  
153 The bidder shall submit acceptable evidence of the authority of the  
154 partner, member(s) or officer(s) to sign for the partnership, joint venture, or  
155 corporation respectively with the proposal. Otherwise, the Department will reject  
156 the proposal as irregular and unauthorized.

157  
158 **102.07 Irregular Proposals.** The Department may consider proposals  
159 irregular and may reject the proposals for the following reasons:

160  
161 (1) The proposal is a form not furnished by the Department, altered, or  
162 detached;

163  
164 (2) The proposal contains unauthorized additions, conditions, or  
165 alternates. Also, the proposal contains irregularities that may tend to  
166 make the proposal incomplete, indefinite, or ambiguous to its meaning;

167  
168 (3) The bidder adds provisions reserving the right to accept or reject an  
169 award. Also, the bidder adds provisions into a contract before an award;

170  
171 (4) The proposal does not contain a unit price for each pay item listed  
172 except authorized optional pay items; and

173  
174 (5) Prices for some items are out of proportion to the prices for other  
175 items.

176  
177 (6) If in the opinion of the Director, the bidder and its listed  
178 subcontractors do not have the Contractor's licenses or combination of  
179 Contractor's licenses necessary to complete the work.

180



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

186  
187 **102.08 Proposal Guaranty.** The Department will not consider a proposal of  
188 \$25,000 or more unless accompanied by:

189  
190 (1) A deposit of legal tender; or

191  
192 (2) A valid surety bid bond, underwritten by a company licensed to  
193 issue bonds in the State of Hawaii, in the form and composed,  
194 substantially, with the same language as provided herewith and signed by  
195 both parties; or

196  
197 (3) A certificate of deposit, share certificate, cashier's check,  
198 treasurer's check, teller's check, or official check drawn by, or a certified  
199 check accepted by and payable on demand to the State by a bank,  
200 savings institution, or credit union insured by the Federal Deposit  
201 Insurance Corporation (FDIC) or the National Credit Union Administration  
202 (NCUA).

203  
204 (a) The bidder may use these instruments only to a maximum of  
205 \$100,000.

206  
207 (b) If the required security or bond amount totals over \$100,000  
208 more than one instrument not exceeding \$100,000 each and issued  
209 by different financial institutions shall be acceptable.

210  
211 (c) The instrument shall be made payable at sight to the  
212 Department.

213  
214 In accordance with HRS Chapter 103D-323, the above shall be in a sum  
215 not less than 5% of the amount bid.

216  
217 **102.09 Delivery of Proposal.** The bidder shall submit the proposal in  
218 HlePRO. Bids received after said due date and time shall not be considered.

219  
220 **102.10 Withdrawal or Revision of Proposals.** A bidder may withdraw or  
221 revise a proposal after the bidder submits the proposal in HlePRO. Withdrawal  
222 or revision of proposal must be completed before the time set for the receiving of  
223 bids.

224  
225 **102.11 Public Opening of Proposals.** Not applicable.  
226

227 **102.12 Disqualification of Bidders.** The Department may disqualify a bidder  
228 and reject its proposal for the following reasons:

- 229
- 230 (1) Submittal of more than one proposal whether under the same or  
231 different name.
- 232
- 233 (2) Evidence of collusion among bidders. The Department will not  
234 recognize participants in collusion as bidders for any future work of the  
235 Department until such participants are reinstated as qualified bidders.
- 236
- 237 (3) Lack of proposal guaranty.
- 238
- 239 (4) Submittal of an unsigned or improperly signed proposal.
- 240
- 241 (5) Submittal of a proposal without a listing of subcontractors or  
242 containing only a partial or incomplete listing of subcontractors.
- 243
- 244 (6) Submittal of an irregular proposal in accordance with Subsection  
245 102.07 - Irregular Proposals.
- 246
- 247 (7) Evidence of assistance from a person who has been an employee  
248 of the agency within the preceding two years and who participated while in  
249 State office or employment in the matter with which the contract is directly  
250 concerned, pursuant to HRS Chapter 84-15.
- 251
- 252 (8) Suspended or debarred in accordance with HRS Chapter 104-25.
- 253
- 254 (9) Failure to complete the prequalification questionnaire, if applicable.
- 255
- 256 (10) Failure to attend the mandatory pre-bid meeting, if applicable.
- 257

258 **102.13 Material Guaranty.** The successful bidder may be required to furnish  
259 a statement of the composition, origin, manufacture of materials, and samples.

260

261 **102.14 Substitution of Materials and Equipment Before Bid Opening.** See  
262 Subsection 106.13 for Substitution Of Materials and Equipment After Bid  
263 Opening.

264

265 (A) **General.** When brand names of materials or equipment are  
266 specified in the contract documents, they are to indicate a quality, style,  
267 appearance, or performance and not to limit competition. The bidder shall  
268 base its bid on one of the specified brand names unless alternate brands  
269 are qualified as equal or better in an addendum. Qualification of such  
270 proposed alternate brands shall be submitted in HlePRO. The request  
271 must be posted in HlePRO no later than 14 calendar days before the bid  
272 opening date, not including the bid opening date

273 An addendum will be issued to inform all prospective bidders of any  
274 accepted substitution in accordance with Subsection 102.17 – Addenda.

275  
276 **(B) Statement of Variances.** The statement of variances must list all  
277 features of the proposed substitution that differ from the contract  
278 documents and must further certify that the substitution has no other  
279 variant features. The brochure and information submitted shall be clearly  
280 marked showing make, model, size, options, and any other features  
281 requested by the Engineer and must include sufficient evidence to  
282 evaluate each feature listed as a variance. A request will be denied if  
283 submitted without sufficient evidence. If after installing the substituted  
284 product, an unlisted variance is discovered, the Contractor shall  
285 immediately replace the product with a specified product at no increase in  
286 contract price and contract time.

287  
288 **(C) Substitution Denial.** Any substitution request not complying with  
289 the above requirements will be denied.

290  
291 **102.15 Preferences.** Hawaii Products and Recycled Products shall not apply  
292 to this project.

293  
294 **102.16 Certification for Safety and Health Program for Bids in excess of**  
295 **\$100,000.** In accordance with HRS Chapter 396-18, the bidder or offeror, by  
296 signing and submitting this proposal, certifies that a written safety and health plan  
297 for this project will be available and implemented by the notice to proceed date  
298 for this project. Details of the requirements of this plan may be obtained from the  
299 State Department of Labor and Industrial Relations, Occupational Safety and  
300 Health Division (HIOSH).

301  
302 **102.17 Addenda.** Addenda issued shall become part of the contract  
303 documents. Addenda to the bid documents will be provided to all prospective  
304 bidders via HlePRO. Each addendum shall be an addition to the contract  
305 documents. The terms and requirements of the bid documents (i.e., drawings,  
306 specifications and other bid and contract documents) cannot be changed prior to  
307 the bid opening except by a duly issued addendum.”

308  
309  
310  
311  
312 **END OF SECTION 102**

1 Make this section a part of the Standard Specifications:  
2

3 **“SECTION 103 - AWARD AND EXECUTION OF CONTRACT**  
4

5  
6 **103.01 Consideration of Proposals.** The Department will compare the  
7 proposals in terms of the summation of the products of the approximate quantities  
8 and the unit bid prices after the submittal date and time established in HlePRO. If  
9 a discrepancy occurs between the unit bid price and the bid price, the unit bid price  
10 shall govern.  
11

12 The “Buy America” provisions in the Surface Transportation Assistance Act  
13 of 1982 is applicable to Federal-aid projects. Bidders may submit a bid based upon  
14 the furnishing and use of domestic steel or foreign steel. Manufacturing processes  
15 for domestic steel shall occur in the United States.  
16

17 The Department reserves the right to reject proposals, waive technicalities or  
18 advertise for new proposals, if the rejection, waiver, or new advertisement favors  
19 the Department.  
20

21 **103.02 Award of Contract.** The award of contract, if it be awarded, will be made  
22 within 60 calendar days after the opening of bids, to the lowest responsible  
23 bidder whose proposal complies with all the requirements. (Through HlePRO). The  
24 successful bidder will be notified by letter mailed to the address shown in its  
25 proposal, that its proposal has been accepted, and that it has been awarded  
26 the contract.  
27

28 **(1) Requirement for Award.** To be eligible for award, the apparent  
29 low bidder will be contacted to submit copies of the documents listed  
30 below to demonstrate compliance with HRS Section 103D-310(c). The  
31 documents should be submitted to the Department as soon as possible.  
32 If a valid certificate/clearance is not submitted on a timely basis for award  
33 of a contract, a bidder otherwise responsive and responsible may not  
34 receive the award. See also Subsection 108.03 – Preconstruction Data  
35 Submittal.  
36

37 **(A) Tax Clearance.** Pursuant to HRS Sections 103D-310(c), 103-53 and  
38 103D-328, the successful bidder shall be required to submit a certified copy  
39 of its tax clearance issued by the Hawaii State Department of Taxation  
40 (DOTAX) and the Internal Revenue Service (IRS) to demonstrate its  
41 compliance with HRS Chapter 237. A tax clearance is valid for six (6) months  
42 from the most recent approval stamp date on the tax clearance and must be  
43 valid on the bid’s first legal advertisement date or any date thereafter up to  
44 the bid opening date.  
45

46 FORM A6, TAX CLEARANCE CERTIFICATE, is available at  
47 the following website:

48 <http://www.hawaii.gov/tax/>  
49

50 To receive DOTAX Forms by fax or mail, phone  
51 (808) 587-7572 or 1-800-222-7572.  
52

53  
54 The application for the Tax Clearance Certificate is the responsibility  
55 of the bidder and must be submitted directly to the DOTAX or IRS. The  
56 approved certificate may then be submitted to the Department.  
57

58 **(B) DLIR Certificate of Compliance.** Pursuant to HRS Section 103D-  
59 310(c), the successful bidder shall be required to submit a copy (faxed copies  
60 are acceptable) of its approved certificate of compliance issued by the Hawaii  
61 State Department of Labor and Industrial Relations (DLIR) to demonstrate its  
62 compliance with unemployment insurance (HRS Chapter 383), workers'  
63 compensation (HRS Chapter 386), temporary disability insurance (HRS  
64 Chapter 392), and prepaid health care (HRS Chapter 393). The certificate is  
65 valid for six (6) months from the most recent approval stamp date on the  
66 certificate and must be valid on the bid's first legal advertisement date or any  
67 date thereafter up to the bid opening date. For certificates which receive a  
68 "pending" approval stamp, a DLIR approval stamp is required prior to the  
69 issuance of the Notice to Proceed.  
70

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

73 [www.hawaii.gov/labor](http://www.hawaii.gov/labor)  
74

75  
76 More information is available by calling the DLIR Unemployment Insurance  
77 Division at (808) 586-8926.  
78

79 Inquiries regarding the status of a LIR#27 Form may be made by calling  
80 the DLIR Disability Compensation Division at (808) 586-9200.  
81

82 The application for the Certificate of Compliance is the responsibility of  
83 the bidder and must be submitted directly to the DLIR. The approved  
84 certificate may then be submitted to the Department.  
85

86 **(C) DCCA Certificate of Good Standing.** Pursuant to HRS Section  
87 103D-310(c), the successful bidder shall be required to submit a copy (faxed  
88 copies are acceptable) of its approved Certificate of Good Standing issued by  
89 the Hawaii State Department of Commerce and Consumer Affairs (DCCA),  
90 Business Registration Division (BREG) to demonstrate that it is either:  
91

- 92 (1) Incorporated or organized under the laws of the State; or  
93  
94 (2) Registered to do business in the State as a separate branch or  
95 division that is capable of fully performing under the contract.  
96

97 The Certificate of Good Standing is valid for six (6) months from  
98 the approval date on the certificate and must be valid on the bid's first  
99 legal advertisement date or any date thereafter up to the bid opening  
100 date. A Hawaii business that is a sole proprietorship, however, is not  
101 required to register with the BREG, and therefore not required to  
102 submit a Certificate of Good Standing. Bidders are advised that there  
103 are costs associated with registering and obtaining a Certificate of  
104 Good Standing from the DCCA.  
105

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

108 [www.hawaii.gov/dcca/](http://www.hawaii.gov/dcca/)  
109  
110

111 The application for the Certificate of Good Standing is the  
112 responsibility of the bidder and must be submitted directly to the DCCA. The  
113 approved certificate may then be submitted to the Department.  
114

115 (D) **Hawaii Compliance Express (HCE).** In lieu of the certificates  
116 referenced above, the bidder may make available proof of compliance  
117 through the Hawaii Compliance Express or any other designated certification  
118 process. Bidders may apply and register at the "Hawaii Compliance Express"  
119 website: <https://vendors.ehawaii.gov/hce/>  
120

121 **103.03 Cancellation of Award.** The Department reserves the right to cancel  
122 the award of contracts before the execution of said contract by the parties.  
123 There will be no liability to the awardee and to other bidders.  
124

125 **103.04 Return of Proposal Guaranty.** The Department will return the proposal  
126 guaranties, except those of the three lowest bidders, after the Department  
127 checks the proposals. The Department will return the proposal guaranties of the  
128 remaining two lowest bidders not awarded the contract within five working days  
129 following the execution of the contract. The Department will return the successful  
130 bidder's proposal guaranty after the successful bidder furnishes a bond and  
131 executes the contract.  
132

133 **103.05 Requirement of Contract Bond.** At the time of execution of the contract,  
134 the successful bidder shall file a good and sufficient performance bond and a  
135 payment bond on the forms furnished by the Department conditioned for the full  
136 and faithful performance of the contract in accordance with the terms and intent  
137 thereof and for the prompt payment to all others for all labor and material furnished  
138 by them to the bidder and used in the prosecution of the work provided for in the  
139 contract. The bonds shall be of an amount equal to 100 percent of the amount of  
140 the contract price and include 5 percent of the contract amount estimated to be  
141 required for extra work. The bidder shall limit the acceptable performance and  
142 payment bonds to the following:

143  
144 (a) Legal tender;

145  
146 (b) Surety bond underwritten by a company licensed to issue bonds in the  
147 State of Hawaii; or

148  
149 (c) A certificate of deposit; share certificate; cashier's check; treasurer's  
150 check, teller's check drawn by or a certified check accepted by and payable  
151 on demand to the State by a bank savings institution or credit union insured  
152 by the Federal Deposit Insurance Corporation (FDIC) or the National Credit  
153 Union Administration (NCUA).

154  
155 1. The bidder may use these instruments only to a maximum of  
156 \$100,000.

157  
158 2. If the required security or bond amount totals over \$100,000  
159 more than one instrument not exceeding \$100,000 each and issued  
160 by different financial institutions shall be acceptable.

161  
162 Such bonds shall also by the terms inure to the benefit of any and all persons  
163 entitled to file claims for labor done or material furnished in the work so as to give  
164 them a right of action as contemplated by HRS Section 103D-324.

165  
166 **103.06 Execution of the Contract.** The contract bond and HRS Chapter 104 -  
167 Compliance Certificate, similar to a copy of the same annexed hereto, shall  
168 be executed by the successful bidder and returned within ten days after the award  
169 of the contract or within such further time as the Director may allow after the  
170 bidder has received the contract for execution.

171  
172 The contract shall not bind the Department unless said parties execute  
173 the contract and the Director of Finance endorses the bidder's certificate in  
174 accordance with HRS Section 103-39.

176 **103.07 Failure to Execute Contract.** Failure to execute the contract and file  
177 acceptable bonds shall be cause for the cancellation of the award in accordance  
178 with Subsection 103.06 - Execution of the Contract. Also, the Contractor forfeits the  
179 proposal guaranty which becomes the property of the Department. This is not a  
180 penalty, but liquidated damages sustained by the State. The Department may then  
181 make award to the next lowest responsible bidder or the Department may  
182 readvertise and construct the work under contract.”

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**END OF SECTION 103**



1   **SECTION 104 – SCOPE OF WORK**  
2

3   Make the following amendment to said Section:  
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5   **(I)**    Amend **Section 104.11(B) Contractor’s Duty to Locate and Protect**  
6 **Utility** by adding the following after line 291:  
7

8               “(4) The Contractor shall contact the Hawaii One Call Center at 811 prior  
9               to any execution in a public right of way or on private property.”  
10

11 **(II)**    Amend **Section 104.06 Methods of Price Adjustment** as follows:  
12

13 **“104.06 Methods of Price Adjustment.**    Any adjustment in the contract price  
14 pursuant to a change or claim shall be made in one or more of the following  
15 ways:  
16

17       **(1)**    By written agreement on a fixed price adjustment before  
18 commencement of the pertinent performance.  
19

20       **(2)**    By unit prices or other price adjustments specified in the contract or  
21 subsequently agreed upon before commencement of the pertinent  
22 performance.  
23

24       **(3)**    The Engineer may base the adjustment for a lump sum item on a  
25 calculated proportionate unit price.       The Engineer will calculate the  
26 proportionate unit price by dividing the original contract lump sum price by  
27 the actual or original estimated quantity established by the contract  
28 documents.  
29

30       **(4)**    In any other lawful manner as the parties may mutually agree upon  
31 before commencement of the pertinent performance.  
32

33       **(5)**    At the sole option of the Engineer, work may be paid for on a force  
34 account basis in accordance with Subsection 109.06 - Force Account  
35 Provisions and Compensation.  
36

37       **(6)**    By the cost variations attributable to the events or situations with  
38 adjustment of profit and fee, all as specified in the contract or  
39 subsequently agreed upon before commencement of the pertinent  
40 performance.  
41

42       **(7)**    In the absence of agreement by the parties:  
43

44               **(A)** For change orders with value not exceeding \$50,000 by  
45 documented actual costs of the work, allowing for overhead and  
46 profit as set forth in Section 109.05 - Allowances for Overhead and

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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 nonadjustment 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 nonadjustment 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."

**END OF SECTION 104**

1                                   **SECTION 105 – CONTROL OF WORK**  
2

3       Make the following amendments to said Section:  
4

5  
6       **(I)**       Amend **105.01 – Authority** to read as follows:  
7

8       **“105.01   Authority.**  
9

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

- 14                   **(1)**     Interpretation of the contract documents.
- 15                   **(2)**     Acceptability of the materials furnished and work performed.
- 16                   **(3)**     Manner of performance and rate of progress of the work.
- 17                   **(4)**     Acceptable fulfillment of the contract on the part of the  
18                   Contractor.
- 19                   **(5)**     Compensation under the contract.  
20

21                   The Engineer’s decisions on questions, claims, and disputes will be  
22       final and conclusive subject to Subsection 107.15 – Disputes and Claims.  
23

24                   The Engineer may delegate specific authority to act for the  
25       Engineer to a specific person or persons. Such delegation of authority  
26       shall be established in writing and shall become effective upon delivery to  
27       the Contractor.  
28

29       **(B)    Authority of the Inspectors.** Inspectors, as a representative of  
30       the Engineer or other agencies, will inspect the work done and materials  
31       furnished. Such inspection may extend to the preparation, fabrication or  
32       manufacture of the materials to be used. The Inspector does not have  
33       authority vested in the Engineer unless specifically delegated in writing.  
34       The Inspector may not alter or waive the provisions of the contract, issue  
35       instructions contrary to the contract, or act as agent or representative of  
36       the Contractor.  
37

38                   Failure of an Inspector at any time to reject non-conforming work  
39       shall not be considered a waiver of the State’s right to require work in strict  
40       conformity with the contract documents as a condition of final acceptance.  
41

47           **(C) Authority of the Consultant and Construction Management.**  
48           The State may engage consultants and construction managements to  
49           perform duties in connection with the work. Unless otherwise specified in  
50           writing to the Contractor, such retained consultants and construction  
51           managements shall have no greater authority than an Inspector.”  
52

53           **(II) Amend Subsection 105.02 - Submittals** by revising the first paragraph  
54           from lines 52 to 61 to read as follows:  
55

56           **“105.02 Submittals.** The contract contains the description of various items  
57           that the Contractor must submit to the Engineer for review and acceptance. The  
58           Contractor shall review all submittals for correctness, conformance with the  
59           requirements of the contract documents and completeness before submitting  
60           them to the Engineer. The submittal shall indicate the contract items and  
61           specifications subsections for which the submittal is provided. The submittal  
62           shall be legible and clearly indicate what portion of the submittal is being  
63           submitted for review. The Contractor shall provide six copies of the required  
64           submissions at the earliest possible date.”  
65

66           **(III) Amend Subsection 105.08 (A) - Furnishing Drawings and Special**  
67           **Provisions** to read as follows:  
68

69           **“(A) Furnishing Drawings and Special Provisions.** The State will  
70           furnish the Contractor an electronic set of the special provisions and  
71           plans.” The Contractor shall have and maintain at least one set of plans  
72           and specifications on the work site, at all times.”  
73

74           **(IV) Amend Subsection 105.14(D) – No Designated Storage Area** from lines  
75           421 to 432 to read as follows:  
76

77           **“(D) No Designated Storage Area.** If no storage area is designated  
78           within the contract documents, materials and equipment may be stored  
79           anywhere within the State highway right-of-way, provided such storage  
80           and access to and from such site, within the sole discretion of the  
81           Engineer, does not create a public or traffic hazard or an impediment to  
82           the movement of traffic.”  
83

84           **(V) Amend 105.16(A) – Subcontract Requirements** by adding the following  
85           paragraph after line 483:  
86

87           The 'Specialty Items' of work for this project are as follows:  
88

|     | <b>Section No.</b> | <b>Description</b>  |
|-----|--------------------|---|
| 89  |                    |   |
| 90  |                    |   |
| 91  |                    |   |
| 92  | 312                | Contract Item No. 312.0100 under Section 312 – Hot Mix Glassphalt Base Course                       |
| 93  |                    |   |
| 94  |                    |   |
| 95  | 401                | Contract Item No. 401.0100 under Section 401 – Hot Mix Asphalt Pavement                             |
| 96  |                    |   |
| 97  |                    |   |
| 98  | 606                | All Contract Items under Section 606 - Guardrail  |
| 99  |                    |   |
| 100 | 622                | All Contract Items under Section 622 – Roadway and Sign Lighting System                             |
| 101 |                    |   |
| 102 |                    |   |
| 103 | 623                | All Contract Items under Section 623 - Traffic Signal System  |
| 104 |                    |   |
| 105 | 629                | All Contract Items under Section 629 - Pavement Markings  |
| 106 |                    |   |
| 107 | 630                | All Contract Items under Section 630 - Traffic Control Guide Signs                                  |
| 108 |                    |   |
| 109 |                    |   |
| 110 | 631                | All Contract Items under Section 631 - Traffic Control Regulatory, Warning, and Miscellaneous Signs |
| 111 |                    |   |
| 112 |                    |   |
| 113 | 632                | All Contract Items under Section 632 - Markers  |
| 114 |                    |   |
| 115 | 645                | Contract Item No. 645.0100 under Section 645 – Work Zone Traffic Control”                           |
| 116 |                    |   |
| 117 |                    |   |

118 **(VI) Amend Subsection 105.16(B) – Substituting Subcontractors** by  
 119 revising the second sentence from line 490 to line 493 to read:

120  
 121 “Contractors may enter into subcontracts only with subcontractors listed in the  
 122 proposal or with non-listed joint contractors/subcontractors permitted under  
 123 Subsection 102.05 – Preparation of Proposal.”

124  
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**END OF SECTION 105**

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**SECTION 106 – MATERIAL RESTRICTIONS AND REQUIREMENTS**

Make the following amendment to said Section:

**(I)** Amend **106.05(B) – Deviation** 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.”

**END OF SECTION 106**

1           **SECTION 107 - LEGAL RELATIONS AND RESPONSIBILITY TO PUBLIC**

2  
3       Make the following amendments to said Section:

4  
5       **(I)**       Amend **Section 107.01 Insurance Requirements** from lines 5 to 81 to  
6       read as follows:

7  
8           **“(A) Obligation of Contractor.** Contractor shall not commence any  
9       work until it obtains, at its own expense, all required insurance described  
10      herein. Such insurance shall be provided by an insurance company  
11      authorized by the laws of the State to issue such insurance in the State of  
12      Hawaii. Coverage by a “Non-Admitted” carrier is permissible provided the  
13      carrier has a Best’s Rating of “A-VII” or better. The Contractor shall  
14      maintain and ensure all insurance policies are current for the full period of  
15      the contract until final acceptance of the work by the State.

16  
17           The Certificate of Insurance shall contain: a clause that it is agreed  
18      that any insurance maintained by the State of Hawaii will apply in excess  
19      of, and not contribute with, insurance provided by this policy; and shall be  
20      accompanied by endorsement form CG2010 or equivalent naming the  
21      State as an additional insured to the policy which status shall be  
22      maintained for the full period of the contract until final acceptance of the  
23      work by State.

24  
25           The Contractor shall obtain all required insurance as part of the  
26      contract price. Where there is a requirement for the State of Hawaii and  
27      its officers and employees to be named as additional insureds under any  
28      Contractor’s insurance policy, before the State of Hawaii issues the Notice  
29      to Proceed, the Contractor shall obtain and submit to the Engineer a  
30      Certificate of Insurance and a written policy endorsement that confirms the  
31      State of Hawaii and its officers and employees are additional insureds for  
32      the specific State project number and project title under such insurance  
33      policies. The written policy endorsement must be issued by the insurance  
34      company insuring the Contractor for the specified policy type or by an  
35      agent of such insurance company who is vested with the authority to issue  
36      a written policy endorsement. The insurer’s agent shall also submit  
37      written confirmation of such authority to bind the insurer. Any delays in  
38      the issuance of the Notice to Proceed attributed to the failure to obtain the  
39      proof of the State of Hawaii and its officers and employees’ additional  
40      insured status shall be charged to the Contractor.

41  
42           A mere Certificate of Insurance issued by a broker who represents  
43      the Contractor (but not the Contractor’s insurer), or by any other party who  
44      is not authorized to contractually name the State as an additional insured  
45      under the Contractor’s insurance policy, is not sufficient to meet the  
46      Contractor’s insurance obligations.

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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.



92 (1) **Workers' Compensation.** The Contractor shall obtain  
93 worker's compensation insurance for all persons whom they  
94 employ in carrying out the work under this contract. This insurance  
95 shall be in strict conformity with the requirements of the most  
96 current and applicable State of Hawaii Worker's Compensation  
97 Insurance laws in effect on the date of the execution of this contract  
98 and as modified during the duration of the contract.  
99

100 (2) **Auto Liability.** The Contractor shall obtain Auto Liability  
101 Insurance covering all owned, non-owned and hired autos with a  
102 Combined single Limit of not less than \$1,000,000 per occurrence  
103 for bodily injury and property damage with the State of Hawaii  
104 named as additional insured. Refer to SPECIAL CONDITIONS for  
105 any additional requirements.  
106

107 (3) **General Liability.** The Contractor shall obtain General  
108 Liability insurance with a limit of not less than \$1,000,000 per  
109 occurrence and \$2 million in aggregate for each of the following:  
110

- 111 (a) Products - Completed/Operations Aggregate,
- 112
- 113 (b) Personal & Advertising Injury, and
- 114
- 115 (c) Bodily Injury & Property Damage  
116

117 The General Liability insurance shall include the State as an  
118 Additional Insured. The required limit of insurance may be provided  
119 by a single policy or with a combination of primary and excess  
120 policies. Refer to SPECIAL CONDITIONS for any additional  
121 requirements.  
122

123 (4) **Builders Risk For All Work.** The Contractor shall take out  
124 a policy of builder's risk insurance for the full replacement value of  
125 the project work; from a company licensed or otherwise authorized  
126 to do business in the State of Hawaii; naming the State as an  
127 additional insured under each policy; and covering all work, labor,  
128 and materials furnished by such Contractor and all its  
129 subcontractors against loss by fire, windstorm, tsunamis,  
130 earthquakes, lightning, explosion, other perils covered by the  
131 standard Extended Coverage Endorsement, vandalism, and  
132 malicious mischief. Refer to SPECIAL CONDITIONS for any  
133 additional requirements."  
134

135 (II) Amend **Section 107.03 Working Hours; Night Work.** from lines 140 to  
136 142 to read as follows:  
137

138 "Normal working hours shall be from 7:00 a.m. to 3:30 p.m., Monday  
139 through Friday, excluding holidays. Night work hours are shown for the following  
140 areas.

141  
142 From 8:00 p.m. to Midnight, on Mondays through Thursdays; and from  
143 Midnight to 4:00 am, on Tuesdays through Fridays, including holidays at the  
144 Farrington Highway overpass at Waiawa Interchange.

145  
146 From 7:00 p.m. to Midnight, on Mondays through Thursdays; and from  
147 Midnight to 4:00 am, on Tuesdays through Fridays, including holidays at the  
148 Keehi Interchange from Ahua Street to the intersection of Middle Street and  
149 Dillingham Boulevard.

150  
151 From 8:00 p.m. to Midnight, on Mondays through Thursdays; and from  
152 Midnight to 4:00 am, on Tuesdays through Fridays, including holidays along H-1  
153 from Aala Street to Pali Highway.

154  
155 See **Section 645.03 (F) Lane Closures** for specific lane closure hours."

156  
157

**END OF SECTION 107**

1 Amend **Section 108 – PROSECUTION AND PROGRESS** to read as follows:  
2

3 **“SECTION 108 – PROSECUTION AND PROGRESS**  
4

5  
6 **108.01 Notice to Proceed (NTP).** A Notice To Proceed will be issued to the  
7 Contractor not more 30 calendar days after the contract certification date. The  
8 Engineer may suspend the contract before issuing the Notice To Proceed, in  
9 which case the Contractor’s remedies are exclusively those set forth in Subsection  
10 108.10 – Suspension of Work.  
11

12 The Contractor shall be allowed up to 14 calendar days after the Notice to  
13 Proceed to begin physical work. The Start Work Date will be established when  
14 this period ends or on the actual day that physical work begins, whichever is first.  
15 Charging of Contract Time will begin on the Start Work Date. The Contractor shall  
16 notify the Engineer, in writing, at least five working days before beginning physical  
17 work.  
18

19 In the event that the Contractor fails to start physical work within the time  
20 specified, the Engineer may terminate the contract in accordance with Subsection  
21 108.11 – Termination of Contract for Cause.  
22

23 During the period between the Notice to Proceed and the Start Work Date  
24 the Contractor should adjust work forces, equipment, schedules, and procure  
25 materials and required permits, prior to beginning physical work.  
26

27 Any physical work done prior to the Start Work Date will be considered  
28 unauthorized work. If the Engineer does not direct that the unauthorized work be  
29 removed, it shall be paid for after the Start Work Date and only if it is acceptable.  
30

31 In the event that the Engineer establishes, in writing, a Start Work Date that  
32 is beyond 60 calendar days from the Notice to Proceed date, the Contractor may  
33 submit a claim in accordance with, Subsection 107.15 – Disputes and Claims for  
34 increased labor and material costs which are directly attributable to the delay  
35 beyond the first 60 calendar days after the Notice to Proceed date.  
36

37 The Contractor shall notify the Engineer at least 24 hours before restarting  
38 physical work after a suspension of work pursuant to Subsection 108.10 –  
39 Suspension of Work.  
40

41 Once physical work has begun, the Contractor shall work expeditiously and  
42 pursue the work diligently to completion with the contract time. If a portion of the  
43 work is to be done in stages, the Contractor shall leave the area safe and usable  
44 for the user agency and the public at the end of each stage.  
45

46 **108.02 Prosecution of Work.** Unless otherwise permitted by the Engineer, in  
47 writing, the Contractor shall not commence with physical construction unless  
48 sufficient materials and equipment are available for either continuous construction  
49 or completion of a specified portion of the work.

50  
51 **108.03 Preconstruction Submittals.** The awardee shall submit to the  
52 Engineer for information and review the pre-construction submittals within 21  
53 calendar days from award. Until the items listed below are received and found  
54 acceptable by the Engineer, the Contractor shall not start physical work unless  
55 otherwise authorized to do so in writing and subject to such conditions set by the  
56 Engineer. Charging of Contract Time will not be delayed, and additional contract  
57 time will not be granted due to Contractor delay in submitting acceptable  
58 preconstruction submittals. No progress payment will be made to the Contractor  
59 until the Engineer acknowledges, in writing, receipt of the following  
60 preconstruction submittals acceptable to the Engineer:

- 61
- 62 (1) List of the Superintendent and other Supervisory Personnel, and  
63 their contact information.
  - 64
  - 65 (2) Name of person(s) authorized to sign for the Contractor.
  - 66
  - 67 (3) Work Schedule including hours of operation.
  - 68
  - 69 (4) Initial Progress Schedule (See Subsection 108.06 – Progress  
70 Schedule).
  - 71
  - 72 (5) Water Pollution and Siltation Control Submittals, including Site-  
73 Specific Best Management Practice Plan.
  - 74
  - 75 (6) Solid Waste Disposal form.
  - 76
  - 77 (7) Tax Rates.
  - 78
  - 79 (8) Insurance Rates.
  - 80
  - 81 (9) Certificate of Insurance, satisfactory to the Engineer, indicating that  
82 the Contractor has in place all insurance coverage required by the contract  
83 documents.
  - 84
  - 85 (10) Schedule of agreed prices.
  - 86
  - 87 (11) List of suppliers.
  - 88
  - 89 (12) Traffic Control Plan, if applicable.

90 **108.04 Character and Proficiency of Workers.** The Contractor shall at all  
91 times provide adequate supervision and sufficient labor and equipment for  
92 prosecuting the work to full completion in the manner and within the time required  
93 by the contract. The superintendent and all other representatives of the  
94 Contractor shall act in a civil and honest manner in all dealings with the Engineer,  
95 all other State officials and representatives, and the public, in connection with the  
96 work.

97  
98 All workers shall possess the proper license, certification, job classification,  
99 skill, training, and experience necessary to properly perform the work assigned to  
100 them.

101  
102 The Engineer may direct the removal of any worker(s) who does not carry  
103 out the assigned work in a proper and skillful manner or who is disrespectful,  
104 intemperate, violent, or disorderly. The worker shall be removed forthwith by the  
105 Contractor and will not work again without the written permission of the Engineer.

106  
107 **108.05 Contract Time.**

108  
109 **(A) Calculation of Contract Time.** When the contract time is on a  
110 working day basis, the total contract time allowed for the performance of  
111 the work will be the number of working days shown in the contract plus any  
112 additional working days authorized in writing as provided hereinafter. The  
113 count of elapsed working days to be charged against contract time, will  
114 begin from the Start Work Date and will continue consecutively to the date  
115 of Substantial Completion. When multiple shifts are used to perform the  
116 work, the State will not consider the hours worked over the normal eight  
117 working hours per day or night as an additional working day.

118  
119 When the contract is on a calendar day basis, the total contract time  
120 allowed for the performance of the work will be the number of days shown  
121 in the contract plus any additional days authorized in writing as provided  
122 hereinafter. The count of elapsed days to be charged against contract time  
123 will begin from the Start Work Date and will continue consecutively to the  
124 date of Substantial Completion. The Engineer will exclude days elapsing  
125 between the orders of the Engineer to suspend work and resume work for  
126 suspensions not the fault of the Contractor.

127  
128 **(B) Modifications of Contract Time.** Whenever the Contractor  
129 believes that an extension of contract time is justified, the Contractor shall  
130 serve written notice on the Engineer not more than five working days after  
131 the occurrence of the event that causes a delay or justifies a contract time  
132 extension. Contract time may be adjusted for the following reasons or  
133 events, but only if and to the extent the critical path has been affected:

135 **(1) Changes in the Work, Additional Work, and Delays**  
136 **Caused by the State.** If the Contractor believes that an extension of  
137 time is justified on account of any act or omission by the State, and is  
138 not adequately provided for in a field order or change order, it must  
139 request the additional time as provided above. At the request of the  
140 Engineer, the Contractor must show how the critical path will be  
141 affected and must also support the time extension request with  
142 schedules, as well as statements from its subcontractors, suppliers,  
143 or manufacturers, as necessary. Claims for compensation for any  
144 altered or additional work will be determined pursuant to Subsection  
145 104.02 – Changes.

146  
147 Additional time to perform the extra work will be added to the  
148 time allowed in the contract without regard to the date the change  
149 directive was issued, even if the contract completion date has  
150 passed. A change requiring time issued after contract time has  
151 expired will not constitute an excusal or waiver of pre-existing  
152 Contractor delay.

153  
154 **(2) Delay for Permits.** For delays in the routine application and  
155 processing time required to obtain necessary permits, including  
156 permits to be obtained from State agencies, the Engineer may grant  
157 an extension provided that the permit takes longer than 30 days to  
158 acquire and the delay is not caused by the Contractor, and provided  
159 that as soon as the delay occurs, the Contractor notifies the  
160 Engineer in writing that the permits are not available. Permits  
161 required by the contract that take less than 30 days to acquire from  
162 the time which the appropriate documents are granted shall be  
163 acquired between Notice to Proceed and Start Work Date or  
164 accounted for in the contractor's progress schedule. Time  
165 extensions will be the exclusive relief granted on account of such  
166 delays.

167  
168 **(3) Delays Beyond Contractor's Control.** For delays caused by  
169 acts of God, a public enemy, fire, inclement weather days or  
170 adverse conditions resulting therefrom, earthquakes, floods,  
171 epidemics, quarantine restrictions, labor disputes impacting the  
172 Contractor or the State, freight embargoes and other reasons  
173 beyond the Contractor's control, the Contractor may be granted an  
174 extension of time provided that:

175  
176 **(a)** In the written notice of delay to the Engineer, the  
177 Contractor describes possible effects on the completion date  
178 of the contract. The description of delays shall:  
179

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

183  
184 2. Include copies of pertinent documentation to  
185 support the time extension request.

186  
187 3. Cite the anticipated period of delay and the time  
188 extension requested.

189  
190 4. State either that the above circumstances have  
191 been cleared and normal working conditions restored  
192 as of a certain day or that the above circumstances will  
193 continue to prevent completion of the project.

194  
195 (b) The Contractor shall notify the Engineer in writing when  
196 the delay ends. Time extensions will be the exclusive relief  
197 granted and no additional compensation will be paid the  
198 Contractor for such delays.

199  
200 (4) **Delays in Delivery of Materials or Equipment.** For delays  
201 in delivery of materials or equipment, which occur as a result of  
202 unforeseeable causes beyond the control and without fault of the  
203 Contractor, its subcontractor(s) or supplier(s), time extensions shall  
204 be the exclusive relief granted and no additional compensation will  
205 be paid the Contractor on account of such delay. The delay shall not  
206 exceed the difference between the originally scheduled delivery date  
207 and the actual delivery date. The Contractor may be granted an  
208 extension of time provided that it complies with the following  
209 procedures:

210  
211 (a) The Contractor's written notice to the Engineer must  
212 describe the delays and state the effect such delays may have  
213 on the critical path.

214  
215 (b) The Contractor, if requested, must submit to the  
216 Engineer within five days after a firm delivery date for the  
217 material and equipment is established, a written statement  
218 regarding the delay. The Contractor must justify the delay as  
219 follows:

220  
221 1. State specifically all reasons for the delay.  
222 Explain in a detailed chronology the effect of the delay  
223 on the critical path.  
224

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

229  
230                                   3.     Cite the start and end date of the delay and the  
231 time extension requested.

232  
233     **(5) Delays for Suspension of Work.** When the performance of  
234 the work is totally suspended for one or more days (calendar or  
235 working days, as appropriate) by order of the Engineer in  
236 accordance with Subsections 108.10(A)(1), 108.10(A)(2), or  
237 108.10(A)(5) the number of days from the effective date of the  
238 Engineer's order to suspend operations to the effective date of the  
239 Engineer's order to resume operations shall not be counted as  
240 contract time and the contract completion date will be adjusted.  
241 During periods of partial suspensions of the work, the Contractor will  
242 be granted a time extension only if the partial suspension affects the  
243 critical path. If the Contractor believes that an extension of time is  
244 justified for a partial suspension of work, it must request the  
245 extension in writing at least five working days before the partial  
246 suspension will affect the critical operation(s) in progress. The  
247 Contractor must show how the critical path was increased based on  
248 the status of the work and must also support its claim if requested,  
249 with statements from its subcontractors. A suspension of work will  
250 not constitute a waiver of pre-existing Contractor delay.

251  
252     **(6) Contractor Caused Delays.** No time extension will be  
253 granted under the following circumstances:

254  
255                                   **(a)**     Delays within the Contractor's control in performing the  
256 work caused by the Contractor, subcontractor, supplier, or any  
257 combination thereof.

258  
259                                   **(b)**     Delays within the Contractor's control in arrival of  
260 materials and equipment caused by the Contractor,  
261 subcontractor, supplier, or any combination thereof, in  
262 ordering, fabricating, and delivery.

263  
264                                   **(c)**     Delays requested for changes which do not affect the  
265 critical path.



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

273  
 274 (e) Delays caused by the failure to submit sufficient  
 275 information and data in a timely manner in the proper form in  
 276 order to obtain necessary permits related to the work.

277  
 278 (f) Failure to follow the procedure within the time allowed  
 279 by contract to request a time extension.

280  
 281 (g) Failure of the Contractor to provide evidence sufficient  
 282 to support the time extension request.

283  
 284 (7) **Reduction in Time.** If the State deletes or modifies any  
 285 portion of the work, an appropriate reduction of contract time may be  
 286 made in accordance with Subsection 104.02 - Changes.

287  
 288 **108.06 Progress Schedules.**

289  
 290 (A) **Forms of Schedule.** All schedules shall be submitted using the  
 291 specific computer program designated in the bid documents. If no such  
 292 scheduling software program is designated, then all schedules shall be  
 293 submitted using the latest version of Microsoft Project by Microsoft or  
 294 approved equivalent software program.

295  
 296 Schedule submittals shall be as follows:

297  
 298 (1) **For Contracts \$2,000,000 or less or For Contract Time 100**  
 299 **Working Days or 140 Calendar Days or Less.** For contracts of  
 300 \$2,000,000 or less or for contract time of 100 working days or 140  
 301 calendar days or less, the progress schedule will be a Time Scaled  
 302 Logic Diagram (TSLD). The Contractor shall submit a TSLD  
 303 submittal package meeting the following requirements and having  
 304 these essential and distinctive elements:

305  
 306 (a) The major features of work, such as but not limited to  
 307 BMP installation, grubbing, roadway excavation, structure  
 308 excavation, structure construction, shown in the chronological  
 309 order in which the Contractor proposes to work that feature or  
 310 work and its location on the project. The schedule shall  
 311 account for normal inclement weather, unusual soil or other

- 312 conditions that may influence the progress of the work,  
313 schedules, and coordination required by any utility, off or on  
314 site fabrications, and other pertinent factors that relate to  
315 progress;
- 316
- 317 **(b)** All features listed or not listed in the contract  
318 documents that the Contractor considers a controlling factor  
319 for the timely completion of the contract work.
- 320
- 321 **(c)** The time span and sequence of the activities or events  
322 for each feature, and its interrelationship and  
323 interdependencies in time and logic to other features in order  
324 to complete the project.
- 325
- 326 **(d)** The total anticipated time necessary to complete work  
327 required by the contract.
- 328
- 329 **(e)** A chronological listing of critical intermediate dates or  
330 time periods for features or milestones or phases that can  
331 affect timely completion of the project.
- 332
- 333 **(f)** Major activities related to the location on the project.
- 334
- 335 **(g)** Non-construction activities, such as submittal and  
336 acceptance periods for shop drawings and material,  
337 procurement, testing, fabrication, mobilization, and  
338 demobilization or order dates of long lead material.
- 339
- 340 **(h)** Set schedule logic for out of sequence activities to  
341 retain logic. In addition, open ends shall be non-critical.
- 342
- 343 **(i)** Show target bars for all activities.
- 344
- 345 **(j)** Vertical and horizontal sight lines both major and minor  
346 shall be used as well as a separator line between groups.  
347 The Engineer will determine frequency and style.
- 348
- 349 **(k)** The file name, print date, revision number, data and  
350 project title and number shall be included in the title block.
- 351
- 352 **(l)** Have columns with the appropriate data in them for  
353 activity ID, description, original duration, remaining duration,  
354 early start, early finish, total float, percent complete,  
355 resources. The resource column shall list who is responsible  
356 for the work to be done in the activity. These columns shall  
357 be to the left of the bar chart.
- 358

359 **(2) For Contracts Which Have A Contract Amount More Than**  
360 **\$2,000,000 Or Having A Contract Time Of More Than 100**  
361 **Working Days Or 140 Calendar Days.** For contracts which have a  
362 contract amount more than \$2,000,000 or contract time of more than  
363 100 working days or 140 calendar days, the Contractor shall submit  
364 a Timed-Scaled Logic Diagram (TSLD) meeting the following  
365 requirements and having these essential and distinctive elements:  
366

367 **(a)** The information and requirements listed in Subsection  
368 108.06(A)(1) – For Contracts \$2,000,000 or Less or For  
369 Contract Time 100 Working Days or 140 Calendar Days or  
370 Less.

371  
372 **(b)** Additional reports and graphics available from the  
373 software as requested by the Engineer.

374  
375 **(c)** Sufficient detail to allow at least weekly monitoring of  
376 the Contractor and subcontractor's operations.

377  
378 **(d)** The time scaled schematic shall be on a calendar or  
379 working days basis. What will be used shall be determined by  
380 how the contract keeps track of time. It will be the same. Plot  
381 the critical calendar dates anticipated.

382  
383 **(e)** Breakdown of activity, such as forming, placing  
384 reinforcing steel, concrete pouring and curing, and stripping  
385 in concrete construction. Indicate location of work to be done  
386 in such detail that it would be easily determined where work  
387 would be occurring within approximately 200 feet.

388  
389 **(f)** Latest start and finish dates for critical path activities.

390  
391 **(g)** Identify responsible subcontractor, supplier, and others  
392 for their respective activity.

393  
394 **(h)** No individual activity shall have duration of more than  
395 20 calendar days unless requested and approved by the  
396 Engineer.

397  
398 **(i)** All activities shall have work breakdown structure  
399 codes and activity codes. The activity codes shall have  
400 coding that incorporates information for phase, location, who  
401 is responsible for doing work and type of operation and  
402 activity description.  
403

404 (j) Incorporate all physical access and availability  
405 restraints.

406  
407 **(B) Inspection and Testing.** All schedules shall provide reasonable  
408 time and opportunity for the Engineer to inspect and test each work activity.  
409

410 **(C) Engineer's Acceptance of Progress Schedule.** The submittal of,  
411 and the Engineer's receipt of any progress schedule, shall not be deemed  
412 an agreement to modify any terms or conditions of the contract. Any  
413 modifications to the contract terms and conditions that appear in or may be  
414 inferred from an acceptable schedule will not be valid or enforceable unless  
415 and until the Engineer exercises discretion to issue an appropriate change  
416 order. Nor shall any submittal or receipt imply the Engineer's approval of  
417 the schedule's breakdown, its individual elements, any critical path that may  
418 be shown, nor shall it obligate the State to make its personnel available  
419 outside normal working hours or the working hours established by the  
420 Contract in order to accommodate such schedule. The Contractor has the  
421 risk of all elements (whether or not shown) of the schedule and its  
422 execution. No claim for additional compensation, time, or both, shall be  
423 made by the Contractor or recognized by the Engineer for delays during  
424 any period for which an acceptable progress schedule or an updated  
425 progress schedule as required by Subsection 108.06(E) – Contractor's  
426 Continuing Schedule Submittal Requirements had not been submitted. Any  
427 acceptance or approval of the schedule shall be for general format only and  
428 shall not be deemed an agreement by the State that the construction  
429 means, methods, and resources shown on the schedule will result in work  
430 that conforms to the contract requirements or that the sequences or  
431 durations indicated are feasible.  
432

433 **(D) Initial Progress Schedule.** The Contractor shall submit an initial  
434 progress schedule. The initial progress schedule shall consist of the  
435 following:  
436

- 437 (1) Four sets of the TSLD schedule.  
438  
439 (2) All the software files and data to re-create the TSLD in a  
440 computerized software format as specified by the Engineer.  
441  
442 (3) A listing of equipment that is anticipated to be used on the  
443 project. Including the type, size, make, year of manufacture, and all  
444 information necessary to identify the equipment in the Rental Rate  
445 Blue Book for Construction Equipment.  
446  
447 (4) An anticipated manpower requirement graph plotting contract  
448 time and total manpower requirement. This may be superimposed  
449 over the payment graph.  
450

451 (5) A Method Statement that is a detailed narrative describing the  
 452 work to be done and the method by which the work shall be  
 453 accomplished for each major activity. A major activity is an activity  
 454 that has one or more of the following:

- 455
- 456 (a) Has a duration longer than five days.
  - 457
  - 458 (b) Is a milestone activity.
  - 459
  - 460 (c) Is a contract item that exceeds \$10,000 on the contract  
 461 cost proposal.
  - 462
  - 463 (d) Is a critical path activity.
  - 464
  - 465 (e) Is an activity designated as such by the Engineer.
  - 466

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

- 469
- 470 (a) Quantity, type, make, and model of equipment.
  - 471
  - 472 (b) The manpower to do the work, specifying worker  
 473 classification.
  - 474
  - 475 (c) The production rate per eight hour day, or the working  
 476 hours established by the contract documents needed to meet  
 477 the time indicated on the schedule. If the production rate is  
 478 not for eight hours, the number of working hours shall be  
 479 indicated.
  - 480
  - 481 (6) Two sets of color time-scaled project evaluation and review  
 482 technique charts ("PERT") using the activity box template of Logic –  
 483 Early Start or such other template designated by the Engineer.
  - 484

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

487

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

497 all new activities and any changes in duration or start or finish dates of any  
498 activity.  
499

500 The Contractor shall submit with every update, in report form  
501 acceptable to the Engineer, a list of changes to the progress schedule since  
502 the previous schedule submittal. The Engineer may change the frequency  
503 of the submittal requirements but may not require a submittal of the  
504 schedule to be more than once a week. The Engineer may decrease the  
505 frequency of the submittal of the bi-weekly schedule.  
506

507 The Contractor shall submit updates of the anticipated work  
508 completion graph, equipment listing, manpower requirement graph or  
509 method statement when requested by the Engineer. The Contractor shall  
510 submit such updates within 4 calendar days from the date of the request by  
511 the Engineer.  
512

513 The Engineer may withhold progress payment until the Contractor is  
514 in compliance with all schedule update requirements  
515

516 **(F) Float.** All float appearing on a schedule is a shared commodity.  
517 Float does not belong to or exist for the exclusive use or benefit of either  
518 the State or the Contractor. The State or the Contractor has the opportunity  
519 to use available float until it is depleted. Float has no monetary value.  
520

521 **(G) Scheduled Meetings.** The Contractor shall meet on a bi-weekly  
522 basis with the Engineer to review the progress schedule. The Contractor  
523 shall have someone attending the meeting that can answer all questions on  
524 the TSLD and other schedule related submittals.  
525

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

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

545  
546 **(I) Contractor Responsibilities.** The Contractor shall promptly  
547 respond to any inquiries from the Engineer regarding any schedule  
548 submission. The Contractor shall adjust the schedule to address directives  
549 from the Engineer and shall resubmit the TSLD package to the Engineer  
550 until the Engineer finds it acceptable.

551  
552 The Contractor shall perform the work in accordance with the  
553 submitted TSLD. The Engineer may require the Contractor to provide  
554 additional work forces and equipment to bring the progress of the work into  
555 conformance with the TSLD at no increase in contract price or contract time  
556 whenever the Engineer determines that the progress of the work does not  
557 insure completion within the specified contract time.

558  
559 **108.07 Weekly Meeting.** In addition to the bi-weekly schedule meetings, the  
560 Contractor shall be available to meet once a week with the Engineer at the time  
561 and place as determined by the Engineer to discuss the work and its progress  
562 including but not limited to, the progress of the project, potential problems,  
563 coordination of work, submittals, erosion control reports, etc. The Contractor's  
564 personnel attending shall have the authority to make decisions and answer  
565 questions.

566  
567 The Contractor shall bring to weekly meetings a detailed work schedule  
568 showing the next three weeks' work. Directly submit an informational copy of the  
569 three-week schedule to the Material Testing Research Branch (MTRB) on the  
570 same day as the weekly meeting is held or was to be held. An informational copy  
571 is for informational use only and requires no response or further action from the  
572 MTRB. Number of copies of the detailed work schedule to be submitted will be  
573 determined by the Engineer. The three-week schedule is in addition to the TSLD  
574 and shall in no way be considered as a substitute for the TSLD or vice versa. The  
575 three-week schedule shall show:

576  
577 **(a)** All construction events, traffic control and BMP related activities in  
578 such detail that the Engineer will be able to determine at what location and  
579 type of work will be done for any day for the next three weeks. This is for  
580 the State to use to plan its manpower requirements for that time period.

581  
582 **(b)** The duration of all events and delays.  
583

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

587  
588 (d) Critical submittals and requests for information (RFI's).

589  
590 (e) The project title, project number, date created, period the schedule  
591 covers, Contractor's name and creator of the schedule on each page.

592  
593 Two days prior to each weekly meeting, the Contractor shall submit  
594 a list of outstanding submittals, RFIs and issues that require discussion.

595  
596 **108.08 Liquidated Damages for Failure to Complete the Work or Portions**  
597 **of the Work on Time.** The actual amount of damages resulting from the  
598 Contractor's failure to complete the contract in a timely manner is difficult to  
599 accurately determine. Therefore, the amount of such damages shall be liquidated  
600 damages as set forth herein and in the special provisions. The State may, at its  
601 discretion, deduct the amount from monies due or that may become due under the  
602 contract.

603  
604 When the Contractor fails to reach substantial completion of the work for  
605 which liquidated damages are specified, within the time or times fixed in the  
606 contract or any extension thereof, in addition to all other remedies for breach that  
607 may be available to the State, the Contractor shall pay liquidated damages to the  
608 State, in the amount of \$ 2000.00 per working day.

609  
610 (A) **Liquidated Damages Upon Termination.** If the State terminates  
611 on account of Contractor's default, liquidated damages may be charged  
612 against the defaulting Contractor and its surety until final completion of  
613 work.

614  
615 (B) **Liquidated Damages for Failure to Complete the Punchlist.** The  
616 Contractor shall complete the work on any punchlist created after the pre-  
617 final inspection, within the contract time or any extension thereof.

618  
619 When the Contractor fails to complete the work on such punchlist  
620 within the contract time or any extension thereof, the Contractor shall pay  
621 liquidated damages to the State of 20 percent of the amount of liquidated  
622 damages established for failure to substantially complete the work within  
623 contract time. Liquidated damages shall not be assessed for the period  
624 between:

625  
626 (1) Notice from the Contractor that the project is substantially  
627 complete and the time the punchlist is delivered to the Contractor.

628



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

631  
632                   (3)    The date of the Final Inspection that results in Substantial  
633                   Completion and the receipt by the Contractor of the written notice of  
634                   Substantial Completion.

635  
636                   **(C)    Actual Damages Recoverable If Liquidated Damages Deemed**  
637                   **Unenforceable.** In the event a court of competent jurisdiction holds that  
638                   any liquidated damages assessed pursuant to this contract are  
639                   unenforceable, the State will be entitled to recover its actual damages for  
640                   Contractor's failure to complete the work, or any designated portion of the  
641                   work within the time set by the contract.

642  
643                   **108.09   Rental Fees for Unauthorized Lane Closure or Occupancy.** In  
644                   addition to all other remedies available to the State for Contractor's breach of the  
645                   terms of the contract, the Engineer will assess the rental fees in the amount of  
646                   \$500 for every one-to fifteen-minute increment or portion thereof, for each location,  
647                   for each roadway lane closed to public use or encroached upon or occupied  
648                   beyond the time periods authorized in the contract or by the Engineer. The State  
649                   may, at its discretion, deduct the amount from monies due or that may become  
650                   due under the contract. The rental fee may be waived in whole or part if the  
651                   Engineer determines that the unauthorized period of lane closure or occupancy  
652                   was due to factors beyond the control of the Contractor. Equipment breakdown is  
653                   not a cause to waive lane rental fees.

654  
655                   **108.10   Suspension of Work.**

656  
657                   **(A)    Suspension of Work.** The Engineer may, by written order, suspend  
658                   the performance of the work, either in whole or in part, for such periods as  
659                   the Engineer may deem necessary, for any cause, including but not limited  
660                   to:

661  
662                   (1)    Weather or soil conditions considered unsuitable for  
663                   prosecution of the work.

664  
665                   (2)    Whenever a redesign that may affect the work is deemed  
666                   necessary by the Engineer.

667  
668                   (3)    Unacceptable noise or dust arising from the construction even  
669                   if it does not violate any law or regulation.

670  
671                   (4)    Failure on the part of the Contractor to:

672  
673                   (a)    Correct conditions unsafe for the general public or for  
674                   the workers.

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(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.

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

722  
723 **(E) Claims for Adjustment.** Any adjustment in contract price made  
724 shall be determined in accordance with Subsections 104.02 – Changes and  
725 104.06 – Methods of Price Adjustment.

726  
727 Any claims for such compensation shall be filed in writing with the  
728 Engineer within 30 days after the date of the order to resume work or the  
729 claim will not be considered. The claim shall conform to the requirements  
730 of Subsection 107.15(D) – Making of a Claim. The Engineer will take the  
731 claim under consideration, may make such investigations as are deemed  
732 necessary and will be the sole judge as to the equitability of the claim. The  
733 Engineer’s decision will be final.

734  
735 **(F) No Adjustment.** No provision of this clause shall entitle the  
736 Contractor to any adjustments for delays due to failure of its surety, the  
737 cancellation or expiration of any insurance coverage required by the  
738 contract documents, for suspensions made at the request of the Contractor,  
739 for any delay required under the contract, for suspensions, either partial or  
740 whole, made by the Engineer under Subsection 108.10(A)(4) of the  
741 “Suspension of work” paragraph.

742  
743 **108.11 Termination of Contract for Cause.**

744  
745 **(A) Default.** If the Contractor refuses or fails to perform the work, or any  
746 separable part thereof, with such diligence as will assure its completion  
747 within the time specified in this contract, or any extension thereof, or  
748 commits any other material breach of this contract, and further fails within  
749 seven days after receipt of written notice from the Engineer to commence  
750 and continue correction of the refusal or failure with diligence and  
751 promptness, the Engineer may, by written notice to the Contractor, declare  
752 the Contractor in breach and terminate the Contractor’s right to proceed  
753 with the work or the part of the work as to which there has been delay or  
754 other breach of contract. In such event, the State may take over the work,  
755 perform the same to completion, by contract or otherwise, and may take  
756 possession of, and utilize in completing the work, the materials, appliances,  
757 and plants as may be on the site of the work and necessary therefore.  
758 Whether or not the Contractor’s right to proceed with the work is terminated,  
759 the Contractor and the Contractor’s sureties shall be liable for any damage  
760 to the State resulting from the Contractor’s refusal or failure to complete the  
761 work within the specified time.

762  
763 **(B) Additional Rights and Remedies.** The rights and remedies of the  
764 State provided in this contract are in addition to any other rights and  
765 remedies provided by law.

766  
 767 **(C) Costs and Charges.** All costs and charges incurred by the State,  
 768 together with the cost of completing the work under contract, will be  
 769 deducted from any monies due or which would or might have become due  
 770 to the Contractor had it been allowed to complete the work under the  
 771 contract. If such expense exceeds the sum which would have been  
 772 payable under the contract, then the Contractor and the surety shall be  
 773 liable and shall pay the State the amount of the excess.  
 774

775 In case of termination, the Engineer will limit any payment to the  
 776 Contractor to the part of the contract satisfactorily completed at the time of  
 777 termination. Payment will not be made until the work has satisfactorily been  
 778 completed and all required documents, including the tax clearance required  
 779 by Subsection 109.11 – Final Payment are submitted by the Contractor.  
 780 Termination shall not relieve the Contractor or Surety from liability for  
 781 liquidated damages.  
 782

783 **(D) Erroneous Termination for Cause.** If, after notice of termination of  
 784 the Contractor's right to proceed under this section, it is determined for any  
 785 reason that good cause did not exist to allow the State to terminate as  
 786 provided herein, the rights and obligations of the parties shall be the same  
 787 as, and the relief afforded the Contractor shall be limited to, the provisions  
 788 contained in Subsection 108.12 – Termination for Convenience.  
 789

790 **108.12 Termination For Convenience.**  
 791

792 **(A) Terminations.** The Director may, when the interests of the State so  
 793 require, terminate this contract in whole or in part, for the convenience of  
 794 the State. The Director will give written notice of the termination to the  
 795 Contractor specifying the part of the contract terminated and when  
 796 termination becomes effective.  
 797

798 **(B) Contractor's Obligations.** The Contractor shall incur no further  
 799 obligations in connection with the terminated work and on the date set in  
 800 the notice of termination the Contractor shall stop work to the extent  
 801 specified. The Contractor shall also terminate outstanding orders and  
 802 subcontracts as they relate to the terminated work. The Contractor shall  
 803 settle the liabilities and claims arising out of the termination of subcontracts  
 804 and orders connected with the terminated work subject to the State's  
 805 approval. The Engineer may direct the Contractor to assign the  
 806 Contractor's right, title, and interest under terminated orders or subcontracts  
 807 to the State. The Contractor must still complete the work not terminated by  
 808 the notice of termination and may incur obligations as necessary to do so.  
 809

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

813  
814 (1) Any completed work.

815  
816 (2) Any partially completed construction, goods, materials, parts,  
817 tools, dies, jigs, fixtures, drawings, information, and contract rights  
818 (hereinafter called "construction material") that the Contractor has  
819 specifically produced or specially acquired for the performance of the  
820 terminated part of this contract.

821  
822 (3) The Contractor shall protect and preserve all property in the  
823 possession of the Contractor in which the State has an interest. If  
824 the Engineer does not elect to retain any such property, the  
825 Contractor shall use its best efforts to sell such property and  
826 construction materials for the State's account in accordance with the  
827 standards of HRS Chapter 490:2-706.

828  
829 **(D) Compensation.**

830  
831 (1) The Contractor shall submit a termination claim specifying the  
832 amounts due because of the termination for convenience together  
833 with cost or pricing data, submitted to the extent required by HAR  
834 Subchapter 15, Chapter 3-122. If the Contractor fails to file a  
835 termination claim within one year from the effective date of  
836 termination, the Engineer may pay the Contractor, if at all, an amount  
837 set in accordance with Subsection 108.12(D)(3).

838  
839 (2) The Engineer and the Contractor may agree to a settlement  
840 provided the Contractor has filed a termination claim supported by  
841 cost or pricing data submitted as required and that the settlement  
842 does not exceed the total contract price plus settlement costs  
843 reduced by payments previously made by the State, the proceeds of  
844 any sales of construction, supplies, and construction materials under  
845 Subsection 108.12(C)(3), and the proportionate contract price of the  
846 work not terminated.

847  
848 (3) Absent complete agreement, the Engineer will pay the  
849 Contractor the following amounts less any payments previously  
850 made under the contract:

851  
852 (a) The cost of all contract work performed prior to the  
853 effective date of the notice of termination work plus a 5  
854 percent markup on the actual direct costs, including amounts  
855 paid to subcontractor, less amounts paid or to be paid for

856 completed portions of such work; provided, however, that if it  
 857 appears that the Contractor would have sustained a loss if the  
 858 entire contract would have been completed, no markup shall  
 859 be allowed or included and the amount of compensation shall  
 860 be reduced to reflect the anticipated rate of loss. No  
 861 anticipated profit or consequential damage will be due or paid.

862  
 863 **(b)** Subcontractors shall be paid a markup of 10 percent on  
 864 their direct job costs incurred to the date of termination. No  
 865 anticipated profit or consequential damage will be due or paid  
 866 to any subcontractor. These costs must not include payments  
 867 made to the Contractor for subcontract work during the  
 868 contract period.

869  
 870 **(c)** The total sum to be paid the Contractor shall not  
 871 exceed the total contract price reduced by the amount of any  
 872 sales of construction supplies, and construction materials.

873  
 874 **(4)** Cost claimed, agreed to, or established by the State shall be  
 875 in accordance with HAR Chapter 3-123.

876  
 877 **108.13 Pre-Final and Final Inspections.**

878  
 879 **(A) Inspection Requirements.** Before the Engineer undertakes a final  
 880 inspection of any work, a pre-final inspection must first be conducted. The  
 881 Contractor shall notify the Engineer that the work has reached substantial  
 882 completion and is ready for pre-final inspection.

883  
 884 **(B) Pre-Final Inspection.** Before notifying the Engineer that the work  
 885 has reached substantial completion, the Contractor shall inspect the project  
 886 and test all installed items with all of its subcontractors as appropriate. The  
 887 Contractor shall also submit the following documents as applicable to the  
 888 work:

- 889  
 890 **(1)** All written guarantees required by the contract.  
 891  
 892 **(2)** Two accepted final field-posted drawings as specified in  
 893 Section 648 – Field-Posted Drawings;  
 894  
 895 **(3)** Complete weekly certified payroll records for the Contractor  
 896 and Subcontractors.  
 897  
 898 **(4)** Certificate of Plumbing and Electrical Inspection.  
 899  
 900 **(5)** Certificate of building occupancy as required.  
 901

- 902                   (6)    Certificate of Soil and Wood Treatments.  
 903  
 904                   (7)    Certificate of Water System Chlorination.  
 905  
 906                   (8)    Certificate of Elevator Inspection, Boiler and Pressure Pipe  
 907                   Inspection.  
 908  
 909                   (9)    Maintenance Service Contract and two copies of a list of all  
 910                   equipment installed.  
 911  
 912                   (10)   Current Tax clearance. The contractor will be required to  
 913                   submit an additional tax clearance certificate when the final payment  
 914                   is made.  
 915  
 916                   (11)   And any other final items and submittals required by the  
 917                   contract documents.

918  
 919   **(C) Procedure.** When in compliance with the above requirements, the  
 920   Contractor shall notify the Engineer in writing that the project has reached  
 921   substantial completion and is ready for pre-final inspection.  
 922

923                   The Engineer will then make a preliminary determination as to  
 924                   whether or not the project is substantially complete and ready for a pre-final  
 925                   inspection. The Engineer may, in writing, postpone the pre-final inspection  
 926                   until all the items listed in Subsection 108.13(B) – Pre-Final Inspection, are  
 927                   submitted and accepted or in the sole opinion of the Engineer the work is  
 928                   not substantially complete or a combination of both. The Engineer may  
 929                   give a waiver to the Contract Document requirements for the pre-final,  
 930                   which will be written, only if the waiver can justify that it is in the best  
 931                   interest of the State to do so.  
 932

933                   If in the sole opinion of the Engineer, the project's work status is not  
 934                   substantially complete, the Engineer may deny the pre-inspection from  
 935                   being held until it is a qualifying condition. The Engineer may at its sole  
 936                   discretion provide the Contractor a punchlist of specific deficiencies in  
 937                   writing which shall be corrected or finished before the work will be ready for  
 938                   a pre-final inspection. The Engineer needs to do so only if in its sole  
 939                   opinion the project's status of the work is near or at an acceptable condition  
 940                   for a pre-final inspection. The Contractor shall use due diligence to make  
 941                   the project's work status acceptable for a pre-final inspection before  
 942                   requesting one. The Engineer may add to or otherwise modify this  
 943                   punchlist from time to time. The Contractor shall take immediate action to  
 944                   correct the deficiencies and must repeat all steps described above including  
 945                   written notification.  
 946

947 If the Engineer finds the work status is substantially complete after a  
948 pre-final inspection but finds deficiencies that are required be corrected  
949 before the work is ready for a final inspection, the Engineer will prepare in  
950 writing and deliver to the Contractor a punchlist describing such  
951 deficiencies.

952  
953 After the Engineer is satisfied that the project appears substantially  
954 complete a final inspection shall be scheduled within ten working days after  
955 receipt of the Contractor's latest letter of notification that the project is ready  
956 for final inspection.

957  
958 At any time before final acceptance, the Engineer may revoke the  
959 determination of substantial completion if the Engineer finds that it was not  
960 warranted and will notify the Contractor in writing the reasons therefore  
961 together with a description of the deficiencies negating the declaration.

962  
963 When the date of substantial completion has been determined by the  
964 State, liquidated damages for the failure to complete the punchlist, if due to  
965 the State will be assessed in pursuant to Subsection 108.08(B) - Liquidated  
966 Damages for Failure to Complete the Punchlist.

967  
968 **(D) Punchlist; Clean Up and Final Inspection.** Upon receiving a  
969 punchlist after pre-final inspection, the Contractor shall promptly devote all  
970 required time, labor, equipment, materials and incidentals to correct and  
971 remedy all punchlist deficiencies. The Engineer may add to or otherwise  
972 modify this punchlist until substantial completion of the project.

973  
974 Before final inspection of the work, the Contractor shall clean all  
975 ground occupied by the Contractor in connection with the work of all  
976 rubbish, excess materials temporary structures and equipment, shall  
977 remove all graffiti and defacement of the work and all parts of the work and  
978 the worksite must be left in a neat and presentable condition to the  
979 satisfaction of the Engineer.

980  
981 Final inspection will occur within ten working days after the  
982 Contractor notifies the Engineer in writing that all punchlist deficiencies  
983 remaining after the pre-final inspection have been completed and the  
984 Engineer concurs. If the Engineer determines that deficiencies still remain  
985 at the final inspection, the work will not be accepted and the Engineer will  
986 notify the Contractor, in writing, of the deficiencies which shall be corrected  
987 and the steps above repeated.

988  
989 If the Contractor fails to correct the deficiencies and complete the  
990 work by the established or agreed date, the State may correct the  
991 deficiencies by whatever method it deems appropriate and deduct the cost  
992 from any payments due the Contractor.



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994

**108.14 Substantial Completion and Final Acceptance.**

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**108.17 Guarantee of Work.**

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**(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.

**(1)** Regardless of, and in addition to, any manufacturers' warranties, all work and equipment shall be guaranteed by the Contractor against defects

1038 in materials, equipment or workmanship for one year from the date of final  
1039 acceptance or as otherwise specified in the contract documents.

1040  
1041 **(2)** When the Engineer determines that repairs or replacements of any  
1042 guaranteed work and equipment is necessary due to materials, equipment,  
1043 or workmanship which are inferior, defective, or not in accordance with the  
1044 terms of the contract, the Contractor shall, at no increase in contract price  
1045 or contract time, and within five working days of receipt of written notice  
1046 from the State, commence to all of the following:

1047  
1048 **(a)** Correct all noted defects and make replacements, as directed  
1049 by the Engineer, in the equipment and work.

1050  
1051 **(b)** Repair or replace to new or pre-existing condition any  
1052 damages resulting from such defective materials, equipment or  
1053 installation thereof.

1054  
1055 **(3)** The State will be entitled to the benefit of all manufacturers and  
1056 installers warranties that extend beyond the terms of the Contractor's  
1057 guaranty regardless of whether or not such extended warranty is required  
1058 by the contract documents. The Contractor shall prepare and submit all  
1059 documents required by the providers of such warranties to make them  
1060 effective, and submit copies of such documents to the Engineer. If an  
1061 available extended warranty cannot be transferred or assigned to the State  
1062 as the ultimate user, the Contractor shall notify the Engineer who may direct  
1063 that the warranted items be acquired in the name of the State as purchaser.

1064  
1065 **(4)** If a defect is discovered during a guarantee period, all repairs and  
1066 corrections to the defective items when corrected shall be guaranteed for a  
1067 new duration equal to the original full guarantee period. The running of the  
1068 guarantee period shall be suspended for all other work affected by any  
1069 defect. The guarantee period for all other work affected by any such defect  
1070 shall restart for its remaining duration upon confirmation by the Engineer  
1071 that the deficiencies have been repaired or remedied.

1072  
1073 **(5)** Nothing in this section is intended to limit or affect the State's rights  
1074 and remedies arising from the discovery of latent defects in the work after  
1075 the expiration of any guarantee period.

1076  
1077 **108.18 No Waiver of Legal Rights.** The following will not operate or be  
1078 considered as a waiver of any portion of the contract, or any power herein  
1079 reserved, or any right to damages provided herein or by law:

1080  
1081 **(1)** Any payment for, or acceptance of, the whole or any part of the work.

1082  
1083 **(2)** Any extension of time.

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- (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**

1                            **SECTION 109 – MEASUREMENT AND PAYMENT**

2  
3     Make the following amendment to said Section:

4  
5     **(I)**    Amend **Subsection 109.05 Allowances for Overhead and Profit** by  
6     revising lines 101 to 110 to read as follows:

7  
8            **(1)**   20 percent of the direct cost for any work performed by the  
9            Contractor’s own labor force.

10  
11          **(2)**   20 percent of the direct cost for any work performed by each  
12          subcontractor’s own labor force.

13  
14          **(3)**   For the Contractor or any subcontractor for work performed  
15          by their respective subcontractor or tier subcontractor, 10 percent  
16          of the amount due to the performing subcontractor or tier  
17          subcontractor.”

18  
19     **(II)**   Amend **Subsection 109.08(B) Payment for Material On Hand** by  
20     revising lines 421 to 423 to read as follows:

21  
22           **(2)**   The materials shall be stored and handled in accordance  
23           with Subsection 105.14 – Storage and Handling of Materials and  
24           Equipment.”

25  
26  
27     **(III)** Amend **Subsection 109.11 Final Payment** by revising lines 568 to 580  
28     to read as follows:

29  
30           **(3)**   A current “Certificate of Vendor Compliance” issued by the  
31           Hawaii Compliance Express (HCE). The Certificate of Vendor  
32           Compliance is used to certify the Contractor’s compliance with

33  
34                **(a)**   Section 103D-328, HRS (for all contracts \$25,000 or  
35                more) which requires a current tax clearance certificate  
36                issued by the Hawaii State Department of Taxation and the  
37                Internal Revenue Service;

38  
39                **(b)**   Chapters 383, 386, 392, and 393, HRS; and

40  
41                **(c)**   Subsection 103D-310(c), HRS. The State reserves  
42                the right to verify that compliance is current prior to the  
43                issuance of final payment. Contractors are advised that non-  
44                compliance status will result in final payment being withheld  
45                until compliance is attained.  
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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**

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**SECTION 201 – CLEARING AND GRUBBING**

Make the following amendments to said Section:

**(I)** Amend **201.01 Description** by revising lines 4 to 9 to read as follows:

**“201.01 Description** - This section describes clearing, grubbing, protecting trees, vegetation, and objects designated to remain, removing and disposing of vegetation, debris, and unwanted material from the work area as required to perform the work or as instructed by the Engineer. Perform clearing and grubbing in advance of work area preparation.”

**(II)** Amend **201.03 (C) Limits** by revising lines 33 to 49 to read as follows:

**“(C) Limits** - Clear and grub areas as required, for trenching, conduit installation and installation of footings or structures or other work.”

**(III)** Amend **Section 201.05 Payment**, line 179, to read as follows:

|                        |              |
|------------------------|--------------|
| “Clearing and Grubbing | Square Feet” |
|------------------------|--------------|

**END OF SECTION 201**



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

3  
4  
5 **“SECTION 209 - TEMPORARY WATER POLLUTION, DUST, AND EROSION**  
6 **CONTROL**

7  
8  
9 **209.01 Description.** This section describes the following:

10  
11 **(A)** Including detailed plans, diagrams, and written Site-Specific Best  
12 Management Practices (BMP); constructing, maintaining, and repairing  
13 temporary water pollution, dust, and erosion control measures at the project  
14 site, including local material sources, work areas and haul roads; removing  
15 and disposing hazardous wastes; control of fugitive dust (defined as  
16 uncontrolled emission of solid airborne particulate matter from any source  
17 other than combustion); and complying with applicable State and Federal  
18 permit conditions.

19  
20 **(B)** Work associated with construction stormwater, dewatering, and  
21 hydrotesting activities and complying with conditions of the National Pollutant  
22 Discharge Elimination System (NPDES) permit(s) authorizing discharges  
23 associated with construction stormwater, dewatering, and hydrotesting  
24 activities.

25  
26 **(C)** Potential pollutant identification and mitigation measures are listed in  
27 Appendix A for use in the development of the Contractor’s Site-Specific BMP.

28  
29 Requirements of this section also apply to construction support activities  
30 including concrete or asphalt batch plants, rock crushing plants, equipment  
31 staging yards/areas, material storage areas, excavated material disposal  
32 areas, and borrow areas located outside the State Right-of-Way. For areas  
33 serving multiple construction projects, or operating beyond the completion of  
34 the construction project in which it supports, the Contractor shall be  
35 responsible for securing the necessary permits, clearances, and documents,  
36 and following the conditions of the permits and clearances, at no cost to the  
37 State.

38  
39 **209.02 Materials.** Comply with applicable materials described in Chapters 2 and 3  
40 of the current HDOT “Construction Best Management Practices Field Manual”. In  
41 addition, the materials shall comply with the following:

42  
43 **(A) Grass.** Grass shall be a quick growing species such as rye grass,  
44 Italian rye grass, or cereal grasses. Grass shall be suitable to the area and  
45 provide a temporary cover that will not compete later with permanent cover.  
46 Alternative grasses are allowable if acceptable to the Engineer.



47 **(B) Fertilizer and Soil Conditioners.** Fertilizer and soil conditioners shall  
 48 be a standard commercial grade acceptable to the Engineer. Fertilizer shall  
 49 conform to Subsection 619.02(H)(1) - Commercial Fertilizer.

50  
 51 **(C) Hydro-mulching.** Hydro-mulching used as a temporary vegetative  
 52 stabilization measure shall consist of materials in Subsections 209.02(A) -  
 53 Grass, and 209.02(B) – Fertilizer and Soil Conditioners. Mulches shall be  
 54 recycled materials including bagasse, hay, straw, wood cellulose bark, wood  
 55 chips, or other material acceptable to the Engineer. Mulches shall be clean  
 56 and free of noxious weeds and deleterious materials. Potable water shall meet  
 57 the requirements of Subsection 712.01 - Water. Submit alternate sources of  
 58 irrigation water for the Engineer’s acceptance if deviating from 712.01 - Water.  
 59 Installation and other requirements shall be in accordance with portions of  
 60 Section 641- Hydro-Mulch Seeding including 641.02(D) - Soil and Mulch  
 61 Tackifier, 641.03(A) – Seeding, and 641.03(B) - Planting Period. Install non-  
 62 vegetative controls including mulch or rolled erosion control products while the  
 63 vegetation is being established. Water and fertilize grass. Apply fertilizer as  
 64 recommended by the manufacturer. Replace grass the Engineer considers  
 65 unsuitable or sick. Remove and dispose of trash and debris. Remove  
 66 invasive species. Mow as needed to prevent site or signage obstructions, fire  
 67 hazard, or nuisance to the public. Do not remove down stream sediment  
 68 control measures until the vegetation is uniformly established, including no  
 69 large bare areas, and provides 70 percent of the density of pre-disturbance  
 70 vegetation. Temporary vegetative stabilization shall not be used longer than  
 71 one year.

72  
 73 **(D) Silt Fences.** Comply with ASTM D6462, Standard Practice for Silt  
 74 Fence Installation.

75  
 76 Alternative materials or methods to control, prevent, remove and dispose  
 77 pollution are allowable if acceptable to the Engineer.

78  
 79 **209.03 Construction.**

80  
 81 **(A) Preconstruction Requirements.**

82  
 83 **(1) Water Pollution, Dust, and Erosion Control Meeting.**  
 84 Schedule a water pollution, dust, and erosion control meeting with the  
 85 Engineer after Site-Specific BMP is accepted in writing by the Engineer.  
 86 Meeting shall be scheduled a minimum of 7 calendar days prior to the  
 87 Start Work Date. Discuss sequence of work, plans and proposals for  
 88 water pollution, dust, and erosion control.  
 89

**(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.

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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.

181 (h) Site-Specific BMP Review Checklist. The checklist may  
182 be downloaded from HDOT's Stormwater Management website  
183 at <http://stormwaterhawaii.com>.  
184

185 Date and sign Site-Specific BMP Plan. Keep accepted  
186 copy on site or at an accessible location so that it can be made  
187 available at the time of an on-site inspection or upon request by  
188 the Engineer, HDOT Third-Party Inspector, and/or DOH/EPA  
189 Representative. Amendments to the Site-Specific BMP Plan  
190 shall be included with original Site-Specific BMP Plan. Modify  
191 SWPPP if necessary to conform to revisions. Include date of  
192 installation and removal of Site-Specific BMP measures. Obtain  
193 written acceptance by the Engineer before implementing revised  
194 Site-Specific BMPs in the field.  
195

196 Follow the guidelines in the current HDOT "Construction  
197 Best Management Practices Field Manual", in developing,  
198 installing, and maintaining Site-Specific BMPs for all projects.  
199 For any conflicting requirements between the Manual and  
200 applicable bid documents, the applicable bid documents will  
201 govern. Should a requirement not be clearly described within  
202 the applicable bid documents, notify the Engineer immediately  
203 for interpretation. For the purposes of clarification "applicable  
204 bid documents" include the construction plans, standard  
205 specifications, special provisions, Permits, and the SWPPP  
206 when applicable.  
207

208 Follow Honolulu's City and County "Rules for Soil Erosion  
209 Standards and Guidelines" for all projects on Oahu. Use  
210 respective Soil Erosion Guidelines for Maui, Kauai and Hawaii  
211 projects.  
212

213 **(B) Construction Requirements.** Do not begin work until submittals  
214 detailed in Subsection 209.03(A)(2) - Water Pollution, Dust, and Erosion  
215 Control Submittals are completed and accepted in writing by the Engineer.  
216

217 Install, maintain, monitor, repair and replace site-specific BMP  
218 measures, such as for water pollution, dust and erosion control; installation,  
219 monitoring, and operation of hydrotesting activities; removal and disposal of  
220 hazardous waste indicated on plans, concrete cutting slurry, concrete curing  
221 water; or hydrodemolition water. Site-Specific BMP measures shall be in  
222 place, functional and accepted by HDOT personnel prior to initiating any  
223 ground disturbing activities.  
224

225 If necessary, furnish and install rain gage in a secure location prior to  
226 field work including installation of site-specific BMP. Provide rain gage with a  
227 tolerance of at least 0.05 inches of rainfall. Install rain gage on project site in  
228 an area that will not deter rainfall from entering the gate opening. Do not  
229 install in a location where rain water may splash into rain gage. The rain gage  
230 installation shall be stable and plumbed. Maintain rain gage and replace rain  
231 gage that is stolen, does not function properly or accurately, is worn out, or  
232 needs to be relocated. Do not begin field work until rain gage is installed and  
233 Site-Specific BMPs are in place. Rain gage data logs shall be readily  
234 available. Submit rain gage data logs weekly to the Engineer.

235  
236 Address all comments received from the Engineer.

237  
238 Modify and resubmit plans and construction schedules to correct  
239 conditions that develop during construction which were unforeseen during the  
240 design and pre-construction stages.

241  
242 Coordinate temporary control provisions with permanent control  
243 features throughout the construction and post-construction period.

244  
245 Limit maximum surface area of earth material exposed at any time to  
246 300,000 square feet. Do not expose or disturb surface area of earth material  
247 (including clearing and grubbing) until BMP measures are installed and  
248 accepted in writing by the Engineer. Protect temporarily or permanently  
249 disturbed soil surface from rainfall impact, runoff and wind before end of the  
250 work day.

251  
252 Immediately initiate stabilizing exposed soil areas upon completion of  
253 earth disturbing activities for areas permanently or temporarily ceased on any  
254 portion of the site. Earth-disturbing activities have permanently ceased when  
255 clearing and excavation within any area of the construction site that will not  
256 include permanent structures has been completed. Earth-disturbing activities  
257 have temporarily ceased when clearing, grading, and excavation within any  
258 area of the site that will not include permanent structures will not resume for a  
259 period of 14 or more calendar days, but such activities will resume in the  
260 future. The term "immediately" is used in this section to define the deadline for  
261 initiating stabilization measures. "Immediately" means as soon as practicable,  
262 but no later than the end of the next work day, following the day when the  
263 earth-disturbing activities have temporarily or permanently ceased.

264  
265 For projects with an NPDES Permit for Construction activities:

266  
267 **(1)** For construction areas discharging into waters not impaired for  
268 nutrients or sediments, complete initial stabilization within 14 calendar  
269 days after the temporary or permanent cessation of earth-disturbing  
270 activities.

271 (2) For construction areas discharging into nutrient or sediment  
272 impaired waters, complete initial stabilization within 7 calendar days  
273 after the temporary or permanent cessation of earth-disturbing  
274 activities.

275  
276 For projects without an NPDES Permit for Construction activities,  
277 complete initial stabilization within 14 calendar days after the temporary or  
278 permanent cessation of earth-disturbing activities.

279  
280 Any of the following types of activities constitutes initiation of  
281 stabilization:

282  
283 (1) Prepping the soil for vegetative or non-vegetative stabilization;  
284

285 (2) Applying mulch or other non-vegetative product to the exposed  
286 area;

287  
288 (3) Seeding or planting the exposed area;

289  
290 (4) Starting any of the activities in items (1) – (3) above on a portion  
291 of the area to be stabilized, but not on the entire area; and

292  
293 (5) Finalizing arrangements to have stabilization product fully  
294 installed in compliance with the deadline for completing initial  
295 stabilization activities.

296  
297 Any of the following types of activities constitutes completion of initial  
298 stabilization activities:

299  
300 (1) For vegetative stabilization, all activities necessary to initially  
301 seed or plant the area to be stabilized; and/or

302  
303 (2) For non-vegetative stabilization, the installation or application of  
304 all such non-vegetative measures.

305  
306 If the Contractor is unable to meet the deadlines above due to  
307 circumstances beyond the Contractor's control, and the Contractor is using  
308 vegetative cover for temporary or permanent stabilization, the Contractor may  
309 comply with the following stabilization deadlines instead as agreed to by the  
310 Engineer:

311  
312 (1) Immediately initiate, and complete within the timeframe shown  
313 above, the installation of temporary non-vegetative stabilization  
314 measures to prevent erosion;

315

316 (2) Complete all soil conditioning, seeding, watering or irrigation  
317 installation, mulching, and other required activities related to the  
318 planting and initial establishment of vegetation as soon as conditions or  
319 circumstances allow it on the site; and

320  
321 (3) Notify and provide documentation to the Engineer the  
322 circumstances that prevent the Contractor from meeting the deadlines  
323 above for stabilization and the schedule the Contractor will follow for  
324 initiating and completing initial stabilization and as agreed to by the  
325 Engineer.

326  
327 Follow the applicable requirements of the specifications and special  
328 provisions including Section 619 Planting and Section 641 Hydro-Mulch  
329 Seeding.

330  
331 Immediately after seeding or planting the area to be vegetatively  
332 stabilized, to the extent necessary to prevent erosion on the seeded or planted  
333 area, select, design, and install non-vegetative erosion controls that provide  
334 cover (e.g., mulch, rolled erosion control products) to the area while vegetation  
335 is becoming established.

336  
337 Protect exposed or disturbed surface area with mulches, grass seeds or  
338 hydromulch. Spray mulches at a rate of 2,000 pounds per acre. Add tackifier  
339 to mix at a rate of 85 pounds per acre. Apply grass seeds at a rate of 125  
340 pounds per acre. For hydromulch, use the ingredients and rates required for  
341 mulches and grass seeds. Submit recommendations from a licensed  
342 Landscape Architect when deviating from the application rates above.

343  
344 Apply fertilizer to mulches, grass seed or hydromulch per  
345 manufacturer's recommendations. Submit recommendations from a licensed  
346 Landscape Architect when deviating from the manufacturer's  
347 recommendations.

348  
349 Install velocity dissipation measures when exposing erodible surfaces  
350 greater than 15 feet in height.

351  
352 BMP measures shall be in place and operational at the end of work day  
353 or as required by Section 209.03(B) Construction Requirements.

354  
355 Install and maintain either or both stabilized construction entrances and  
356 wheel washes to minimize tracking of dirt and mud onto roadways. Restrict  
357 traffic to stabilized construction areas only. Clean dirt, mud, or other material  
358 tracked onto the road, sidewalk, or other paved area by the end of the same  
359 day in which the track-out occurs. Modify stabilized construction entrances to  
360 prevent mud from being tracked onto road. Stabilize entire access roads if  
361 necessary.

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

364  
365 Provide temporary slope drains of rigid or flexible conduits to carry  
366 runoff from cuts and embankments. Provide portable flume at the entrance.  
367 Shorten or extend temporary slope drains to ensure proper function.

368  
369 Protect ditches, channels, and other drainageways leading away from  
370 cuts and fills at all times by either:

371  
372 **(1)** Hydro-mulching the lower region of embankments in the  
373 immediate area.

374  
375 **(2)** Installing check dams and siltation control devices.

376  
377 **(3)** Other methods acceptable to the Engineer.

378  
379 Provide for controlled discharge of waters impounded, directed, or  
380 controlled by project activities or erosion control measures.

381  
382 Cover exposed surface of materials completely with tarpaulin or similar  
383 device when transporting aggregate, soil, excavated material or material that  
384 may be source of fugitive dust.

385  
386 Cleanup and remove any pollutant that can be attributed to the  
387 Contractor.

388  
389 Install or modify Site-Specific BMP measures due to change in the  
390 Contractor's means and methods, or for omitted condition that should have  
391 been allowed for in the accepted Site-Specific BMP or a Site-Specific BMP that  
392 replaces an accepted Site-Specific BMP that is not satisfactorily performing.  
393 Modifications to Site-Specific BMP measures shall be accepted in writing by  
394 the Engineer prior to implementation.

395  
396 Properly maintain all Site-Specific BMP measures.

397  
398 For projects with an NPDES Permit for Construction Activities:

399  
400 **(1)** For construction areas discharging into nutrient or sediment  
401 impaired waters, inspect, prepare a written report, and make repairs to  
402 BMP measures at the following intervals:

403  
404 **(a)** Weekly.

405  
406 **(b)** Within 24 hours of any rainfall of 0.25 inch or greater  
407 which occurs in a 24-hour period.



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(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

454 seven calendar days from the time of notification/Contractor discovery. Notify  
455 the Engineer and document why it is infeasible to complete the installation or  
456 repair within seven calendar days and complete the work as soon as  
457 practicable and as agreed to by the Engineer. Address Site-Specific BMP  
458 deficiencies discovered by the Contractor within the timeframe above. The  
459 Contractor's failure to satisfactorily address these Site-Specific BMP  
460 deficiencies, the Engineer reserves the right to employ outside assistance or  
461 use the Engineer's own labor forces to provide necessary corrective  
462 measures. The Engineer will charge the Contractor such incurred costs plus  
463 any associated project engineering costs. The Engineer will make appropriate  
464 deductions from the Contractor's monthly progress estimate. Failure to apply  
465 Site-Specific BMP measures may result in one or more of the following:  
466 assessment of liquidated damages, suspension, or cancellation of Contract  
467 with the Contractor being fully responsible for all additional costs incurred by  
468 the State.

469  
470 **(C) Discharges of Storm Water Associated with Construction**  
471 **Activities.** If work includes disturbance of one acre or more, an NPDES  
472 Permit authorizing Discharges of Storm Water Associated with Construction  
473 Activity (CWB-NOI Form C) or Individual Permit authorizing storm water  
474 discharges associated with construction activity is required from the  
475 Department of Health Clean Water Branch (DOH-CWB).

476  
477 Do not begin construction activities until all required conditions of the  
478 permit are met and submittals detailed in Subsection 209.03(A)(2) – Water  
479 Pollution, Dust, and Erosion Control Submittals are completed and accepted in  
480 writing by the Engineer.

481  
482 **(D) Discharges Associated with Hydrotesting Activities.** If hydrotesting  
483 activities require effluent discharge into State waters or drainage systems, an  
484 NPDES Hydrotesting Waters Permit (CWB-NOI Form F) or Individual Permit  
485 authorizing discharges associated with hydrotesting from DOH-CWB is  
486 required from the DOH-CWB.

487  
488 Do not begin hydrotesting activities until the DOH-CWB has issued an  
489 Individual NPDES Permit or Notice of General Permit Coverage (NGPC).  
490 Conduct Hydrotesting operations in accordance with the conditions of the  
491 permit or NGPC.

492  
493 **(E) Discharges Associated with Dewatering Activities.** If dewatering  
494 activities require effluent discharge into State waters or drainage systems, an  
495 NPDES Dewatering Permit (CWB-NOI Form G) or Individual Permit  
496 authorizing discharges associated with dewatering from DOH-CWB is required  
497 from the DOH-CWB.

498

499 Do not begin dewatering activities until the DOH-CWB has issued an  
 500 Individual NPDES Permit or Notice of General Permit Coverage (NGPC).  
 501 Conduct dewatering operations in accordance with the conditions of the  
 502 permit or NGPC.

503  
 504 **(F) Solid Waste.** Submit the Solid Waste Disclosure Form for Construction  
 505 Sites to the Engineer within 21 calendar days of date of award. Provide a copy  
 506 of all the disposal receipts from the facility permitted by the Department of  
 507 Health to receive solid waste to the Engineer monthly. This should also  
 508 include documentation from any intermediary facility where solid waste is  
 509 handled or processed, or as directed by the Engineer.

510  
 511 **(G) Construction BMP Training.** The Contractor’s representative  
 512 responsible for development of the Site-Specific BMP Plan and implementation  
 513 of Site-Specific BMPs in the field shall attend the State’s Construction Best  
 514 Management Practices Training. The Contractor shall keep training logs  
 515 updated and readily available.

516  
 517 **209.04 Measurement.**

518  
 519 **(A)** Installation, maintenance, monitoring, and removal of BMP will be paid  
 520 on a lump sum basis. Measurement for payment will not apply.

521  
 522 **(B)** The Engineer will only measure additional water pollution, dust and  
 523 erosion control required and requested by the Engineer on a force account  
 524 basis in accordance with Subsection 109.06 – Force Account Provisions and  
 525 Compensation.

526  
 527 **209.05 Payment.** The Engineer will pay for accepted pay items listed below at  
 528 contract price per pay unit, as shown in the proposal schedule. Payment will be full  
 529 compensation for work prescribed in this section and contract documents.

530  
 531 The Engineer will pay for each of the following pay items when included in  
 532 proposal schedule:

| Pay Item  | Pay Unit      |
|---|---------------|
| Installation, Maintenance, Monitoring, and Removal of BMP | Months        |
| Additional Water Pollution, Dust, and Erosion Control     | Force Account |

540 An estimated amount for force account is allocated in proposal schedule under  
541 'Additional Water Pollution, Dust, and Erosion Control', but actual amount to be paid  
542 will be the sum shown on accepted force account records, whether this sum be more  
543 or less than estimated amount allocated in proposal schedule. The Engineer will pay  
544 for BMP measures requested by the Engineer that are beyond scope of accepted  
545 Site-Specific BMP on a force account basis.

546  
547 No progress payment will be authorized until the Engineer accepts in writing  
548 Site-Specific BMP or when the Contractor fails to maintain project site in accordance  
549 with accepted BMP.

550  
551 For all citations or fines received by the Department for non-compliance,  
552 including compliance with NPDES Permit conditions, the Contractor shall reimburse  
553 State within 30 calendar days for full amount of outstanding cost State has incurred,  
554 or the Engineer will deduct cost from progress payment.

555  
556 The Engineer will assess liquidated damages up to \$27,500 per day for non-  
557 compliance of each BMP requirement and all other requirements in this section.  
558

559 **Appendix A**

560

561 The following list identifies potential pollutant sources and corresponding  
562 BMPs used to mitigate the pollutants. Each BMP is referenced to the  
563 corresponding section of the current HDOT Construction Best Management  
564 Practices Field Manual or appropriate Supplemental Sheets. The Manual may be  
565 obtained from the HDOT Statewide Stormwater Management Program Website at  
566 <http://www.stormwaterhawaii.com/resources/contractors-and-consultants/> under  
567 Construction Best Management Practices Field Manual. Supplemental BMP  
568 sheets are located at [http://www.stormwaterhawaii.com/resources/contractors-  
569 and-consultants/storm-water-pollution-prevention-plan-swppp/](http://www.stormwaterhawaii.com/resources/contractors-and-consultants/storm-water-pollution-prevention-plan-swppp/) under Concrete  
570 Curing and Irrigation Water.  
571

| <b>Pollutant Source</b>   | <b>Appropriate Site-Specific BMP to be Implemented</b>   | <b>BMP Requirements</b>  |
|---|--|--|
| <i>Construction debris, green waste, general litter</i>   | <ul style="list-style-type: none"> <li>• <i>Separate contaminated clean up materials from construction and demolition (C&amp;D) wastes.</i></li> <li>• <i>Provide waste containers (e.g., dumpster or trash receptacle) of sufficient size and number to contain construction and domestic wastes.</i></li> <li>• <i>Inspect construction waste and recycling areas regularly.</i></li> <li>• <i>Schedule solid waste collection regularly.</i></li> <li>• <i>Schedule recycling activities based on construction/demolition phases.</i></li> <li>• <i>Empty waste containers weekly or when they are two-thirds full, whichever is sooner.</i></li> <li>• <i>Do not allow containers to overflow. Clean up immediately if they do.</i></li> <li>• <i>On work days, clean up and dispose of waste in designated waste containers.</i></li> <li>• <i>See Solid Waste Management Section SM-6 for additional requirements.</i></li> <li>• <i>Provide Storm Drain Inlet Protection and/or Perimeter Sediment Controls as applicable.</i></li> </ul> | <i>See Solid Waste Management Section SM-6. Protect Storm Drain Inlets SC-2, and Perimeter Sediment Controls where applicable.</i>   |
| <i>Materials associated with the operation and maintenance of equipment, such as oil, fuel, and hydraulic fluid leakage</i> | <ul style="list-style-type: none"> <li>• <i>Use off-site wash racks, repair and maintenance facilities, and fueling sites when practical.</i></li> <li>• <i>Designate bermed wash area if cleaning on site is necessary.</i></li> <li>• <i>Place drip pans or drop cloths under vehicles and equipment to absorb spills or leaks.</i></li> <li>• <i>Provide an ample supply of readily available spill cleanup materials.</i></li> <li>• <i>Clean up spills immediately, using dry clean-up methods where possible, and dispose of used materials properly.</i></li> <li>• <i>Do not clean surfaces or spills by hosing the area down.</i></li> <li>• <i>Eliminate the source of the spill to prevent a discharge or a continuation of an ongoing discharge.</i></li> <li>• <i>Inspect on-site vehicles and equipment regularly and immediately repair leaks.</i></li> <li>• <i>Regularly inspect fueling areas and storage tanks.</i></li> </ul>  | <i>See Vehicle and Equipment Cleaning, Maintenance, and Refueling, Sections SM-11, SM-12, and SM-13, and Material Delivery, Storage and Material Use Sections SM-2 and SM-3, and Spill Prevention and Control SM-10.</i> |

573

| Pollutant Source | Appropriate Site-Specific BMP to be Implemented   | BMP Requirements |
|------------------|---|------------------|
|                  | <ul style="list-style-type: none"> <li>• <i>Train employees on proper maintenance and spill practices and procedures and fueling and cleanup procedures.</i></li> <li>• <i>Store diesel fuel, oil, hydraulic fluid, or other petroleum products or other chemicals in water-tight containers and provide cover or secondary containment.</i></li> <li>• <i>Do not remove original product labels and comply with manufacturer's labels for proper disposal.</i></li> <li>• <i>Dispose of containers only after all the product has been used.</i></li> <li>• <i>Dispose of or recycle oil or oily wastes according to Federal, State, and Local requirements.</i></li> <li>• <i>Store soaps, detergents, or solvents under cover or other means to prevent contact with rainwater.</i></li> <li>• <i>See Vehicle and Equipment Cleaning, Maintenance, and Refueling, Sections SM-11, SM-12, and SM-13 and Material Use Section SM-3 for additional requirements.</i></li> </ul> |                  |

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| <b>Pollutant Source</b>               | <b>Appropriate Site-Specific BMP to be Implemented</b>   | <b>BMP Requirements</b>  |
|---------------------------------------|--|--|
| Soil erosion from the disturbed areas | <ul style="list-style-type: none"> <li>• Provide Soil Stabilization, Slope Protection, Storm Drain Inlet Protection SC-2, Perimeter Controls and Sediment Barriers, Sediment Basins and Detention Ponds, Check Dams SC-9, Level Spreader SC-10, Paving Operations SM-19, Construction Road Stabilization EC-1, Controlling Storm Water Flowing Onto and Through the Project, Post-Construction BMPs, and Non-Structural BMPs (Employee Training SM-1, Scheduling SM-14, Location of Potential Sources of Sediment SM-15, Preservation of Existing Vegetation SM-16).</li> <li>• Delineate, and clearly mark off, with flags, tape, or other similar marking device all natural buffer areas defined in the SWPPP.</li> <li>• Preserve native topsoil where practicable.</li> <li>• In areas where vegetative stabilization will occur, restrict vehicle/equipment use in areas to avoid soil compaction or condition soil to promote vegetative growth.</li> <li>• 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.</li> <li>• 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.</li> <li>• Sediment basins shall be designed and maintained in accordance with HAR 11-55.</li> <li>• Minimize disturbance on steep slopes (Greater than 15% in grade).</li> <li>• If disturbance of steep slopes are unavoidable, phase disturbances and use stabilization techniques designed for steep grades.</li> <li>• For temporary drains and swales use velocity dissipation devices within and at the outlet to minimize erosive flow velocities.</li> </ul> | <p>Soil Stabilization</p> <ol style="list-style-type: none"> <li>1. SM-21 Topsoil Management</li> <li>2. EC-5 Seeding and Planting</li> <li>3. EC-6 Mulching</li> <li>4. EC-7 Geotextiles and Mats</li> </ol> <p>Slope Protection</p> <ol style="list-style-type: none"> <li>1. EC-5 Seeding and Planting</li> <li>2. EC-6 Mulching</li> <li>3. EC-7 Geotextiles and Mats</li> <li>4. EC-9 Slope Roughening, Terracing, and Rounding</li> <li>5. SC-11 Slope Drains and Subsurface Drains</li> <li>6. SC-12 Top and Toe of Slope Diversion Ditches and Berms</li> </ol> <p>SC-2 Storm Drain Inlet Protection</p> |



| Pollutant Source | Appropriate Site-Specific BMP to be Implemented | BMP Requirements   |
|------------------|---|--|
|                  |   | <p><i>Perimeter Controls and Sediment Barriers</i></p> <ol style="list-style-type: none"> <li>1. SC-1 Silt Fence</li> <li>2. SC-5 Vegetated Filter Strips and Buffers</li> <li>3. SC-8 Compost Filter Berm</li> <li>4. SC-13 Sandbag Barrier</li> <li>5. SC-14 Brush or Rock Filter</li> </ol> <p><i>Sediment Basins and Detention Ponds</i></p> <ol style="list-style-type: none"> <li>1. SC-15 Sediment Trap</li> <li>2. SC-16 Sediment Basin</li> </ol> <p><i>SC-9 Check Dams</i></p> <p><i>SC-10 Level Spreader</i></p> <p><i>SM-19 Paving Operations</i></p> <p><i>EC-1 Construction Road Stabilization</i></p> |

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| Pollutant Source | Appropriate Site-Specific BMP to be Implemented | BMP Requirements  |
|------------------|---|---|
|                  |   | <p><i>Controlling Storm Water Flowing onto and Through the Project</i></p> <ol style="list-style-type: none"> <li>1. <i>EC-8 Run-On Diversion</i></li> <li>2. <i>SC-6 Earth Dike</i></li> <li>3. <i>SC-7 Temporary Drains and Swales</i></li> </ol> <p><i>Post Construction BMPs</i></p> <ol style="list-style-type: none"> <li>1. <i>EC-4 Flared Culvert End Sections</i></li> <li>2. <i>SC-3 Rip-Rap and Gabion Inflow Protection</i></li> <li>3. <i>SC-4 Outlet Protection and Velocity Dissipation Devices</i></li> <li>4. <i>SM-21 Topsoil Management</i></li> </ol> |

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| Pollutant Source | Appropriate Site-Specific BMP to be Implemented | BMP Requirements   |
|------------------|---|--|
|                  |   | <i>Non-Structural BMPs</i><br>1. SM-1 Employee Training<br>2. SM-14 Scheduling<br>3. SM-15 Location of Potential Sources of Sediment<br>4. SM-16 Preservation of Existing Vegetation |

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| <b>Pollutant Source</b>               | <b>Appropriate Site-Specific BMP to be Implemented</b>   | <b>BMP Requirements</b>   |
|---------------------------------------|--|---|
| Sediment from soil stockpiles         | <ul style="list-style-type: none"> <li>• 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.</li> <li>• Place bagged materials on pallets and under cover.</li> <li>• Provide physical diversion to protect stockpiles from concentrated runoff.</li> <li>• Cover stockpiles with plastic or comparable material when practicable.</li> <li>• Place silt fence, fiber filtration tubes, or straw wattles around stockpiles.</li> <li>• 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.</li> <li>• Unless infeasible, contain and securely protect stockpiles from the wind.</li> <li>• Provide Storm Drain Inlet Protection and/or Perimeter Sediment Controls as applicable.</li> <li>• See Protection of Stockpiles Section SM-4 for additional requirements.</li> </ul> | See Protection of Stockpiles Section SM-4. Protect Storm Drain Inlets SC-2, and Perimeter Sediment Controls where applicable.   |
| Emulsified asphalt or prime/tack coat | <ul style="list-style-type: none"> <li>• Provide training for employees and contractors on proper material delivery and storage practices and procedures.</li> <li>• Restrict paving operations during wet weather to prevent paving materials from being discharged.</li> <li>• Use asphalt emulsions such as prime coat when possible.</li> <li>• Protect drain inlet structures and manholes during application of tack coat, seal coat, slurry seal, and fog seal.</li> <li>• Keep ample supplies of drip pans and absorbent materials on site.</li> <li>• Inspect inlet protection devices.</li> <li>• See Material Delivery and Storage Section SM-2 and Paving Operations Section SM-19 for additional requirements.</li> <li>• Provide Storm Drain Inlet Protection and/or Perimeter Sediment Controls as applicable.</li> </ul>   | See Material Delivery and Storage Section SM-2 and Material Use Section SM-3, Paving Operations Section SM-19, Protect Storm Drain Inlets SC-2, and Perimeter Sediment Controls where applicable. |

| <b>Pollutant Source</b>  | <b>Appropriate Site-Specific BMP to be Implemented</b>   | <b>BMP Requirements</b>   |
|--|--|---|
| Materials associated with painting, such as paint and paint wash solvent | <ul style="list-style-type: none"> <li>• Hazardous chemicals shall be well-labeled and stored in original containers.</li> <li>• Keep ample supply of cleanup materials on site.</li> <li>• Dispose container only after all of the product has been used.</li> <li>• Remove as much paint from brushes on painted surface.</li> <li>• 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.</li> <li>• 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.</li> <li>• Do not dump liquid wastes into the storm drainage system.</li> <li>• Filter and re-use solvents and thinners.</li> <li>• Dispose of oil-based paints and residue as a hazardous waste.</li> <li>• Ensure collection, removal, and disposal of hazardous waste complies with regulations.</li> <li>• Immediately clean up spills and leaks</li> <li>• Properly store paints, solvents, and epoxy compounds.</li> <li>• Properly store and dispose waste materials generated from painting and structure repair and construction activities.</li> <li>• Mix paints in a covered and contained area when possible to minimize adverse impacts from spills.</li> <li>• Do not apply traffic paint or thermoplastic if rain is forecasted.</li> <li>• See Material Delivery and Storage Section SM-2, Material Use SM-3, Waste Management, Hazardous Waste Management Section SM-9, Waste Management, Spill Prevention and Control Section SM-10, and Structure Construction and Painting Section SM-20 for additional requirements.</li> <li>• Provide Storm Drain Inlet Protection and/or Perimeter Sediment Controls as applicable.</li> </ul> | See Material Delivery and Storage Section SM-2, Material Use Section SM-3, Hazardous Waste Management Section SM-9, Waste Management, Spill Prevention and Control Section SM-10, and Structure Construction and Painting Section SM-20, Protect Storm Drain Inlets SC-2, and Perimeter Sediment Controls where applicable. |

| <b>Pollutant Source</b>  | <b>Appropriate Site-Specific BMP to be Implemented</b>  | <b>BMP Requirements</b>  |
|--|---|--|
| <p><i>Industrial chemicals, fertilizers, and/or pesticides</i></p> | <ul style="list-style-type: none"> <li>• <i>Hazardous chemicals shall be well-labeled and stored in original containers.</i></li> <li>• <i>Keep ample supply of cleanup materials on site.</i></li> <li>• <i>Clean up spills immediately, using dry clean-up methods where possible, and dispose of used materials properly.</i></li> <li>• <i>Do not clean surfaces or spills by hosing the area down.</i></li> <li>• <i>Eliminate the source of the spill to prevent a discharge or a furtherance of an ongoing discharge.</i></li> <li>• <i>Dispose container only after all of the product has been used.</i></li> <li>• <i>Retain a complete set of material safety data sheets on site.</i></li> <li>• <i>Store industrial chemicals in water-tight containers and provide either cover or secondary containment.</i></li> <li>• <i>Provide cover when storing fertilizers or pesticides to prevent these chemicals from coming into contact with rainwater.</i></li> <li>• <i>Restrict amount of pesticide prepared to quantity necessary for the current application.</i></li> <li>• <i>Do not apply fertilizers or pesticides during or just before a rain event.</i></li> <li>• <i>Do not apply to stormwater conveyance channels with flowing water.</i></li> <li>• <i>Comply with fertilizer and pesticide manufacturer's recommended usage instructions.</i></li> <li>• <i>Follow federal, state, and local laws regarding fertilizer application.</i></li> <li>• <i>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.</i></li> <li>• <i>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.</i></li> <li>• <i>See Material Delivery and Storage Section SM2, Material Use SM-3, and Waste Management, Hazardous Waste Management Section SM-9 for additional requirements.</i></li> </ul> | <p><i>See Material Delivery and Storage Section SM-2, Material Use Section SM-3, and Hazardous Waste Management Section SM-9, and Spill Prevention and Control SM-10</i></p> |

| <b>Pollutant Source</b>  | <b>Appropriate Site-Specific BMP to be Implemented</b>   | <b>BMP Requirements</b>  |
|--|--|--|
| <p>Hazardous waste<br/>(Batteries, Solvents, Treated Lumber, etc.)</p> | <ul style="list-style-type: none"> <li>• Do not dispose of toxic materials in dumpsters allocated for construction debris.</li> <li>• Ensure collection, removal, and disposal of hazardous waste complies with regulations.</li> <li>• Hazardous waste that cannot be reused or recycled shall be disposed of by a licensed hazardous waste hauler.</li> <li>• 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.</li> <li>• 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.</li> <li>• 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.</li> <li>• Clean up spills immediately, using dry clean-up methods where possible, and dispose of used materials properly.</li> <li>• Do not clean surfaces or spills by hosing the area down.</li> <li>• Eliminate the source of the spill to prevent a discharge or a continuation of an ongoing discharge.</li> <li>• Ensure collection, removal, and disposal of hazardous waste complies with manufacturer's recommendations and is in compliance with federal, state, and local requirements.</li> <li>• See Hazardous Waste Management Section SM-9 and Vehicle and Equipment Management, Vehicle and Equipment Maintenance SM-12 for additional requirements.</li> </ul> | <p>See<br/>Hazardous Waste Management Section SM-9 and Vehicle and Equipment Maintenance SM-12</p> |

| <b>Pollutant Source</b>              | <b>Appropriate Site-Specific BMP to be Implemented</b>   | <b>BMP Requirements</b>   |
|--------------------------------------|--|---|
| <i>Metals and Building Materials</i> | <ul style="list-style-type: none"> <li>• <i>Inspect construction waste and recycling areas regularly.</i></li> <li>• <i>Schedule solid waste collection regularly.</i></li> <li>• <i>If building materials or metals are stored on site (such as rebar or galvanized poles) store under cover under tarps or in containers.</i></li> <li>• <i>Minimize the amount of material stored on site.</i></li> <li>• <i>Do not stockpile uncovered metals or other building materials in close proximity to discharge points.</i></li> <li>• <i>See Solid Waste Management Section SM-6 for additional requirements.</i></li> </ul>  | <i>See Solid Waste Management Section SM-6</i>  |
| <i>Contaminated Soil</i>             | <ul style="list-style-type: none"> <li>• <i>See Waste Management, Contaminated Soil Management Section SM-8 and/or Hazardous Waste Management Section SM-9 for additional requirements.</i></li> <li>• <i>At minimum contain contaminated material soil by surrounding with impermeable lined berms or cover exposed contaminated material with plastic sheets.</i></li> </ul>   | <i>See Waste Management, Contaminated Soil Management Section SM-8 and/or Hazardous Waste Management Section SM-9</i> |
| <i>Dust Control Water</i>            | <ul style="list-style-type: none"> <li>• <i>Do not over spray water for dust control purposes which will result in runoff from the area.</i></li> <li>• <i>Apply water as conditions require.</i></li> <li>• <i>Washing down of debris or dirt into drainage, sewage systems, or State waters is not allowed.</i></li> <li>• <i>See Dust Control Section SM-18 for additional requirements.</i></li> </ul>   | <i>See Dust Control Section SM-18</i>   |
| <i>Concrete Truck Wash Water</i>     | <ul style="list-style-type: none"> <li>• <i>Disposal of concrete truck wash water via percolation is prohibited.</i></li> <li>• <i>Wash concrete-coated vehicles or equipment off-site or in the designated wash area.</i></li> <li>• <i>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.</i></li> <li>• <i>Runoff from the on-site concrete wash area shall be contained in a temporary pit or level bermed area where the concrete can set.</i></li> <li>• <i>Design the area so that no overflow can occur due to inadequate wash area sizing or precipitation.</i></li> </ul> | <i>See Waste Management, Concrete Waste Management Section SM-5</i>   |



| Pollutant Source   | Appropriate Site-Specific BMP to be Implemented   | BMP Requirements                                  |
|--------------------|---|---|
|                    | <ul style="list-style-type: none"> <li>• <i>The temporary pit shall be lined with plastic to prevent seepage of wash water into the ground.</i></li> <li>• <i>Allow wash water to evaporate or collect wash water and all concrete debris in a concrete washout system bin.</i></li> <li>• <i>Do not dump liquid wastes into storm drainage system.</i></li> <li>• <i>Dispose of liquid and solid concrete wastes in compliance with federal, state, and local standards.</i></li> <li>• <i>See Waste Management, Concrete Waste Management Section SM-5 for additional requirements.</i></li> </ul>  |   |
| Sediment Track-Out | <ul style="list-style-type: none"> <li>• <i>Include Stabilized Construction Entrance at all points that exit onto paved roads.</i></li> <li>• <i>A sediment trapping device is required if a wash rack is used in conjunction with the stabilized construction entrance/exit.</i></li> <li>• <i>The pavement shall not be cleaned by washing down the street.</i></li> <li>• <i>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.</i></li> <li>• <i>Use BMPs for adjacent drainage structures.</i></li> <li>• <i>Remove sediment tracked onto the street by the end of the day in which the track-out occurs.</i></li> <li>• <i>Restrict vehicle use to properly designated exit points.</i></li> <li>• <i>Include additional BMPs which remove sediment prior to exit when minimum dimensions can not be met.</i></li> <li>• <i>See Stabilized Construction Entrance Section EC-2 for additional requirements.</i></li> </ul> | See Stabilized Construction Entrance Section EC-2 |

| <b>Pollutant Source</b>      | <b>Appropriate Site-Specific BMP to be Implemented</b>   | <b>BMP Requirements</b>   |
|------------------------------|--|---|
| <i>Irrigation Water</i>      | <ul style="list-style-type: none"> <li>• <i>Consider irrigation requirements.</i></li> <li>• <i>Where possible, avoid species which require irrigation.</i></li> <li>• <i>Design timing and application methods of irrigation water to eliminate the runoff of excess irrigation water into the storm water drainage system.</i></li> <li>• <i>See Seeding and Planting Section EC-5 and California Stormwater BMP Handbook SD-12 Efficient Irrigation at <a href="http://www.stormwaterhawaii.com/resources/contractors-and-consultants/storm-water-pollution-prevention-plan-swppp/">http://www.stormwaterhawaii.com/resources/contractors-and-consultants/storm-water-pollution-prevention-plan-swppp/</a> under Irrigation Water for additional requirements.</i></li> </ul> | <i>See Seeding and Planting Section EC-5 and California Stormwater BMP Handbook SD-12 Efficient Irrigation</i>        |
| <i>Hydrotesting Effluent</i> | <ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>   | <i>Site-Specific BMPs will be included in the NOI/NPDES Permit Form F submittal.</i>                                  |
| <i>Dewatering Effluent</i>   | <ul style="list-style-type: none"> <li>• <i>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-17 for additional requirements.</i></li> </ul>   | <i>See Dewatering Operations SM-17. Site-Specific BMPs will be included in the NOI/NPDES Permit Form G submittal.</i> |

| <b>Pollutant Source</b>      | <b>Appropriate Site-Specific BMP to be Implemented</b>   | <b>BMP Requirements</b>   |
|------------------------------|--|---|
| <i>Saw-cutting Slurry</i>    | <ul style="list-style-type: none"> <li>• <i>Saw cut slurry shall be removed from the site by vacuuming.</i></li> <li>• <i>Provide storm drain protection during saw cutting. See Paving Operations Section SM-19 for additional requirements.</i></li> <li>• <i>Provide Storm Drain Inlet Protection and/or Perimeter Sediment Controls as applicable.</i></li> </ul>  | <i>See Paving Operations Section SM-19, Storm Drain Inlet Protection SC-2, Perimeter sediment controls where applicable</i>   |
| <i>Concrete Curing Water</i> | <ul style="list-style-type: none"> <li>• <i>Avoid overspraying of curing compounds.</i></li> <li>• <i>Apply an amount of compound that covers the surface, but does not allow any runoff of the compound.</i></li> <li>• <i>See California Stormwater BMP Handbook NS-12 Concrete Curing at <a href="http://www.stormwaterhawaii.com/resources/contractors-and-consultants/storm-water-pollution-prevention-plan-swppp/">http://www.stormwaterhawaii.com/resources/contractors-and-consultants/storm-water-pollution-prevention-plan-swppp/</a> under Concrete Curing for additional requirements.</i></li> </ul>  | <i>See California Stormwater BMP Handbook NS-12 Concrete Curing</i>   |
| <i>Plaster Waste Water</i>   | <ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>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.</i></li> <li>• <i>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.</i></li> <li>• <i>Plaster waste water shall not be allowed to flow into drainage structures or State waters.</i></li> <li>• <i>See Material Delivery and Storage Section SM-2, Material Use SM-3, and Hazardous Waste Management Section SM-9 for additional requirements.</i></li> </ul> | <i>See Material Delivery and Storage Section SM-2, Material Use Section SM-3, and Hazardous Waste Management Section SM-9</i> |

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| <b>Pollutant Source</b>      | <b>Appropriate Site-Specific BMP to be Implemented</b>  | <b>BMP Requirements</b>                                 |
|------------------------------|---|---|
| <i>Water-Jet Wash Water</i>  | <ul style="list-style-type: none"> <li>• <i>For Water-Jet Wash Water used to clean vehicles, use off site wash racks or commercial washing facilities when practical.</i></li> <li>• <i>See Vehicle and Equipment Cleaning Section SM-11 for additional information.</i></li> <li>• <i>For Water-Jet Wash Water used to clean impervious surfaces, the runoff shall not be allowed to flow into drainage structures or State Waters.</i></li> </ul>   | <i>See Vehicle and Equipment Cleaning Section SM-11</i> |
| <i>Sanitary/Septic Waste</i> | <ul style="list-style-type: none"> <li>• <i>Locate Sanitary facilities in a convenient place away from drainage facilities.</i></li> <li>• <i>Position sanitary facilities so they are secure and will not be tipped over or knocked down.</i></li> <li>• <i>Wastewater shall not be discharged to the ground or buried.</i></li> <li>• <i>A licensed service provider shall maintain sanitary/septic facilities in good working order.</i></li> <li>• <i>Schedule regular waste collection by a licensed transporter.</i></li> <li>• <i>See Sanitary/Septic Waste Section SM-7 for additional requirements.</i></li> </ul> | <i>See Sanitary/Septic Waste Section SM-7.</i>          |

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**END OF SECTION 209**

1 Make the following Section a part of the Standard Specifications:  
2

3 **“SECTION 212 – ARCHAEOLOGICAL MONITORING**  
4

5 **212.01 Description.** This section describes having an Archaeological Monitor hired  
6 by the Contractor to be present during all ground disturbing activities at the location shown  
7 on the plans and as directed by the Engineer.  
8

9 An archaeological monitoring plan prepared by Pacific Consulting Services, Inc. has been  
10 submitted and written acceptance with comments has been provided by the State  
11 Department of Land and Natural Resources, State Historic Preservation Division (SHPD).  
12 Copies of the accepted archaeological monitoring plan are on file at the office of the  
13 Engineer.  
14

15 **212.02 Materials.** None.  
16

17 **212.03 Construction.** Actual onsite time and specific actions to be followed in the  
18 event of inadvertent discoveries will be discussed and agreed upon by the Contractor and  
19 the Archaeological Monitor at the pre-construction meeting.  
20

- 21 **(A) Selection of Archaeological Monitor.** The Contractor shall obtain the  
22 services of a qualified Archaeologist or Archaeological firm to investigate  
23 the sites prior to clearing and grubbing and to monitor construction activities  
24 during clearing and grubbing and/or drilling and excavation activities for  
25 historic remains such as artifacts, burials, concentrations of shell or  
26 charcoal.  
27

28 The Archaeological Monitor shall work in compliance with Hawai`i Revised  
29 Statutes Chapter 6E. The Contractor is prohibited from hiring the  
30 Archaeologist that has prepared the approved Archaeological Monitoring  
31 Plan for this project. In addition, the Archaeological Monitor shall have an  
32 active permit with the State Historic Preservation Division to provide  
33 archaeological services. The SHPD Archaeology Branch maintains a listing  
34 of State of Hawaii permitted archaeological firms annually. The latest list  
35 can be found at the SHPD website or at the following link:  
36 [https://dlnr.hawaii.gov/shpd/about/branches/archaeology/attachment/2020](https://dlnr.hawaii.gov/shpd/about/branches/archaeology/attachment/2020-permittee-list_07-2/)  
37 [-permittee-list\\_07-2/](https://dlnr.hawaii.gov/shpd/about/branches/archaeology/attachment/2020-permittee-list_07-2/).  
38

- 39 **(B) Schedule.** The Contractor shall be responsible for ensuring that the  
40 Archaeological Monitor is aware of all pertinent construction schedules and  
41 that the monitor is present for all subsurface excavation activities within the  
42 project area.  
43

- 44 **(C) Archaeological Monitoring.** The Archaeological Monitor and the  
45 Contractor are responsible for ensuring that on-site work is halted in an area  
46 of significant findings and to protect any such find from any further damage

47 (i.e., construction fencing, protective covering, etc.). The SHPD office shall  
48 be consulted for recommended appropriate mitigation actions.

49  
50 In the event of the discovery of human remains, work shall cease in the  
51 immediate find area. *In situ* human remains shall be left in place, and any  
52 disturbed human remains shall only be removed after written notification is  
53 received from the SHPD. The monitoring archaeologist shall be responsible  
54 for notifying the SHPD office (Culture and History Branch), which, in  
55 consultation with the Oahu Island Burial Council (OIBC) regional  
56 representative, shall determine appropriate mitigation measures.

57  
58 Close down construction activities in areas where potentially significant  
59 discoveries have been made until they have been properly evaluated.  
60 Construction activities may continue in unaffected portions of the project  
61 area.

62  
63 Field procedures to be followed for documentation of discovered cultural  
64 features or human skeletal remains include:

- 65  
66 (1) standard field methods including recordation of profiles showing  
67 stratigraphy, cultural layers, etc.;
- 68  
69 (2) mapping and photographing of finds other than human remains;
- 70  
71 (3) excavation of cultural materials and/or exposed features.

72  
73 The SHPD archaeologist shall be notified and consulted with regarding  
74 treatment of identified features such as cultural layers, artifact or midden  
75 concentrations and structural remains.

76  
77 The Contractor shall take into account the necessity for machine excavation  
78 at a speed slow enough to allow for reasonable visual inspection of the  
79 work. The Archaeological Monitor shall make a “best effort” to search for  
80 significant material culture remains (i.e. artifacts, features, midden, skeletal  
81 remains, etc.). Machine excavation speed will need to be slowed in an area  
82 where significant material culture remains have been identified.

83  
84 Significant archaeological discoveries, if they occur, shall be protected and  
85 identified by construction “caution” tape, fencing, or other reasonable  
86 means, until the SHPD office and the Archaeological Monitor decide  
87 appropriate mitigation actions. All recovered material culture remains—with  
88 the possible exception of charcoal samples for radiometric analysis—shall  
89 remain on Oahu. Standard laboratory methods shall be utilized by the  
90 Archaeological Monitor in the event that cultural materials are recovered  
91 during monitoring and/or mitigation work.

93 One monitor in most instances shall carry out the necessary fieldwork.  
94 Tasks will include observation of grubbing and earth-moving activities.  
95

96 In the event of night work, the Contractor shall supply adequate lighting for  
97 the Archaeological Monitor.  
98

99 The Contractor shall abide by HRS Chapter 6E-11 which specifies the  
100 following: "It shall be unlawful for any person or corporate, to take,  
101 appropriate, excavate, injure, destroy, or alter any historic property or  
102 aviation artifact located on the private lands of any owner thereof without  
103 the owner's written permission being first obtained. It shall be unlawful for  
104 any person, natural or corporate, to take, appropriate, excavate, injure,  
105 destroy, or alter any historic property located upon lands owned or  
106 controlled by the State or any of its political subdivisions, except as  
107 permitted by the department."  
108

109 Field methods utilized shall include photographic recordation (where  
110 appropriate), artifact excavation (recovery and recordation), profile  
111 documentation of cultural layers and stratigraphy, excavation and  
112 recordation of exposed features, and mapping of all pertinent features on  
113 an appropriate site map. A daily log (field notes) of activities and findings  
114 shall also be kept. Gathered information shall be utilized in the preparation  
115 of the monitoring report to be submitted to the SHPD.  
116

117 In the event human skeletal remains are inadvertently disturbed, the SHPD  
118 office, the SHPD Cultural Historian, and the OIBC regional representative  
119 shall be notified, and appropriate mitigation actions determined.  
120

121 The Archaeological Monitor shall periodically visit the monitoring site as  
122 often as is necessitated by the nature of the construction activities and  
123 archaeological findings. If significant discoveries are made, appropriate  
124 mitigation measures shall be discussed with the SHPD office.  
125

126 The Archaeological Monitor shall curate all cultural materials recovered  
127 from this monitoring project on Oahu, with the exception of human remains.  
128 When analysis is completed, recovered material culture remains shall be  
129 turned over to the appropriate parties. The SHPD and the landowner will  
130 approve long-term curation arrangements of significant material culture  
131 remains.  
132

133 **212.04 Measurement.** The Engineer will measure the work required for the  
134 archaeological monitoring, including remedial measures, on a force account basis in  
135 accordance with Subsection 109.06 – Force Account Provisions and Compensation and  
136 as ordered by the Engineer.  
137

138 **212.05 Payment.** The Engineer will pay for the accepted archaeological monitoring,

139 including remedial measures, on a force account basis in accordance with Subsection  
140 109.06 – Force Account Provisions and Compensation. Payment will be full  
141 compensation for the work prescribed in this section, by the Engineer, and in the contract  
142 documents.

143  
144 The Engineer will pay for the following pay item when included in the proposal  
145 schedule:

| 146 | <b>Pay Item</b>           | <b>Pay Unit</b> |
|-----|---------------------------|-----------------|
| 147 |                           |                 |
| 148 |                           |                 |
| 149 | Archaeological Monitoring | Force Account   |

150  
151 The Engineer will not pay for work required that is due to the Contractor's  
152 convenience, negligence, carelessness or failure to properly monitor excavation activity."

153  
154

155 **END OF SECTION 212**



1  
2 Amend **Section 511 – DRILLED SHAFTS** to read as follows:

3  
4 **“SECTION 511 - DRILLED SHAFTS**

5  
6 **511.01 Description.** This section describes installing drilled shafts, including  
7 reinforced or unreinforced concrete drilled shafts, with or without belled footings.

8  
9 **511.02 Materials.**

10  
11 **(A) Portland Cement Concrete.** Portland cement concrete shall conform to  
12 Section 601 - Structural Concrete, except concrete shall have minimum 28-day  
13 compressive strength of 5,500 pounds per square inch.

14  
15 Proportion concrete mix designs to yield properties of high workability,  
16 consolidation under self-weight, and resistance to segregation. Use aggregate  
17 with maximum nominal size of 3/4 inch. For concrete placed into a water-free  
18 borehole, slump range shall be 7 inches +/- 1 inch. For concrete placed under  
19 water, slump range shall be 8 inches +/- 1 inch. Minimum concrete slump shall  
20 be 4 inches within 4 hours of initial mixing. Superplasticizers will not be allowed.

21  
22 **(B) Reinforcing Steel.** Reinforcing steel shall conform to Section 602 -  
23 Reinforcing Steel.

24  
25 **(C) Casing.** Permanent casing shall conform to ASTM A 252, Grade 3.

26  
27 **511.03 Construction.**

28  
29 **(A) Qualifications of Drilled Shaft Contractor.** Be capable of installing  
30 drilled shafts, conducting load tests and other related work as specified in the  
31 contract and shall having the following minimum experience requirements below.

32  
33 **(1) Drilled Shaft Experience.** Because of the expertise required to  
34 successfully complete the drilled shafts according to the contract, a  
35 qualified drilled shaft Contractor shall install the drilled shaft. The  
36 drilled shaft Contractor shall have installed at least three projects  
37 completed in the last three years on which the Contractor has  
38 installed a minimum of five drilled shafts per project of a diameter  
39 and length similar to those shown in the contract. Include in list of  
40 projects, names and phone numbers of owner’s representatives who  
41 can verify the drilled shaft Contractor’s participation on those  
42 projects. Drilled shaft Contractor shall have on its payroll and on the  
43 project for the entire duration, supervisory personnel who have  
44 participated in drilled shaft construction, similar to the type proposed  
45 in the contract, for duration of at least three years within the last 10

46 years.

47

48

**(B) Preconstruction Requirements.**

49

50

**(1) Experience Information.** Submit the following information to the Engineer within 30 days after award of contract for acceptance by the Engineer:

51

52

53

54

**(a)** List of drilled shaft projects completed in the past 10 years. The list of projects shall contain the names and phone numbers of owner's representatives who can verify participation on that project.

55

56

57

58

59

**(b)** Name and experience record of the drilled shaft superintendent who will be in charge of drilled shaft operations for this project. Drilled shaft superintendent shall have minimum three years experience within the last 10 years in drilled shaft construction similar to type proposed. Drilled shaft superintendent shall remain on the project for the duration of the drilled shaft work. Drilled shaft superintendent who leaves the project shall be replaced with personnel with equal or better experience. Submit proposed superintendent's name and experience record for acceptance.

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**(c) Examination of Work Site.** Submit signed statement that the drilled shaft contractor has inspected both project site and subsurface information, including soil or rock samples made available in the contract documents.

72

73

74

75

76

**(2) Installation Plan.** No later than 30 days after contract award, submit installation plan that includes the following:

77

78

79

**(a)** Name and experience record of drilled shaft superintendent who will be in charge of drilled shaft operations for this project. Drilled shaft superintendent shall have minimum three years experience within the last 10 years in drilled shaft construction similar to type proposed.

80

81

82

83

84

85

**(b)** List of proposed equipment, including cranes, drills, augers, bailing buckets, final cleaning equipment, tremies, or concrete pumps, and casing.

86

87

88

89

**(c)** Details of construction operation sequence and shaft construction sequence in bents or groups.

90

91

- 92 (d) Details of shaft excavation methods, including proposed drilling  
93 and shaft cleanout methods, and excavated material disposal plan.  
94
- 95 (e) Details of methods to ensure shaft stability, including  
96 prevention of caving or bottom heave using casings or other means  
97 accepted by the Engineer. If casings are to be used, submit  
98 dimensions and detailed installation and dewatering procedures for  
99 permanent and temporary casings; and removal procedures for  
100 temporary casings.  
101
- 102 (f) Details of reinforcement placement, including support and  
103 centralization methods.  
104
- 105 (g) Details of concrete placement, including proposed  
106 operational procedures for free fall, tremie, or pumping methods.  
107
- 108 (h) Details of required load tests, including equipment,  
109 procedures, and recent calibrations for jacks or load cells supplied  
110 by the Contractor.  
111
- 112 (i) Proposed concrete mix design, including expected strengths  
113 at 3, 7, and 28 days. Submit test results of both a trial mix and a  
114 slump loss test, conducted by State-accepted testing laboratory  
115 using methods specified in Subsection 601.03(B) – Design and  
116 Designation of Concrete. Tests shall demonstrate that concrete  
117 meets 2-hour plasticity requirement at expected ground ambient  
118 temperature and at highest expected ambient air temperature (two  
119 separate slump loss tests required).  
120

121 The Engineer will evaluate drilled shaft installation plan for  
122 conformance with the contract documents. Within 21 days after plan receipt,  
123 the Engineer will notify the Contractor of additional information required,  
124 including if applicable, changes necessary to meet requirements of the  
125 contract documents. The Engineer will reject parts of installation plan that  
126 are unacceptable. Resubmit changes for re-evaluation. Procedural  
127 acceptance given by the Engineer shall be subject to trial in the field.  
128

129 **(3) Protection of Existing Structures.** Prevent damage to existing  
130 structures and utilities. Include the following preventative measures:  
131

- 132 (a) Select construction methods and procedures that will prevent  
133 caving of shaft excavation.  
134
- 135 (b) Monitor and control vibrations from construction activities,  
136 such as driving casing or sheeting, or drilling shaft.  
137

138 (C) **Construction Requirements.**  
139

140 (1) **Construction Sequence.** Excavate for structure footings  
141 supported by drilled shafts and place embankment fills before drilling shaft.  
142 Do not cap drilled shafts before placing fills as near to final grade as  
143 possible. Leave ungraded only those areas needed to construct caps.  
144

145 Before placing footing concrete, repair disturbances to footing area  
146 caused by shaft installation. Maintain minimum 12-foot, edge-to-edge  
147 separation between new shaft to be drilled and existing open shaft.  
148

149 (2) **Construction Methods.** Construct drilled shafts and bell footings  
150 using the following methods, in accordance with the contract documents.  
151

152 (a) **Dry Construction Method.** The dry method includes drilling  
153 shaft excavation, removing accumulated water and loose material  
154 from the excavation, placing reinforcing cage, and concreting shaft  
155 in a dry excavation. Dry excavation is defined as an excavation  
156 where maximum depth of water does not exceed 3 inches.  
157

158 (b) **Wet Construction Method.** This method includes using  
159 water to maintain stability of shaft perimeter while advancing  
160 excavation to final depth, and placing reinforcing cage and shaft  
161 concrete.  
162

163 Reuse drilling water only if permitted by the Engineer and  
164 contingent upon control of unit weight to no more than 62.5 pounds per  
165 cubic foot and Marsh funnel viscosity to not more than 27 seconds  
166 per quart, at the time drilling water is introduced into the borehole.  
167

168 For drilled shafts in open water areas, extend exterior casings  
169 from above water elevation into the ground. Install exterior casing  
170 in a manner that will produce a positive seal at bottom of casing, such  
171 that no intrusion or extrusion of water or other materials occurs into or  
172 from shaft excavation.  
173

174 (c) **Casing Construction Method.** The temporary casing  
175 method may be used when dry or wet construction methods are  
176 inadequate. Use permanent casing method only when required by  
177 the contract documents or authorized by the Engineer. Casing  
178 may be placed either in a predrilled hole or advanced by twisting,  
179 driving, or vibrating, before cleaning casing.  
180

181 (3) **Excavation.**  
182

183 (a) **General.** Excavate shafts at locations, and to dimensions

184 shown in the contract documents. When material encountered during  
185 excavation differs from that anticipated in drilled shaft design, adjust  
186 shaft tip elevation, after acceptance by the Engineer.  
187

188 **1. Construction Method Log.** Maintain construction  
189 method log during shaft excavation. Submit method log  
190 within 24 hours of shaft drilling completion. Include the  
191 following information:  
192

193 **a.** Excavation diameters.

194 **b.** Equipment used, excavation rate, and  
195 difficulties encountered.  
196

197 **c.** Description and approximate top and bottom  
198 elevations of each type of soil or rock material  
199 encountered.  
200

201 **d.** Elevation and approximate rate of any  
202 seepage or groundwater.  
203

204 **e.** Remarks.  
205  
206  
207

208 **2. Cofferdams.** On projects with cofferdams, provide  
209 certified diver to inspect cofferdam conditions when the  
210 contract documents require a concrete seal. Before placing  
211 concrete seal, inspect cofferdam interior periphery. Inspect  
212 each sheeting indentation and around each drilled shaft.  
213

214 **3.** Dispose of excavated material as specified in Section  
215 203 - Excavation and Embankment.  
216

217 **4.** When shown in the contract documents, excavate  
218 bells, by mechanical methods, to form bearing area of the size  
219 and shape in accordance with the contract documents.  
220

221 **5.** Furnish drilled shaft concrete in excess of theoretical  
222 volume required to fill excavations for bells and shafts  
223 dimensioned in the contract documents.  
224

225 **6.** Do not permit workers to enter shaft excavation unless  
226 the following conditions are met:  
227

228 **a.** Suitable casing is in place.

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b. Water level is lowered and stabilized.

c. Accepted safety equipment and procedures are provided and complied with.

**(b) Excavation and Drilling Equipment.** Furnish excavation and drilling equipment to excavate hole to maximum diameter and to a depth of ten feet or 20 percent beyond depths shown in the contract documents, whichever is greater.

**1. Special Drilling Equipment.** When conventional earth augers or underreaming tools cannot be used for drilling, provide special drilling equipment, including rock core barrels, rock tools, air tools, and blasting materials to construct shaft excavation to size and depth required. Blasting will be allowed only if specified in the contract documents

**2. Sidewall Overreaming.** Overream sidewall when hole sidewall has softened due to excavation methods or swelled due to delays in concreting. Ensure minimum overreaming dimension of 1/2 inch and maximum of 3 inches. Overream with grooving tool or overreaming bucket. The dimension and elevation of sidewall overreaming shall be as ordered by the Engineer. Overream sidewall and place additional shaft concrete at no increase in contract price or contract time.

**(c) Unclassified Excavation.** When the contract documents specifies unclassified shaft excavation, provide necessary equipment to remove and dispose of materials encountered in drilled shaft excavation. The Engineer will not pay separately for excavation of materials of different densities and character, or for employment of special excavation tools and procedures. The Engineer will pay for obstruction separately.

**(4) Casings.**

**(a) General.** Furnish steel casings that are smooth, watertight, and of ample strength to withstand both handling and driving stresses, pressure of concrete during placement, and surrounding earth pressures. The inside diameter of casing shall be no less than specified shaft diameter. The Engineer will not authorize extra compensation for concrete required to fill oversized casing or oversized excavation.

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When shaft extends above ground or through a body of water, shaft may be formed with removable casing, unless permanent casing is specified. For permanent casing, after curing concrete, remove portion of metal casing between an elevation two feet below lowest water elevation and top of shaft elevation. Remove casing carefully so that process will not damage concrete. When casing needs to be removed after concrete cures in open water, design and submit special casing system for acceptance. When concrete attains sufficient strength, casing may be removed provided:

1. Concrete curing continues for the full 72-hour period.
2. Shaft concrete is not exposed to salt water or moving water for 7 days.
3. Concrete reaches compressive strength of at least 2,500 pounds per square inch.

**(b) Temporary Casing.** Remove temporary casing before completing drilled shaft concrete placement. Telescoping and overreaming to beyond outside casing diameter may be required to install casing.

When choosing to remove and replace casing with longer or larger diameter casing through caving soils, stabilize excavation with backfill before installing new casing.

Before withdrawing casing, ensure level of fresh concrete in casing is the higher of the following: 5 feet minimum above hydrostatic water level; or level of drilling fluid outside the casing.

While withdrawing casing, maintain adequate level of concrete within casing so that fluid trapped behind casing is displaced upward and discharged at ground surface without contaminating or displacing shaft concrete.

The Engineer will consider drilled shaft defective when temporary casing becomes bound or fouled during shaft construction and cannot be removed. Correct such defective shafts using methods accepted by the Engineer, including removing shaft concrete and extending shaft deeper; providing replacement shaft; or providing straddle shafts to compensate for capacity loss. Perform corrective measures, including redesign of footings caused by defective shafts, at no increase in contract price or contract time. The Engineer will not pay for defective casing remaining in place.

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**(c) Permanent Casing.** Ensure casing is continuous between top and bottom casing elevations. After completing installation, cut off permanent casing at prescribed elevation. Complete shaft by installing required reinforcing steel and concrete in casing.

When special temporary casings are in the contract documents or specified in writing by the Engineer, maintain temporary outer casing alignment with permanent inner casing. Provide watertight seal between the two casings during excavation and concreting operations.

**(5) Slurry.** Drilling slurry will not be allowed.

**(6) Excavation Inspection.** Provide equipment for checking dimensions and alignment of each permanent shaft excavation. After cleaning, measure final shaft depth with weighted tape.

Ensure a minimum of 50 percent of each shaft base has less than 1/2 inch of sediment at the time concrete is placed. Ensure maximum sediment depth or debris on shaft base does not exceed 1-1/2 inches.

The Engineer will visually inspect dry shafts for cleanliness. For wet shafts, the Engineer will use inspection methods deemed appropriate.

**(7) Reinforcing Steel Cage Construction and Placement.** Assemble and place reinforcing steel cage immediately after the Engineer inspects and accepts shaft excavation and before placing concrete. Reinforcing steel cage includes longitudinal bars, ties, cage stiffener bars, spacers, centralizers, and other appurtenances necessary to complete cage.

Tie and support shaft reinforcing steel such that reinforcing steel placement conforms to allowable tolerances as specified in Subsection 511.03(C)(10) – Construction Tolerances. Use concrete spacers at sufficient intervals (near bottom and at intervals not exceeding 10 feet along shaft length) to ensure concentric spacing for entire cage length. Use minimum of four spacers, equally spaced around circumference, at each vertical interval. Construct spacers of material accepted by the Engineer, equal in quality and durability to concrete specified for the shaft.

Furnish spacers of adequate dimension to ensure a minimum 3-inch space between outer portion of reinforcing cage and side of excavated hole or casing. Provide cylindrical concrete bottom supports accepted by the Engineer to maintain proper distance between bottom of cage and base of shaft excavation.

Check top of steel cage elevation before and after placing



366 concrete. When reinforcing steel placement does not meet specified  
367 tolerances, correct to required tolerances. Do not construct additional shafts  
368 until reinforcing steel cage support method has been modified and accepted.  
369

370 When bottom of constructed shaft elevation is lower than shown  
371 in the contract documents, extend at least half of the longitudinal bars  
372 required in upper portion of shaft, to the shaft bottom. Continue tie bars for  
373 the extra depth, spaced 2 feet on center. Extend stiffener bars to final  
374 depth. Use lap splices or unspliced bars of proper length. Welding of  
375 reinforcing steel will not be allowed.  
376

377 **(8) Concrete Placement.**

378  
379 **(a) General.** Place concrete through a tremie, concrete pump,  
380 or drop chute, using methods as described below.  
381

382 Unless otherwise authorized by the Engineer, place  
383 concrete immediately after placing reinforcing steel.  
384

385 Place concrete in one continuous operation from bottom to top  
386 of shaft. Continue placing concrete after shaft excavation is full  
387 until concrete with no laitance or soil contamination is visible at top  
388 of shaft.  
389

390 Elapsed time from beginning to completion of shaft  
391 concrete placement shall not exceed 2 hours. Adjust admixtures  
392 accepted by the Engineer so that concrete remains in a workable,  
393 plastic state throughout 2-hour placement limit.  
394

395 **(b) Monitoring Concrete Volume.** For each drilled shaft,  
396 prepare and submit, the next working day after concrete  
397 placement has been completed, the following:  
398

399 **1.** A chart made up after excavation has been  
400 completed and accepted by the Engineer and before  
401 concrete placement has commenced, indicating depth of hole  
402 plotted with theoretical volume of concrete required to fill  
403 hole. Plot concrete elevation (surface) along vertical axis and  
404 concrete volume along horizontal axis.  
405

406 **2.** As concrete is being placed, measure concrete surface  
407 at an interval of approximately each cubic yard of concrete  
408 discharged, unless otherwise ordered by the Engineer. Plot  
409 concrete volume actually placed at each elevation point.  
410

411 **3.** Keep records of steel and concrete movement to

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document the following conditions:

a. When removing temporary casing, elevation of the top of reinforcing cage did not rise more than 2 inches or drop more than 3 inches from its original elevation.

b. As casing is extracted, static level of fluid concrete did not rise.

**(c) Concreting by Tremie.** Tremie consists of a tube of sufficient length, weight, and diameter to discharge concrete at the shaft base. Tremie shall not contain aluminum parts that will come in contact with concrete. Use tremie with inside diameter at least 6 times the maximum size of aggregate used in concrete mix and not less than 10 inches. Ensure that inside and outside surfaces of the tremie are clean and smooth. Tremie wall shall be thick enough to prevent crimping or sharp bends.

Use watertight tremie for wet excavation concrete placement. Begin underwater placement after placing tremie at shaft base elevation. Use valves, bottom plates, or plugs to separate drilling water from fluid concrete. Begin concrete discharge within one tremie diameter of the base.

Remove plugs from excavation or use plugs made from material accepted by the Engineer that will prevent shaft defect, if not removed.

Discharge end of tremie shall permit free radial flow of concrete during placement. After starting flow of concrete, keep tremie discharge end immersed at least 5 feet below fluid concrete surface. Place concrete in a continuous flow. Maintain a positive head of concrete in tremie at all times.

The Engineer will consider shaft defective and will reject shaft, if at any time during concrete placement, the tremie discharge end is removed from fluid concrete column and concrete is discharged onto rising concrete surface. If shaft is rejected, remove reinforcing cage, concrete, and portion of sidewall, as ordered by the Engineer, and reconstruct shaft. The Engineer will not pay for defective shaft or shaft removal.

**(d) Concreting by Pump.** Use pump and discharge line of sufficient capacity, length, weight, and diameter to discharge concrete at the shaft base elevation. Pump and discharge line shall

458 not contain aluminum parts that will come in contact with concrete.  
459 Furnish discharge line with minimum diameter of 4 inches and  
460 watertight joints. Do not begin concrete placement until discharge line  
461 orifice is at shaft base elevation.

462  
463 For wet excavations, use plug to separate concrete from fluid in  
464 the hole until pumping begins. Remove plugs from excavation or  
465 use plugs made from material accepted by the Engineer that will  
466 prevent shaft defect, if not removed.

467  
468 Keep pump discharge line orifice at least five feet below fluid  
469 concrete surface. When lifting discharge line during concreting,  
470 reduce line pressure temporarily, until discharge orifice has been  
471 repositioned at a higher level in the excavation.

472  
473 The Engineer will consider shaft defective and will reject shaft,  
474 if at any time during concrete placement, the discharge line is  
475 removed from fluid concrete column and concrete is discharged  
476 onto rising concrete surface. If shaft is rejected, remove reinforcing  
477 cage, concrete, and portion of sidewall, as ordered by the Engineer,  
478 and reconstruct shaft. The Engineer will not pay for defective shaft  
479 or shaft removal.

480  
481 **(e) Concreting by Drop Chute.** Free-fall placement of concrete  
482 will be allowed in dry excavations only. Use drop chute to direct  
483 free-fall concrete placement. Drop chute consists of a smooth tube  
484 of one-piece construction or sections that may be added and removed.  
485 Drop chute shall not contain aluminum parts that will come in contact  
486 with concrete. Place concrete through a hopper at top of tube or  
487 through side openings, as drop chute is removed from shaft during  
488 concrete placement. Support drop chute so that free-fall of concrete,  
489 measured from bottom of chute, is less than 25 feet.

490  
491 Ensure concrete placed by drop chute falls directly to base  
492 without contacting reinforcing steel cage or shaft sidewall. When  
493 concrete placement causes shaft excavation to cave or slough, or  
494 when concrete strikes reinforcing steel cage or sidewall, reduce  
495 height of free fall or reduce rate of concrete flow into excavation.  
496 When concrete placement exceeds 25- foot free fall height limit, use  
497 tremie or concrete pump to place concrete.

498  
499 **(9) Construction Tolerances.** Apply the following construction  
500 tolerances to drilled shafts:

501  
502 **(a)** Construct drilled shaft within 1/12 of shaft diameter or 3 inches,  
503 whichever is less, of Plan location, measured in a horizontal plane

504 at Plan top of shaft elevation.

505

506 **(b)** Limit alignment variation of vertical shaft excavation from  
507 alignment indicated in the contract documents to no more than 1/4  
508 inch per foot of depth. Limit alignment variation of battered shaft  
509 excavation from the prescribed batter to no more than 1/2 inch per  
510 foot of depth.

511

512 **(c)** After placing concrete, ensure top of reinforcing steel cage is  
513 no more than 6.0 inches above and no more than 3.0 inches below  
514 position indicated in the contract documents unless otherwise  
515 accepted by the Engineer.

516

517 **(d)** Casing diameters shown in the contract documents refer to  
518 outside diameter (OD) dimensions. When accepted by the Engineer,  
519 a casing larger in diameter than shown in the contract documents  
520 may be provided to facilitate meeting this requirement. When using a  
521 series of telescoping casings, size casing to maintain specified shaft  
522 diameters.

523

524 **(e)** Excavate bearing area of bells to bearing area indicated in the  
525 contract documents, as a minimum. Limit maximum bell diameter to  
526 three times specified shaft diameter. When accepted by the  
527 Engineer, other dimensions indicated in the contract documents for  
528 bells may vary.

529

530 **(f)** Ensure top of shaft elevation is within 1.0 inch of top of shaft  
531 elevation indicated in the contract documents.

532

533 **(g)** Use American Pipe Institute tolerances applicable to regular  
534 steel pipe for casing dimension tolerances.

535

536 **(h)** Use excavation equipment and methods to ensure that  
537 completed shaft excavation will have a flat bottom. Make cutting  
538 edges of excavation equipment normal to vertical axis of the shaft,  
539 within a tolerance of  $\pm 3/8$  inch per foot of diameter. Supply as-built  
540 drawings.

541

542 The Engineer will reject drilled shaft excavations that cannot be  
543 completed within required tolerances. Correct unacceptable drilled shaft  
544 excavations by using a combination of the following methods: overdrill  
545 shaft excavation to a larger diameter to permit accurate placement of  
546 reinforcing steel cage with required minimum concrete cover; increase  
547 number, size, or length of reinforcing steel bars; enlarge bearing area  
548 of bell excavation within allowed tolerances.

549

550 Acceptance of correction procedures will be based on an  
551 analysis of the effect of misalignment and improper positioning. Submit  
552 redesign drawings and computations signed by a Hawaii Licensed  
553 Professional Structural Engineer and Hawaii Licensed Professional Civil  
554 Engineer who specializes in Geotechnical Engineering. Correct out-of-  
555 tolerance drilled shaft excavations, including engineering analysis and  
556 redesign, at no increase in contract price or contract time.  
557

558 **(10) Integrity Testing.** Test drilled shafts for soundness and  
559 integrity, as specified in the contract documents. Perform specified  
560 testing as follows:

561 **(a) Coring.**

- 562 1. Core inspection holes on drilled shafts as directed by  
563 the Engineer.
- 564 2. Core a 3-inch diameter vertical hole, throughout  
565 full depth of drilled shafts at locations designated by the  
566 Engineer. Fill cored holes with non-shrink grout of the same  
567 minimum strength as drilled shaft.  
568

569 **(11) Corrective Action.** Fill with grout, all voids or separations  
570 revealed by integrity testing, using the following procedures:  
571

572 **(a)** Core additional holes, as ordered by the Engineer, to define  
573 flow path to the void. Place grout tube in cored hole with its tip  
574 adjacent to the void. Seal hole and inject cement grout at a gage  
575 pressure of 10 pounds per square inch. Continue injection until  
576 refusal or until gage reads 15 pounds per square inch, whichever  
577 occurs first.

578 **(b)** Use one part Type I portland cement and two and one-half  
579 parts sand (by volume), from which all sizes larger than No. 8  
580 have been removed, and with just sufficient water to provide  
581 fluidity and compressive strength equal to compressive strength of  
582 drilled shaft concrete.

583 **(c)** After inspection and after all voids have been filled and  
584 accepted by the Engineer (proof coring may be required, at the  
585 discretion of the Engineer), fill cored holes completely with  
586 specified grout.

587 **(d)** Submit alternative corrective methods for review and  
588 acceptance prior to use.  
589  
590  
591  
592  
593  
594  
595

596 (e) Perform corrective actions at no additional increase in  
 597 contract price or contract time.

598  
 599 **(12) Revised Concreting Procedure.** If voids or inclusions are found  
 600 through testing, submit revised concreting procedure for new shafts.  
 601 Indicate steps to be taken to eliminate such voids in the future. Continuation  
 602 of shaft concreting will not be allowed until the Engineer has accepted  
 603 revised procedure. Prepare and submit revised concreting procedure  
 604 at no additional increase in contract price or contract time and with no  
 605 extension of time allowed.

606  
 607 **511.04 Measurement.**

608  
 609 **(A)** The Engineer will measure drilled shaft per linear foot at each site.  
 610 The pile cap shall be considered as part of the drilled shaft. The Engineer  
 611 will compute length between plan top of pile cap elevation and final bottom  
 612 of shaft elevation. Mobilization and demobilization of equipment, drilled  
 613 shaft excavation, concrete, reinforcement steel, integrity testing, and other  
 614 requirements incidental to the drilled shaft construction shall be included  
 615 in the cost per lineal foot for each site.

616  
 617 **511.05 Payment.** The Engineer will pay for the accepted pay items listed below  
 618 at the contract price per pay unit, as shown in the proposal schedule. Payment will  
 619 be full compensation for the work prescribed in this section and the contract  
 620 documents.

621  
 622 The Engineer will pay for each of the following pay items when included in  
 623 the proposal schedule:

| <b>Pay Item</b>                           | <b>Pay Unit</b> |
|---|-----------------|
| H-2 South CCTV Drilled Shaft and Pile Cap | Linear Foot     |
| Waikele CCTV Drilled Shaft and Pile Cap   | Linear Foot"    |

630  
 631  
 632 **END OF SECTION 511**  
 633

1                                   **SECTION 601 – STRUCTURAL CONCRETE**  
2

3   Make the following amendments to said Section:  
4

5   **(I)**   Amend **Subsection 601.03(A) – Quality Control** by adding the following  
6   paragraphs after line 40:  
7

8                 “Five 6”x12” test cylinders shall be made. Two cylinders shall be  
9                 tested at 7 days, two cylinders shall be tested at 28 days and one held as  
10                 a reserve. Test specimens shall be molded and cured in accordance with  
11                 ASTM C 31 and tested in accordance with ASTM C 39. Results of all  
12                 strength tests shall be reported immediately to the Engineer.  
13

14                 Contractor option to use seven 4”x8” test cylinders in lieu of the five  
15                 6”x12” test cylinders. Three cylinders shall be tested at 7 days, Three  
16                 cylinders shall be tested at 28 days and one held as a reserve.”  
17

18   **(II)**   Amend **Subsection 601.03(B) – Design and Designation of Concrete**  
19   by adding the following to Table 601.03-1 – DESIGN OF CONCRETE  
20

| Class of Concrete               | 28-Day Strength<br>f’c, psi | Minimum Cement<br>Content lbs./cy.<br>(800 Maximum) | Maximum Water-<br>Cement Ratio,<br>lb/lb |
|---------------------------------|-----------------------------|---|--|
| Drilled Shafts and<br>Pile Caps | 5,500                       | 610   | 0.40                                     |

21  
22   **(III)**   Amend **Subsection 601.03(D) – Mixing** by adding the following  
23   paragraph after line 381:  
24

25                 “             If on-site batching and mixing is used ASTM C 685 *Concrete Made*  
26                 *by Volumetric Batching and Continuous Mixing* shall apply.”  
27  
28

29                                   **END OF SECTION 601**

1 **SECTION 602 – Reinforcing Steel**

2  
3 Make the following amendments to said Section:

4  
5 **(I)** Amend **602.04 – Measurement** by revising lines 803 to 808 to read as  
6 follows:

7  
8 **“602.04 Measurement.** The Engineer will not measure reinforcing steel for  
9 payment.”

10  
11 **(II)** Amend **602.05 – Payment** by revising lines 810 to 830 to read as follows:

12  
13 **“602.05 Payment.** The Engineer will not pay for the accepted reinforcing  
14 steel separately. The Engineer shall consider the cost for the accepted  
15 reinforcing steel as included in the contract price of the various contract items.  
16 The cost is for the work prescribed in this section and the contract documents.”

17  
18 **END OF SECTION 602**



1 **SECTION 619 – PLANTING**

2  
3 Make the following amendments to said Section:

4  
5  
6 **(I)** Amend **Subsection 619.02(H)(3) – Application Records** from lines 207  
7 to 210 to read:

8  
9 **“(3) Application Records.** Records shall be kept by Contractor of dates  
10 of application, type of fertilizer or manure used, quantities, and areas that  
11 were covered and shall be submitted to Engineer within 24 hours of  
12 application. Document if rates and amounts of fertilizer deviate from  
13 manufacturer’s specifications.”

14  
15 **(II)** Amend **Subsection 619.03(A) – Codes and Standards** from lines 262 to  
16 264 to read:

17  
18 **“(A) Quality Assurance.**

19  
20 **(1) Codes and Standards.** Perform work in accordance with  
21 applicable laws, codes, and regulations. Provide inspections and  
22 permits required by Federal, State, and local governmental  
23 authorities.

24  
25 **(2) Qualifications.** To become qualified in the work class of  
26 Landscaping, the applicant shall provide a letter containing the  
27 following:

28  
29 **(a)** A statement declaring at least five continuous years of  
30 experience of a scope similar to that required for the work,  
31 including installing temporary irrigation (where applicable),  
32 hydro-mulch application, soil preparation, and plant  
33 installation and establishment.

34  
35 **(b)** The letter must be signed and dated by the Owner of  
36 the Company or Company Officer.

37  
38 **(c)** Produce a list of completed projects similar to the  
39 scope and size of the required work to substantiate the  
40 experience. The list shall contain a minimum of five different  
41 landscape projects, excluding single-family residential  
42 landscape. A minimum of five different landscape projects  
43 shall be rated positive on a performance evaluation by the  
44 references in the list below. Names and references must be  
45 current and verifiable. Use separate sheets of paper that  
46 contain all of the following information:

- 48 1. Project name
- 49 2. Location of project (city, state)
- 50 3. Owner
- 51 4. Owner Contact (name and current phone  
52 number)
- 53 5. Architect or Engineer Company Name
- 54 6. Architect or Engineer Contact (name and  
55 current phone number)
- 56 7. Construction Manager (name and current  
57 phone number)
- 58 8. Description of Project, Scope of Work  
59 Performed
- 60 9. Total Value of Construction (including change  
61 orders)
- 62 10. Original Scheduled Completion Date
- 63 11. Actual Date of Completion

64 **(d) Approval.** The Contractor shall submit the items  
65 under this section to the Engineer for approval prior to  
66 construction. If the applicant does not have proof of five  
67 continuous years of experience with a minimum of five  
68 completed projects similar in scope and size, the Contractor  
69 shall remove the applicant from the project upon receipt of a  
70 written notice from the Engineer. Requests to substitute an  
71 applicant will be allowed under Subsection 105.16  
72 Subcontracts.”

73  
74 **(III) Amend Subsection 619.03(I)(1) – Adding Fertilizer and Amendments**  
75 by revising the section from lines 310 to 314 to read:

76  
77 “**(1)** Uniformly distribute fertilizer and amendments over planting areas as  
78 recommended by the Soil Analysis Report as specified in Section 617 –  
79 Planting Soil. Document if rates and amounts of fertilizer deviate from  
80 manufacturer’s specifications. Rototill top four inches of soil to evenly  
81 incorporate fertilizer and amendments. Rototill before installing drip  
82 irrigation system.”

83  
84 **(IV) Amend Subsection 619.03(T)(3) – Fertilizing** by adding the following  
85 paragraph after line 478:

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“Submit recommendations from a licensed Landscape Architect when deviating from the application rates and amounts above. Document if the rates and amounts of fertilizer deviate from manufacturer’s specifications.”

**(V)** Amend Subsection **619.04 Measurement** lines 538 to 539 to read as follows:

**“619.04 Measurement.** The Engineer will not measure trees, shrubs, and vines for payment.”

**(VI)** Amend Subsection **619.05 Payment** lines 541 to 573 to read as follows:

**“619.05 Payment.** The Engineer will not pay for planting separately. The Engineer shall consider the cost for planting as included in the contract price of the various contract items. The cost is for the work prescribed in this section and the contract documents.”

**END OF SECTION 619**

1 Make this section a part of the Standard Specifications:  
2

3 **“SECTION 621 - ELECTRIC AND COMMUNICATION SYSTEMS**  
4  
5

6 **621.01 Description.** This work shall consist of furnishing all labor,  
7 materials and equipment to install in place and in operating condition  
8 underground and surface mounted structures required for the facilities of  
9 Hawaiian Electric Company, herein referred to as HECO; Hawaiian Telcom,  
10 herein referred to as HECO; the Department of Transportation, herein  
11 referred to as DOT. Such works shall be performed and tested at the  
12 indicated locations in accordance with the requirements herein specified and  
13 the indicated details, or as ordered by the Engineer, and includes but is not  
14 limited to the following:  
15

16 (A) Complete surface mounted conduit system including conduits  
17 and junction boxes to be used by the DOT for their cables and  
18 equipment. Work shall also include securing the approval of the DOT  
19 inspector.  
20

21 (B) Complete underground duct system including excavation,  
22 backfilling, concrete work, conduits, handholes, manholes, and  
23 transformer and switching equipment pads, to be used by the HECO  
24 for their cables and equipment. Work shall also include securing the  
25 approval of the HECO inspector.  
26

27 (C) Coordinate work and arrange for periodic inspections by DOT  
28 and Engineer.  
29

30 (D) Pass test mandrel through all conduits, and make corrections as  
31 directed by the inspectors or Engineer.  
32

33 (E) Provide each conduit run with a nominal 1/8-inch pull line made  
34 of polypropylene, polyester, or polyolefin extending through the entire  
35 length. Double additional 2 feet of polypropylene polyester or  
36 polyolefin pull line back into the conduit at each end of the run. The  
37 pull line installed in the conduits must have a minimum of 240 lbs.  
38 tensile strength, must be rot and mildew resistant. No slicing of the  
39 pull line is allowed.  
40

41 (F) Immediately report and pay for damages to existing equipment.  
42

43 (G) Obtain and pay for electrical permits, arrange for periodic  
44 inspection by local authorities and deliver certificate of final inspection  
45 to Engineer.  
46

47 (H) Contractor shall check and test the installation for completeness  
48 and functional operation as described by the drawings and specified

49 herein. Final test shall be in the presence of Engineer and  
50 representatives of utility companies. Contractor shall arrange and pay  
51 for all testing costs.

52  
53

54 (I) Work shall include providing power and communication to  
55 Variable Message Signs (VMS), this shall include:

56  
57

(1) Installation of DMS.

58  
59

(2) Supply and installation of DMS mounting hardware.

60  
61

(3) Supply and installation of communication and power duct systems.

62  
63

(4) Installation of owner supplied pole cabinet components for communications.

64  
65

(5) Supply and installation of pad mounted enclosure for pole cabinet components.

66  
67

(6) Supply and installation of enclosed circuit breakers for electrical service to the sign.

68  
69

(7) Supply and installation of branch circuit wiring for all services.

70  
71

(8) Supply and installation of communicating wiring.

72  
73

(9) Supply of traffic management during construction.

74  
75

(10) Support testing and commissioning of the components.

76  
77

78 Incidental parts which are not shown on the plans or specified herein  
79 and which are necessary to complete the underground electric duct systems  
80 shall be furnished and installed by the Contractor as though such parts were  
81 shown on the plans, or specified herein or in the special provisions.

82  
83

84 All electrical equipment shall conform to the NEMA Standards, and all  
85 electrical work shall conform to ordinances of City and County of Honolulu;  
86 latest edition of National Electrical Code; General Order No. 10, Public  
87 Utilities Commission, State of Hawaii; and Regulations.

88  
89

90 Applicable rules, standards and specifications of following associations  
91 shall apply to materials and workmanship:

92  
93

94 American National Standards Institute (ANSI)  
95 Edison Electric Institute (EEI)

96

97 Illumination Engineer Society (IES)  
98 National Board of Fire Underwriters (NBFU)  
99 National Electrical Manufacturer's Association (NEMA)  
100 National Fire Protection Association (NFPA)  
101 Underwriters' Laboratories, Inc. (UL)  
102

103 **621.02 Materials.** Materials shall meet the requirements specified in  
104 the following subsections of Division 700 - Materials.  
105

106 **(A) Rigid Steel Conduit PVC Coated.**  
107

108 **(1)** Zinc-coated rigid steel conduits prior to PVC coating shall  
109 conform to Federal Specification WW-C-581d, ANSI Standard  
110 C80.1, UL Standard #6 and NEMA RN1-1980.  
111

112 **(2)** All conduits shall be hot dip zinc-coated inside and out  
113 with zinc-coated threads.  
114

115 **(3)** All conduit and connectors shall be PVC coated.  
116

117 **(4)** Prior to PVC coating, zinc-coated surfaces shall be  
118 coated with epoxy-acrylic primer to ensure bond greater than  
119 coating tensile strength.  
120

121 **(5)** 40 mil-thick, minimum, plastic coating shall be applied by  
122 dip-method.  
123

124 **(6)** Factory-applied plastic coating shall be applied by same  
125 manufacturer who produced the hot dip zinc-coated conduit.  
126 The coated conduit shall conform to NEMA Standard No. RN1-  
127 1980 (Type 40).  
128

129 **(7) Fittings and Accessories.**  
130

131 **(a)** Conduit clamps, u-bolts, nuts and conduit support  
132 system shall be stainless steel. Nuts shall be installed  
133 with manufacturer supplied wrenches.  
134

135 **(b)** Couplings shall have 40-mil-thick longitudinal ribs.  
136

137 **(c)** All coated conduits shall be installed in  
138 accordance with manufacturer recommendations.  
139

140 **(d)** Fittings and accessories shall be provided to  
141 ensure a continuous grounded system.  
142

143 **(8)** Provide 5' maximum spacing between conduit supports  
144 and 3' spacing between conduit support and junction box.

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**(9)** Provide minimum three (3) inches clearances from the edge of the bottom most conduit to the bottom of the unistruct.

**(10)** Provide and install stainless steel spring nuts.

**(11)** Conduits shall have bushings/caps on the end for entrances into junction boxes.

**(B)** Ducts and Conduits. Ducts and Conduits shall conform to the requirements of Section 712.27 - Conduits. Ducts and conduits required shall be new and provided by the Contractor in accordance with the construction drawings and specifications.

**(1)** Polyvinyl Chloride (PVC) Schedule 40 type ducts shall be provided for the electrical and communication duct systems. The fittings shall be of the same material as the conduit and duct.

**(2)** Conduit Riser Bends shall be polyvinyl chloride (PVC) pipes with 6-foot radius for 46 KV use and 3-foot radius for 12 KV use. The fittings shall be of the same material as the conduit and duct.

**(C)** Innerduct. 3-cell fabric innerducts shall be installed in communication conduits. Innerducts shall be pre-lubricated for lower friction during cable installation and have pre-installed pull tapes.

**(D)** Concrete. Concrete shall conform to the requirements of Section 601 - Structural Concrete, except that for concrete jackets and concrete caps, the maximum size of coarse aggregate shall be 3/4 inch in lieu of the one-inch to No. 4 specified and the slump shall be 6-inch minimum and 7-inch maximum. Concrete for manholes, handholes, and pullboxes shall be Class A. Concrete for jacketing conduits and ducts shall be Class B except that the cement content shall be 5.6 sacks per cubic yard.

**(E)** Junction Box. NEMA 4X stainless steel. Provide as required to minimize cable pulling tension. Provide tamper proof screws on all boxes.

**(F)** Single Conductors: Stranded copper, XHHW-2 insulated unless otherwise noted on plans. Color coding to NEC and as shown on plans.

**(G)** Communication Cables: Two conductor, 22 gauge, shielded twisted pair cabling installed outside temperature controlled areas: approved for use in a wet underground duct system.

- 193 (H) Control Cable: 24 AWG 4-Pair Shielded 100 Ohm Cable,  
194 Manhattan 3422 or Belden 8104.  
195  
196 (I) Fiber Optic Cable: See Section 647 – Fiber Optic Cable  
197  
198 (J) Fiber/VMS Cabinet. Cabinet shall be a Caltrans Traffic Signal 332A  
199 anodized aluminum cabinet with a 19" rack, 20amp circuit breaker set-up,  
200 surge-protected and noise-isolation 6-outlet strip, and thermo-control fan.  
201  
202 (K) Enclosed Circuit Breaker  
203  
204 (1) Enclosed circuit breaker shall be designed, manufactured, and  
205 tested in accordance with UL 489, CSA 22.2, and NEMA 250  
206 standards and certifications.  
207  
208 (2) Provide NEMA 1 surface mounted general purpose enclosure  
209 intended for indoor use.  
210  
211 (3) Provide necessary stainless steel mounting accessories for  
212 mounting enclosed circuit breaker within new pad mounted  
213 enclosures.  
214  
215 (4) All enclosed circuit breakers shall have nameplates that  
216 contain a permanent record of catalog number and maximum  
217 rating.  
218  
219 (5) Provide handle mechanisms that are pad-lockable in the  
220 "OFF" position.  
221  
222 (L) Cabinet Foundation. Construction per details on drawings.  
223  
224 (M) Inspection. Materials will be subject to inspection at any time.  
225 Failure of the Engineer to note faulty material or workmanship during  
226 construction will not relieve the Contractor of his responsibility for  
227 removing or replacing such materials and dredging the work at his  
228 expense.  
229

### 230 **621.03 Construction Requirements.**

#### 231 (A) **General.**

- 232  
233  
234 (1) The Contractor shall in performing required installation of  
235 conduit and cabinet, exercise due care to avoid disturbing  
236 existing facilities. Shall remove and dispose of all demolished  
237 or excess material from the job site.  
238  
239 (2) Upon completion of the work, the Contractor shall submit  
240 an 'As Built' or corrected plan showing in detail thereon all



241 construction changes.

242

243 **(3)** Before bidding, the Contractor shall visit project site,  
244 carefully review each section of the Specification and all  
245 Drawings of this Contract, and obtain and review the standards,  
246 specifications and drawings of the local utility companies.

247

248 The Contractor shall report any error, conflicts or  
249 omissions to the Engineer at least one week before submission  
250 of bids for interpretation or clarification. If errors or omissions  
251 are not reported, the Contractor shall provide necessary work at  
252 no cost to the State of Hawaii to properly complete intent of  
253 Specification and Plans.

254

255 **(B) Installation of Conduits and Duct Banks.** All joints shall be  
256 water tight.

257

258 **(C) Existing Utilities.** Existing utilities are shown on the drawings  
259 in approximate locations for the convenience of the Contractor. It is  
260 not the intention of plans to imply that all existing utilities are drawn  
261 and located, and the fact that any utility is not shown on the drawings  
262 shall not relieve the Contractor of his responsibility under this Section.  
263 It shall be the Contractor's responsibility to ascertain the location of all  
264 existing utilities which may be subject to damages by construction  
265 under this Contract. The Contractor shall:

266

267 **(1)** Support and protect all HECO, CATV and/or HECO  
268 utilities during construction,

269

270 **(2)** Notify HECO, CATV and/or HECO immediately of any  
271 damage to its system caused by construction under this  
272 Contract, and

273

274 **(3)** Reconstruct, at his expense, damaged portions of the  
275 utility system in accordance with the requirements and  
276 specifications of HECO, CATV and/or HECO.

277

278 **(4)** The Contractor shall be responsible for and shall pay for  
279 all damages to existing utilities of all types.

280

281 **(D) HECO Facilities.** The Contractor shall provide HECO with  
282 24-hour access to all existing HECO facilities that are to remain, or, for  
283 facilities that are to be removed, until they are removed and to all new  
284 HECO facilities after they are installed. The Contractor shall be  
285 responsible for any delays in utility company work due to his failure to  
286 provide access to utility company facilities. All existing HECO facilities  
287 shall remain in place until proposed permanent facilities are completed  
288 and energized. Any cost for temporary relocations arising during

289 construction shall be borne by the Contractor.

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Electrical equipment or conductors, whether electrically energized or not, shall remain in place at all time during construction. Handling and moving of electrical equipment or conductors, when required by the Engineer, shall be done by HECO. Work by the Contractor in areas with energized electrical equipment or conductors shall be performed with extreme caution to prevent accidents and to avoid disturbing or damaging this equipment or conductors or any temporary supports or protective guards that are constructed. Unless otherwise permitted by HECO, all work by the Contractor in areas with energized equipment of conductors shall be performed in the presence of a HECO inspector and/or standby man. The Contractor shall have the sole responsibility for maintaining safe and efficient working conditions and procedures in these areas.

305

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308

Any existing or new HECO facilities including equipment or conductors damaged by the Contractor during construction shall be replaced by HECO at the Contractor's expense.

309

310

311

312

The Contractor shall give HECO two weeks advance notice for any work to be done by HECO on its facilities. Unless otherwise indicated on the drawings or otherwise directed by the Engineer, HECO will:

313

314

315

316

(1) Remove the concrete envelope from existing underground HECO ducts containing electrical cables.

317

318

319

320

321

322

(2) Construct temporary supports and protective barriers for bare duct and electrical cables immediately after removal of the concrete envelope is completed. Material for such supports and barriers shall be furnished by the Contractor as an incidental cost.

323

324

325

(3) Remove temporary supports and protective barriers constructed under item (2) above.

326

327

328

329

**(E) Excavation and Backfill.** All excavation and backfill for electric, telephone and cable television underground structures and trenches shall conform to the requirements of Section 204 - Excavation and Backfill for Miscellaneous Facilities, modified as follows:

330

331

332

**(1) Excavation.**

333

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336

**(a)** The width of trenches for concrete encased ducts shall be not less than the width of the encasement nor more than that required to properly and safely execute the work.

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**(b)** Ducts encased in concrete jackets which are bedded in disturbed (fill) ground shall be installed in the following manner: Embankments shall be built up and thoroughly compacted to the elevation which is three feet above the top-of-jacket elevation, or to the required elevation shown on the plans, whichever is less than five times the width of the jacket. This work shall conform to the requirements of Section 203 - Excavation and Embankment. The trench to accommodate the jacket shall then be excavated through the constructed embankment.

**(c)** The Contractor shall not excavate for manholes, handholes and duct lines until he has the locations for these structures staked out and verified to be correct, and approved by the respective utility company inspectors.

**(d)** Trenches shall be excavated at least 50 feet ahead of duct placement so that any obstruction to the duct line can be avoided through gradual alignment. The profile grade may be adjusted by the Engineer to increase or decrease the excavation depth (up to 3 feet) as a result of unforeseen obstruction at no additional cost.

**(e)** Excavation for each handhole and manhole, plus 50 feet of trenching for all ducts connected to those structures shall be completed, and the locations and depths of the handholes and manholes shall be verified and approved by the respective utility company inspectors prior to construction or installation of the structures. All cuts in excess of depths required shall be filled with concrete, beach sand, or Type A backfill. The lateral limit for handholes and manholes shall be the vertical surfaces two feet outside the neat lines of the structures.

**(f)** The bottom of the trench excavation shall be flat and smooth. All trenches shall be approved by the Engineer and the utility company inspectors before any ducts or conduits are placed or any structures and foundations are constructed.

**(g)** The trenches shall be widened at handholes and manholes to permit proper entry of the ducts and conduits.

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(h) The Contractor shall provide all sheathing and bracing to support the sides of the excavated trench. Provision and removal of these items are incidental to the trenching work.

(i) Saw cutting work shall be considered incidental to the trenching work.

**(2) Backfill.**

(a) No backfilling shall be done until the duct and conduit installations, and the handhole and manhole placements have been verified to be correct, and approved by the respective utility company inspectors.

(b) Material for use as trench backfill for direct buried conduit above select backfill shall be nonexpansive and shall conform to Section 204 – Excavation and Backfill for Miscellaneous Facilities and requirements stated below. Backfilling and compaction shall be as specified in Section 204 - Excavation and Backfill for Miscellaneous Facilities. Backfill material shall be beach sand, earth or earth and gravel mixture. If earth and gravel, mixture must pass 1/2 inch mesh screen and contain no more than 20 percent of rock particles by volume.

(c) Backfilling shall be to finished grades indicated on accompanying drawings, and/or matching existing conditions. Backfill material shall be placed in maximum of 8" layers in loose thickness before compacting. Backfill shall be thoroughly compacted with hand or mechanical tampers to 95% of the ASTM D1557 maximum dry density. In no case shall tamping be accomplished by using the wheels or tracks of a vehicle.

**(F) Installation of Conduits and Duct Banks.** All joints shall be water tight and all ducts shall be installed to drain towards pull points unless otherwise shown on the plans.

**(1) Plastic Duct Joints.**

(a) Field cutting of plastic ducts shall be performed by the Contractor and only with the use of a miter box. Burrs shall be removed by filing before the joint is made. All foreign matter shall be wiped off the sockets of the fittings and the edges of the duct with a clean cloth.

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**(b)** Cement for plastic duct joints shall be obtained from the duct manufacturer. Thinning of the cement will not be permitted. A liberal and uniform coat of cement shall be applied with a natural bristle brush to the inside of the coupling and to the outside of the duct end. Immediately thereafter, the duct shall be slipped into the socket of the fitting with a half-twisted, and the excess cement shall be wiped off.

**(c)** Allow the joined members to cure for at least five minutes before disturbing or applying stress to the joint. After this initial cure, care must be exercised in handling to prevent twisting or pulling the joint. In damp weather, this interval shall be increased to allow for slower evaporation of the solvent.

**(d)** Another fitting or section of conduit may be added to the opposite end within 2 or 3 minutes if care is exercised in handling so that strain is not placed on the previous assembly.

**(e)** Any joint included in a section of conduit to be bent in the trench shall be assembled above ground and allowed to lie undisturbed for at least two hours before installation. In cases where a plastic connection is made with the union under stress due to misalignment or other factors, the union shall be staked out to relieve stress on the joint until the conduit is backfilled or encased.

**(2) Plastic Duct Installation.**

**(a)** The Contractor shall provide spacers to maintain proper separation between ducts. The bottom duct spacers shall be placed on the prepared trench bottom, the first tier of ducts placed in the grooves of the spacers, and couplings attached to the duct ends. Spacers shall be 15 inches or more away from any coupling or joint. Successive lengths of ducts shall then be placed and connected to the preceding lengths as specified above. The second tier of duct spacers shall then be placed over the ducts previously placed and followed by installation of couplings. The operation shall be repeated for each successive tier until the top tier is set in place after which the top spacers are placed.

**(b)** When conduit is assembled above the ground, the spacer shall be supported in a vertical position by use of a No. 4 rebar and smooth black steel wire, No. 14 gage.

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**(c)** Duct alignment shall be as straight as feasible. Such directional changes as are required shall be made by using field made bends or with segments using angle couplings or deflection couplings, except where otherwise indicated. The deflection angle between two adjacent lengths of duct shall not exceed five degrees, unless otherwise indicated.

Horizontal bends for conduits/ducts shall be constructed with 25-foot minimum radius curves unless indicated otherwise or approved by the respective utility company inspector. Vertical bends for conduits/ducts shall be constructed with 20-foot minimum radius curves unless indicated otherwise or approved by the respective utility company inspector.

Spacers shall not be located at the centers of a long radius bend. On pre-fabricated bends, the spacer shall be located in the tangent, free of the coupling. On trench formed bend, the spacer shall be located midway between the tangent and center of the bend.

**(d)** Precaution shall be taken to prevent damage in plastic duct lines from thermal expansion and contraction. All ducts shall be cool when placed in trenches and when the concrete jacket is being poured.

**(e)** Ducts ending in handholes and manholes shall be terminated with junior end bells. End bells, terminators or ducts shall be flush to inside wall surfaces; duct extension into boxes is not acceptable.

The terminated ends of the conduit in an underground structure shall be free of support for a distance of at least 10 feet from the structure. The conduit shall be aligned and supported inside the structure with proper spacing and shall be cut to length after the concrete envelope has cured.

**(f)** The ends of the conduit shall be sealed with a plastic cap, plug, or approved substitute at the end of each day's work, when work on duct installation has to be interrupted, where ducts may be submerged in water, and in stub outs.

**(3)** A minimum thickness of 4 thousandths of an inch (mils), with a solid aluminum core or aluminum backing for detection

529 with metal detector. Tape shall be 6 inches wide, red in color  
530 for electrical power lines, and imprinted with "CAUTION  
531 BURIED ELECTRIC LINE BELOW" in black lettering. For all  
532 HECO duct lines, provide electrical detectable warning tape in  
533 accordance with HECO Specification No. M0302 – Warning  
534 Tape for Underground Conduit Systems.

535  
536 **(4)** The Contractor shall apply a thin coat of sealing  
537 compound on ducts and conduits at couplings and bells.

538  
539 **(5)** Conduits stubbed for future connections shall be plugged  
540 and marked.

541  
542 **(6)** The Contractor shall securely anchor duct banks prior to  
543 pouring concrete encasement to prevent ducts from floating.

544  
545 **(G)** The Contractor shall test the completed ducts by passing a test  
546 mandrel through the length of each duct of each duct run. For HECO  
547 conduits, the mandrel shall be a bullet shaped, blunt tipped type,  
548 unless indicated otherwise, about 14 inches long with a diameter 1/2  
549 inch less than the inside diameter of the ducts through the length of  
550 each duct run. Scars in the mandrel deeper than 1/32 inch, other than  
551 that caused by normal abrasion between the duct line and bottom of  
552 mandrel shall be considered an indication of the presence of burrs  
553 and/or obstructions in the duct run. The Contractor shall remove such  
554 burrs and/or obstructions, after which the test mandrel will be passed  
555 through again. All tests shall be conducted in the presence of the  
556 Engineer and respective utility company inspectors, and shall be  
557 repeated until the results obtained are satisfactory to the Engineer and  
558 to the utility company inspectors.

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560 **(H)** Unless indicated otherwise, the Contractor shall furnish and  
561 install a 1/8 inch Polyolefin pull line between pull points in all ducts  
562 after testing.

563  
564 **(I) Concrete.** The Contractor shall notify the utility company's  
565 inspector a minimum of 72 hours prior to placement of any concrete.

566  
567 **(1)** Securely anchor duct banks prior to pouring concrete  
568 encasement to prevent ducts from floating.

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570 **(2)** When pouring concrete, prevent heavy masses of  
571 concrete from falling directly on ducts. If unavoidable, protect  
572 ducts with plank.

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574 **(3)** Direct flow of concrete down sides of duct bank to  
575 bottom, allowing concrete to rise between ducts, filling all open  
576 spaces uniformly.

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**(4)** To insure against voids in concrete, work a long, flat splicing bar or spatula liberally and carefully up and down the vertical rows of ducts. Mechanical vibrators shall be used for stacked duct banks of three ducts or higher.

**(5)** Cure concrete for a minimum of 72 hours before permitting traffic and/or backfilling.

**(6)** Convey concrete from mixer to forms rapidly to prevent segregation. Free drop shall be limited to five feet, unless authorized by inspector.

**(7) Placing.**

**(a)** Clean and remove all debris from inside forms and trenches before placing concrete.

**(b)** Place concrete only on clean damp surfaces, free from water.

**(c)** Place concrete in forms, in horizontal layers not exceeding 18" thickness.

**(d)** Place concrete to avoid segregation of materials and displacement of ducts, inserts and reinforcing.

**(e)** Vibrate structural concrete thoroughly during and immediately after placing to insure dense watertight concrete.

**(8) Forming.**

**(a)** Forms shall be of good sound lumber with sufficient strength and conforming to shapes and dimensions indicated on drawings.

**(b)** Forms shall be treated with non-staining form oil immediately before each use.

**(9)** Patching: Patch all voids, pour joints and holes before concrete is thoroughly dry. Use mortar of same proportions as original concrete.

**(10)** Curing: Curing of concrete shall be accomplished by impervious membrane method with liquid membrane compound. Apply two or more coats to obtain a total of one gallon for each 150 square feet of concrete surface.



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**(J) Manholes, Handholes and Pullboxes.**

- (1)** Boxes shall be installed approximately where shown. The exact location of each box shall be determined after careful consideration has been given to the location of other utilities, grades, and pavement. Boxes shall be of the type noted on the Drawings and shall be constructed in accordance with the applicable details and standard drawings as indicated.
- (2)** Pullboxes shall be installed on a minimum of 3" #3 crushed rock.
- (3)** Ducts ending in manholes and handholes shall be terminated with junior end bells. End bells, terminators or ducts shall be flush to inside wall surfaces; duct extension into boxes is not acceptable. Verify complement and arrangement of ducts entering each manhole or handhole and location of duct entrance with the respective utility company prior to fabrication of the respective manhole and handhole.
- (4)** State boxes shall be provided with a tamper proof cover.

**(K) Cable Installation in Duct**

- (1)** Install cables as indicated in ducts.
- (2)** Do not pull spliced cables inside ducts.
- (3)** Install multiple cables in duct simultaneously.
- (4)** Use NEC approved lubricants of type compatible with cable jacket to reduce pulling tension.
- (5)** Perform tests using qualified personnel. Provide necessary instruments and equipment.
- (6)** Acceptance Tests
- (7)** Ensure that terminations and accessory equipment are disconnected.
- (8)** Ground shields, ground wires, metallic armor and conductors not under test.

**(L) Grounding and Bonding.** All grounding and bonding shall conform to the NEC. Connect all ground rods, plates, conductors, and galvanized steel conduits together. Connect

673 only one wire to any one ground bushing.

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**(M) Labeling**

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(1) Label all cables, conductors, ports, and terminals as shown on the Plans.

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(2) Label all cables and wiring in junction boxes, handholes, cabinets and any other access points using a permanent, durable, and waterproof printer-generated labeling system. Securely fasten the label tag to the cable using Ty-Wraps or equivalent fastening methods. Provide the Engineer with a sample of all proposed types of labels for review and approval 2 weeks prior to installation.

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(3) All end of wire segments and all access points between source and destination shall be labeled. Wire labeling shall adhere to the following nomenclature: <Cabinet Name>.<Device Name>.<Cable Number>.<Wire Number>. Provide a sample of the proposed labeling to the Engineer for approval prior to installation.

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(4) Label all electrical equipment and enclosures, including but not limited to, junction boxes, breakout boxes, and power supplies using the following systems:

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a. Label inside equipment as shown on the Plans using a lamoid style label on the front face of each enclosure with the wording shown on Plans. Use 25mm high white characters on a red background. Rivet the nameplate using a minimum of 4 stainless steel rivets.

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**(N) Restoration of Existing Streets and Other Improvements.**

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Street, sidewalks, curbs, gutters, traffic detection loops, and other improvements of the State, private owners, or those of the City and County which are maintained by the State, which are damaged by rearrangements to the electric, cable television or telephone system, shall be restored by the Contractor to their original condition. Existing concrete pavement, sidewalks, curbs, gutters, concrete facilities, etc. disturbed by the Contractor shall be removed and reconstructed at the pavement, sidewalks, curbs, gutters, concrete facilities, etc. scorelines or joints. Spot repairing of the concrete pavement sidewalks, curbs, gutters, concrete facilities, etc. must not be allowed. Materials and workmanship shall conform to the applicable sections in these specifications.

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Repairing of existing City streets and other improvements not maintained by the State and where such work is called for on the plans, inside and outside of the right-of-way, publicly or privately owned, which are damaged by the Contractor's operations shall be restored to their original condition, or better, at his expense. Materials and workmanship shall conform to the "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, SEPTEMBER 1986, AS AMENDED", of the Department of Public Works, County of Kauai, City and County of Honolulu, County of Maui, and County of Hawaii, of the State of Hawaii. Copies of the Standard Specifications are on file and may be inspected at the Division of Purchasing during regular business hours of the City.

All disturbed unpaved surfaces shall be backfilled and graded to match the surrounding areas, and sodded areas shall be replanted with the same type of grass. Fences and other improvements shall be restored to their original condition.

**621.04 Method of Measurement.** The Engineer will not measure software for controller, interconnect, or electrical risers for payment.

- (A) The Engineer will measure the type "A" traffic rated traffic signal pullbox, stepdown transformer 2kVA pedestal, 24"x36" traffic signal pullbox, splice cabinet, enclosed circuit breaker, 32"x32"x8" stainless steel junction box, 36"x36"x8" stainless steel junction box, and HECO meter pedestal per each in accordance with the contract documents.
- (B) The Engineer will measure traffic signal 2"C PVC schedule 40, 2"C PVC coated GRC, electrical cabling, and trench excavation per linear foot in accordance with the contract documents.
- (C) The Engineer will measure concrete per cubic yard in accordance with the contract documents.
- (D) The Engineer will measure Hawaiian Electric Company service connection fees and transformer installation on a force account basis according to Subsection 109.06 – Force Account Provisions and Compensation to be paid for by the subcontractor.

**621.05 Basis of Payment.** The Engineer will pay for the type "A" traffic rated traffic signal pullbox 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 pullbox at the designated locations; saw cutting; excavating and backfilling; restoration of concrete sidewalks, asphalt concrete pavement and landscaping; coating the frames and covers;

769 and furnishing equipment, tools, labor, materials and other incidentals  
770 necessary to complete the work.

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772 The Engineer will pay for the HECO Meter Pedestal at the contract unit  
773 price per each complete in place. The price includes full compensation for  
774 submitting the equipment list and drawing; furnishing and installing the signal  
775 assembly; wiring; bonding and grounding; testing; providing turn-on service;  
776 submitting warranty; and furnishing equipment, tools, labor, materials; and  
777 other incidentals necessary to complete the work.

778

779 The Engineer will not pay for the interconnect or electrical risers. The  
780 work includes furnishing and installing the riser; and furnishing equipment,  
781 tools, labor, materials, and other incidentals necessary to complete the work.  
782 The Engineer will consider the cost for risers as included in the contract price  
783 for the various contract items.

784

785 The Engineer will pay for the traffic signal 2" C PVC Schedule 40 at the  
786 contract unit price per linear foot complete in place. The price includes full  
787 compensation for saw cutting; trenching; excavating and backfilling, including  
788 asphalt concrete pavement, aggregate base course and aggregate subbase  
789 course for trench repair; concrete curb and/or gutter, concrete sidewalk repair  
790 and striping restoration; furnishing, installing, bonding, and grounding the  
791 conduits and interconnect subducts; and furnishing equipment, tools, labor,  
792 materials and other incidentals necessary to complete the work.

793

794 The Engineer will pay for the traffic signal 2" C PVC Coated GRC at the  
795 contract unit price per linear foot complete in place. The price includes full  
796 compensation for saw cutting; trenching; excavating and backfilling, including  
797 asphalt concrete pavement, aggregate base course and aggregate subbase  
798 course for trench repair; concrete curb and/or gutter, concrete sidewalk repair  
799 and striping restoration; furnishing, installing, bonding, and grounding the  
800 conduits and interconnect subducts; and furnishing equipment, tools, labor,  
801 materials and other incidentals necessary to complete the work.

802

803 The Engineer will pay for the electrical cables at the contract unit price  
804 per linear foot complete in place. The price includes full compensation for  
805 furnishing, installing, splicing, and taping the cable; furnishing and installing  
806 interconnect fabric subducts; making the connections; providing turn-on  
807 service; and furnishing equipment, tools, labor, materials and other  
808 incidentals necessary to complete the work.

809

810 The Engineer will pay for the stepdown transformer 2kVA pedestal at  
811 the contract unit price per each complete in place. The price includes full  
812 compensation for furnishing and installing the meter/main safety socket box,  
813 pullbox, support structure, ground rod, conduit, conductors; and furnishing  
814 equipment, tools, labor, materials and other incidentals necessary to  
815 complete the work.

816

817 The Engineer will pay for the splice cabinet at the contract unit price  
818 per each complete in place. The price includes full compensation for  
819 furnishing and installing the meter/main safety socket box, pullbox, support  
820 structure, ground rod, conduit, conductors; and furnishing equipment, tools,  
821 labor, materials and other incidentals necessary to complete the work.

822  
823 The Engineer will pay for the enclosed circuit breaker at the contract  
824 unit price per each complete in place. The price includes full compensation  
825 for furnishing and installing the meter/main safety socket box, pullbox, support  
826 structure, ground rod, conduit, conductors; and furnishing equipment, tools,  
827 labor, materials and other incidentals necessary to complete the work.

828  
829 The Engineer will pay for Hawaiian Electric Company service  
830 connection fees and transformer installation on a force account basis  
831 according to Subsection 109.06 – Force Account Provisions and  
832 Compensation. An estimate amount for the force account is allocated in the  
833 proposal schedule under Hawaiian Electric Company Service Connection  
834 Fees and Transformer Installation Fees. The actual amount to be paid will be  
835 the sum shown on the accepted force account records whether this sum be  
836 more or less than the estimated amount allocated in the proposal schedule.

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838 The Engineer will pay for 24"x36" traffic signal pullboxes at the contract  
839 unit price per each complete in place. The price includes full compensation  
840 for furnishing and installing the pullbox, and furnishing equipment, tools,  
841 labor, materials and other incidentals necessary to complete the work.

842  
843 The Engineer will pay for 32"x32"x8" stainless steel junction boxes at  
844 the contract unit price per each complete in place. The price includes full  
845 compensation for furnishing and installing the junction box, and furnishing  
846 equipment, tools, labor, materials and other incidentals necessary to  
847 complete the work.

848  
849 The Engineer will pay for 36"x36"x8" stainless steel junction boxes at  
850 the contract unit price per each complete in place. The price includes full  
851 compensation for furnishing and installing the junction box, and furnishing  
852 equipment, tools, labor, materials and other incidentals necessary to  
853 complete the work.

854  
855 The Engineer will pay for the concrete at the contract price per  
856 cubic yard.

857  
858 The Engineer will consider full compensation for additional materials  
859 and labor not shown in the contract that are necessary to complete the  
860 installation of the various systems incidental to the various contract items.  
861 The Engineer will not allow additional compensation.

862  
863 The Engineer will pay for saw cutting, excavation, backfill and  
864 restoration of the traffic signal ductlines at the contract unit price complete in

865 place. The price includes full compensation for saw cutting; trenching;  
 866 excavating and backfilling, including asphalt concrete pavement, aggregate  
 867 base course and aggregate subbase course for trench repair; concrete curb  
 868 and/or gutter and concrete sidewalk repair; and furnishing equipment, tools,  
 869 labor, materials and other incidentals necessary to complete the work.

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872 The Engineer will pay for the following pay items when included in the  
 873 proposal schedule:

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| 875 Pay Item   | Pay Unit      |
|--|---------------|
| 876 Middle Street to Ahua Street, Trench Excavation  | Lin. Ft       |
| 877 Middle Street to Ahua Street, Concrete   | Cub. Yd       |
| 878 Middle Street to Ahua Street, 2" C PVC Schedule 40   | Lin. Ft       |
| 879 Middle Street to Ahua Street, 2" C PVC Coated GRC  | Lin. Ft       |
| 880 Middle Street to Ahua Street, Splice Cabinet   | Each          |
| 881 Middle Street to Ahua Street, 24"x36" Traffic Signal Pullbox   | Each          |
| 882 Middle Street to Ahua Street, 32"x32"x8" Stainless Steel Junction Box  | Each          |
| 883 Middle Street to Ahua Street, 36"x36"x8" Stainless Steel Junction Box  | Each          |
| 884 Middle Street to Ahua Street, HECO Meter Pedestal  | Each          |
| 885 Middle Street to Ahua Street, HECO Charges   | Force Account |
| 886  |               |
| 887 Waiawa Road Stub, Trench Excavation  | Lin. Ft       |
| 888 Waiawa Road Stub, Concrete   | Cub. Yd       |
| 889 Waiawa Road Stub, 2" C PVC Schedule 40   | Lin. Ft       |
| 890 Waiawa Road Stub, Splice Cabinet   | Each          |
| 891 Waiawa Road Stub, 24"x36" Traffic Signal Pullbox   | Each          |
| 892  |               |
| 893 Farrington/Kamehameha Cabinet to H2 South CCTV to H2 VMS<br>Cabinet, Trench Excavation                         | Lin. Ft       |
| 894  |               |
| 895 Farrington/Kamehameha Cabinet to H2 South CCTV to H2 VMS<br>Cabinet, Concrete                                  | Cub. Yd       |
| 896  |               |
| 897 Farrington/Kamehameha Cabinet to H2 South CCTV to H2 VMS<br>Cabinet, 2" C PVC Schedule 40                      | Lin. Ft       |
| 898  |               |
| 899 Farrington/Kamehameha Cabinet to H2 South CCTV to H2 VMS<br>Cabinet, 2" C PVC Coated GRC                       | Lin. Ft       |
| 900  |               |
| 901 Farrington/Kamehameha Cabinet to H2 South CCTV to H2 VMS<br>Cabinet, Electrical Cable                          | Lin. Ft       |
| 902  |               |
| 903 Farrington/Kamehameha Cabinet to H2 South CCTV to H2 VMS<br>Cabinet, 24"x36" Traffic Signal Box                | Each          |
| 904  |               |
| 905 Farrington/Kamehameha Cabinet to H2 South CCTV to H2 VMS<br>Cabinet, Type "A" Traffic Rated Traffic Signal Box | Each          |
| 906  |               |
| 907 Farrington/Kamehameha Cabinet to H2 South CCTV to H2 VMS<br>Cabinet, Splice Cabinet                            | Each          |
| 908  |               |
| 909 Farrington/Kamehameha Cabinet to H2 South CCTV to H2 VMS<br>Cabinet, 32"x32"x8" Stainless Steel Junction Box   | Each          |
| 910  |               |
| 911 Farrington/Kamehameha Cabinet to H2 South CCTV to H2 VMS<br>Cabinet, Enclosed Circuit Breaker                  | Each          |
| 912  |               |

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|-----|--|---------|
| 913 | Farrington/Kamehameha Cabinet to H2 South CCTV to H2 VMS |         |
| 914 | Cabinet, Stepdown Transformer 2kVA Pedestal              | Each    |
| 915 |  |         |
| 916 | Waihona Street Stub, Trench Excavation                   | Lin. Ft |
| 917 | Waihona Street Stub, Concrete                            | Cub. Yd |
| 918 | Waihona Street Stub, 2"C PVC Schedule 40                 | Lin. Ft |
| 919 | Waihona Street Stub, Splice Cabinet                      | Each    |
| 920 | Waihona Street Stub, 24"x36" Traffic Signal Pullbox      | Each    |
| 921 |  |         |
| 922 | Waikele CCTV, Trench Excavation                          | Lin. Ft |
| 923 | Waikele CCTV, Concrete                                   | Cub. Yd |
| 924 | Waikele CCTV, 2"C PVC Schedule 40                        | Lin. Ft |
| 925 | Waikele CCTV, Electrical Cable                           | Lin. Ft |
| 926 | Waikele CCTV, 24"x36" Traffic Signal Pullbox             | Each    |
| 927 | Waikele CCTV, Enclosed Circuit Breaker                   | Each    |
| 928 | Waikele CCTV, Stepdown Transformer 2kVA Pedestal         | Each"   |
| 929 |  |         |
| 930 | <b>END OF SECTION 621</b>                                |         |

1 Make the following Section a part of the Standard Specifications:

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3 **“SECTION 636 – E-CONSTRUCTION**

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6 **636.01 Description.** This section is for furnishing e-construction software for the  
7 Project.

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9 **636.02 General Requirements.** The Contractor shall:

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11 (A) Provide licenses for the E-Construction platform designated by HDOT.

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13 **636.03 Not used.**

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15 **636.04 Measurement.** The Engineer will measure the fee for the license(s)  
16 associated with the “E-Construction Program” on a force account basis in  
17 accordance with Subsection 109.06 – Force Account Provisions and Compensation.

18  
19 **636.05 Payment.** The Engineer will pay for the fee for the license for the E-  
20 construction Program on a force account basis in accordance with Subsection  
21 109.06 – Force Account Provisions and Compensation. Payment will be full  
22 compensation for the “E-Construction” licensing fee as prescribed in this section  
23 and contract documents. The actual amount to be paid will be the sum shown on  
24 the accepted force account records whether this sum be more or less than the  
25 estimated amount allocated in the proposal schedule.

| <b>Pay Item</b>        | <b>Pay Unit</b> |
|------------------------|-----------------|
| E-Construction license | Force Account”  |

26  
27  
28  
29  
30  
31  
32  
33  
34 **END SECTION 636**



1                                   **SECTION 641 – HYDRO-MULCH SEEDING**

2  
3    Make the following amendments to said Section:

4  
5    **(I)**    Amend **Subsection 641.02(B) – Fertilizer** by revising the section from  
6    line 33 to 36 to read:

7  
8           **“(B) Fertilizer.** Proper fertilizer shall be used in hydro-mulch mix,  
9           depending on condition of soil. Apply at rates and in amounts consistent  
10          with manufacturer’s specifications. Contractor shall provide a Soil Analysis  
11          Report, if requested by Engineer, and shall use report to determine  
12          quantity and ratio of fertilizer for sustained growth of grass. Submit  
13          recommendations from a licensed Landscape Architect when deviating  
14          from the application rates and amounts above.”

15  
16  
17    **(II)**    Amend **Subsection 641.03(A) – Seeding** by revising the first paragraph  
18    from line 100 to 103 to read:

19  
20           **“(A) Seeding.** Apply seeded mulch within the timeframe in Subsection  
21           209.03(B) – Construction Requirements, if temporary stabilization will not  
22           be utilized, after completion of slopes or portion of slope when exposed  
23           face attains height of 15 feet. Notify Engineer not less than 24 hours  
24           ahead of hydro-mulch seeding operation. Do not hydro-mulch until the  
25           Engineer inspects and accepts areas for planting.”

26  
27    **(III)**   Amend Subsection **641.04 Measurement** lines 173 to 174 to read as  
28    follows:

29  
30           **“641.04 Measurement.** The Engineer will not measure hydro-mulch  
31           seeding for payment including the efforts to provide water for the seeds and  
32           ensure proper growth.”

33  
34    **(IV)**   Amend Subsection **641.05 Payment** lines 176 to 199 to read as follows:

35  
36           **“641.05 Payment.** The Engineer will not pay for the hydro-mulch seeding  
37           including the efforts to provide water for the seeds and ensure proper growth  
38           separately. The Engineer shall consider the cost for the hydro-mulch seeding as  
39           included in the contract price of the various contract items. The cost is for the  
40           work prescribed in this section and the contract documents.”

41  
42                                   **END OF SECTION 641**



1                                   **SECTION 645 – WORK ZONE TRAFFIC CONTROL**

2  
3    Make the following amendments to said Section:

4  
5    **(I)**     Amend **Section 645.02 Materials** from lines 39 to 48 to read as follows:

6  
7            “Submit at least 30 working days before work starts, 10 sets of FHWA  
8 approval letters certifying compliance with AASHTO Manual for Assessing Safety  
9 Hardware (MASH) for signs, sign supports, barricades, delineators, cones,  
10 vertical panels, concrete barriers, steel barriers, end treatments, and other traffic  
11 control devices.

12  
13            Furnish to Engineer at least 30 working days before work starts, 10 sets of  
14 a self-certified MASH complaint letter from the vendor for each type of Category  
15 1 traffic control device, as defined in MASH, including but not limited to a single-  
16 piece traffic cone, single-piece drum, tubular marker, and delineator.

17  
18            Use of signs, sign supports, barricades, delineators, cones, vertical  
19 panels, and other traffic control devices that are not certified to be MASH  
20 compliant shall not be used unless a request for a waiver is submitted in writing  
21 and a written waiver is given by the Engineer.”

22  
23    **(II)**     Amend **Section 645.03 Construction** by replacing the second sentence  
24 in the paragraph lines 65 and 66 to read as follows:

25  
26            “Furnish two police officers for each location that requires lane closure or  
27 encroachment or traffic control or combination thereof. During times when there  
28 is reduced sunlight illumination or at night or both, each police officer or flagger  
29 must be illuminated.”

30  
31    **(III)**    Amend **Section 645.03 Construction** from lines 152 to 154 to read as  
32 follows:

33  
34            “Notify the Engineer and County, including Bus Systems Division, Police  
35 Department, Fire Department, Emergency Medical Services, Department of  
36 Health; Airports Division; and Military in writing at least five days before start of  
37 construction.

38  
39            Coordinate and verify Zipper Lane deployment times with the Zipper Lane  
40 operating contractor prior to closing any westbound freeway traffic lanes at the  
41 Waiawa IC site.”

42  
43    **(IV)**                Amend **Section 645.03 (F) Lane Closures** from lines 248 to  
44 251 to read as follows:

45  
46            “(F) - Lane closures for night work at the sites shown on plans will only be

47 allowed during the following hours:

48

49

**Location**

**Hours**

50

51

52 Waiawa Interchange Farrington Hwy Overpass

53 H-2 Northbound

54 1 lane closed:

11:00 p.m. to Midnight, Monday  
through Thursday

55

56

Midnight to 4:00 a.m., Tuesday  
through Friday

57

58

59 H-1 Westbound

60 1 lane closed:

8:00 p.m. to Midnight, Monday through  
Thursday

61

62

Midnight to 2:00 a.m., Tuesday  
through Friday

63

64

65 2 lanes closed:

10:00 p.m. to Midnight, Monday  
through Thursday

66

67

Midnight to 2:00 a.m., Tuesday  
through Friday

68

69

70 H-1 Eastbound

71 1 lane closed:

8:00 p.m. to Midnight, Monday through  
Thursday

72

73

Midnight to 4:00 a.m., Tuesday  
through Friday

74

75

76 2 lanes closed:

9:00 p.m. to Midnight, Monday through  
Thursday

77

78

Midnight to 4:00 a.m., Tuesday  
through Friday

79

80

81 Keehi Interchange Conduit

82 H-1 Eastbound

83 1 lane closed:

8:00 p.m. to Midnight, Monday through  
Thursday

84

85

Midnight to 4:00 a.m., Tuesday  
through Friday

86

87

88 Nimitz Westbound On-Ramp

89 1 & 2 lanes closed:

7:00 p.m. to Midnight, Monday through  
Thursday

90

91

Midnight to 2:00 a.m., Tuesday  
through Friday

92

|     |  |                                       |
|-----|--|---------------------------------------|
| 93  |  |                                       |
| 94  | Nimitz Ramp "D"  |                                       |
| 95  | 1 lane closed:   | 8:00 p.m. to Midnight, Monday through |
| 96  |  | Thursday                              |
| 97  |  | Midnight to 4:00 a.m., Tuesday        |
| 98  |  | through Friday                        |
| 99  |  |                                       |
| 100 | <u>H-1 Near Pali Hwy.</u>  |                                       |
| 101 | H-1 Eastbound  |                                       |
| 102 | 1 lane closed:   | 8:00 p.m. to Midnight, Monday through |
| 103 |  | Thursday                              |
| 104 |  | Midnight to 4:00 a.m., Tuesday        |
| 105 |  | through Friday                        |
| 106 |  |                                       |
| 107 | Closures for day work at the sites shown on plans will be allowed during |                                       |
| 108 | the following hours:   |                                       |
| 109 |  |                                       |
| 110 | <b><u>Location</u></b>   | <b><u>Hours</u></b>                   |
| 111 |  |                                       |
| 112 | <u>Waialeale CCTV</u>  |                                       |
| 113 | H-1 Westbound  |                                       |
| 114 | Shoulder closed:   | 8:30 a.m. to 3:00 p.m., Monday        |
| 115 |  | through Friday                        |
| 116 |  |                                       |
| 117 | <u>H-2 CCTV (North &amp; South)</u>                                      |                                       |
| 118 | H-2 Northbound   |                                       |
| 119 | Shoulder closed:   | 8:30 a.m. to 3:00 p.m., Monday        |
| 120 |  | through Friday                        |
| 121 |  |                                       |
| 122 | H-2 Southbound   |                                       |
| 123 | Shoulder & 1 lane closed:  | 9:00 a.m. to 3:00 p.m., Monday        |
| 124 |  | through Friday                        |
| 125 |  |                                       |
| 126 | <u>Keehi Interchange Conduit</u>   |                                       |
| 127 | H-1 Eastbound  |                                       |
| 128 | Shoulder closed:   | 9:00 a.m. to 3:00 p.m., Monday        |
| 129 |  | through Friday                        |
| 130 |  |                                       |
| 131 | Ramp "E" & "F" Westbound   |                                       |
| 132 | 1 lane closed:   | 8:30 a.m. to 3:00 p.m., Monday        |
| 133 |  | through Friday                        |
| 134 |  |                                       |
| 135 | Middle St. Southbound  |                                       |
| 136 | 1 lane closed:   | 8:30 a.m. to 3:00 p.m., Monday        |
| 137 |  | through Friday"                       |
| 138 |  |                                       |

139 (V) Amend **Section 645.03 Construction**, by adding the following after line  
140 393:

141  
142 (I) Portable variable message sign with proposed pre-advisory  
143 message. A minimum of one portable variable message sign to be  
144 posted for public information for a period of 3 days before traffic  
145 pattern changes for lane or ramp closures or as ordered by the  
146 Engineer.

147  
148 (J) The Contractor shall provide and maintain up to two portable  
149 variable message signs with remote access features at each  
150 location to be used for the duration of the work. Payment for all  
151 work associated with the variable message signs shall be  
152 considered incidental to the lump sum pay items in this section.”

153  
154 (VI) Amend **Section 645.04(A)**, lines 396 to 398, to read as follows:

155  
156 (A) Contractor shall submit a certified payroll for all workers  
157 involved in the installation/removal of traffic control devices. Traffic  
158 control as specified in Subsection 645.03 - Construction will be  
159 measured on a contract lump sum basis. Measurement for payment  
160 will not apply. All public notices and advertisements shall be  
161 incidental to the lump sum pay items in this Section and will not be  
162 paid for separately, unless otherwise directed by Engineer.”

163  
164 (VII) Amend **Section 645.04(B)**, lines 400 to 403, to read as follows:

165  
166 (B) The Engineer will measure the following when ordered by  
167 the Engineer:  
168 • Additional police officers, additional traffic control devices,  
169 that are beyond the required amount to allow the public to  
170 safely pass through the project and is not required, or a  
171 standard or guidance, or option, by the Contract Documents  
172 or the MUTCD or both.  
173 • Additional items of work if ordered by the Engineer.

174  
175 Measurement shall be on a force account basis, in accordance with  
176 Subsection 109.06 - Force Account Provisions and Compensation.”

177  
178 (VIII) Amend **Section 645.05 Payment**, line 415, to read as follows:

179  
180 “Traffic Control \_\_\_\_\_ Site Days”

181  
182  
183

**END SECTION 645**

1 Delete Section 647 in its entirety and replace with the following:

2  
3 **“SECTION 647 – FIBER OPTIC CABLE**

4  
5 **647.01 Description.** This work includes furnishing labor, materials, tools,  
6 machinery, and equipment necessary to install fiber optic cable according to the  
7 contract.

8  
9 There shall be a fiber optic cable Subcontractor, who shall have at least 3  
10 (three) years experience in installing fiber optic systems over \$250,000,  
11 specifically for outdoor overhead joint-pole and underground in traffic-highway  
12 applications. The fiber optic cable Subcontractor shall be responsible for testing  
13 all fiber optic cables to provide a documented optical budget loss analysis for  
14 each link to and from a hub station. The fiber optic cable Subcontractor shall be  
15 responsible for all hookup, assignments, dedication, testing, matching, and  
16 splicing of the fiber optic cables, unless otherwise indicated. All fiber optic splice  
17 points shall be spliced color-for-color whenever matching pairs are available.  
18 The fiber optic cable Subcontractor shall be fully responsible for all splices,  
19 budget loss, attenuators, appropriate fiber hardware, accessories, and pigtail  
20 connections for a fully operational system. All other hardware, equipment, and  
21 labor necessary shall be considered incidental.

22  
23 **647.02 Materials.** The fiber optic cables, which will be used to transmit  
24 video and data signals, will consist of single-mode fibers. Cables will be installed  
25 in existing and new conduits. The Contractor shall furnish and install fiber optic  
26 cable suitable, and meeting standards, for underground and aerial lashing  
27 installations. The fiber optic cables shall meet the following specifications:

28  
29 The cable shall meet the requirements of the United States Department of  
30 Agriculture (USDA) Rural Utilities Service (RUS) 7 CFR 1755.900 and shall be  
31 included in the most current “USDA List Of Acceptable Materials For Use On  
32 Telecommunications Systems Of RUS Borrowers”.

33  
34 **(A) Single-mode Fiber.** The single-mode fiber utilized in the cable  
35 specified herein shall be dispersion unshifted and conform to the following  
36 specifications:

37  
38 Cladding diameter:  $125 \mu\text{m} \pm 1.0 \mu\text{m}$

39 Core-to-cladding offset:  $< 0.6 \mu\text{m}$

40 Cladding Non-circularity:  $< 1.0\%$

41 Coating diameter:  $245 \pm 10 \mu\text{m}$

42 Colored fiber diameter: Nominal  $250 \mu\text{m}$

43 Attenuation uniformity: No point discontinuity greater than 0.10 dB at  
44 either 1310 nm or 1550 nm.

45 Attenuation at the water peak: The attenuation at  $1388 \pm 3 \text{ nm}$  shall not  
46 exceed 2.1 dB/kM.

47 Cutoff wavelength: The cabled fiber cutoff wavelength shall be < 1260  
48 nm.  
49 Mode-field diameter: 9.30 ± 0.50 µm at 1310 nm  
50 10.50 ± 1.00 µm at 1550 nm  
51 Zero Dispersion wavelength: < 1301.5 nm  
52 Zero Dispersion Slope: <0.092 ps/(nm²kM)  
53 Fiber polarization mode dispersion: < 0.5ps/kM  
54

55 The coating shall be a dual layered, UV cured acrylate applied by the fiber  
56 manufacturer. The coating shall be mechanically strippable.  
57

58 **(B) Fiber Specification Parameters.**

59  
60 Required fiber grade: Maximum individual fiber attenuation.

61  
62 Single mode – The maximum dispersion shall be ≤ 3.2 ps/nmkm  
63 from 1285 to 1330 nm and shall be < 18 ps/nm-kM at 1550 nm.  
64

65 All optical fibers shall be proof tested by the fiber manufacturer to a  
66 minimum load of 0.7 GN.m2 (100 kpsi). Fibers shall contain no factory  
67 splices.  
68

69 **(C) Specifications for Outdoor Cable Construction.** Optical fibers  
70 shall be inside a loose buffer tube in groups of 12. Optical fibers shall be  
71 mechanically strippable. Gel filled cables shall not be used. The fiber  
72 shall be colored with ultraviolet (UV) curable links. Each fiber shall be  
73 distinguishable by means of color coding in accordance with TIA/EIA-598-  
74 A, “Optical Fiber Cable Color Coding”.  
75

76 Loose buffer tubes shall also be colored with distinct and  
77 recognizable colors in accordance with TIA/EIA-598-A, “Optical Fiber  
78 Cable Color Coding” and shall be marked Singlemode. Fillers may be  
79 included in the cable core to lend symmetry to the cable cross section  
80 where needed. Cable construction shall utilize dielectric strength  
81 members.  
82

83 Cable jacket shall be a PVC material that is fungus, water and UV  
84 resistant. The jacket shall be marked with the manufacturer’s name,  
85 sequential meter or foot marking, month and year of manufacture.  
86

87 The maximum pulling tension shall be 2700 N (608 lbft) during  
88 installation (short term) and 890 N (200 lbft) long term installed.  
89

90 The shipping, storage, and operating temperature range of the  
91 cable shall be –40C to +70C.  
92



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**(D) Quality Assurance Provision.** All cabled optical fibers > 1000 meters in length shall be 100% attenuation tested. Attenuation of each fiber shall be provided with each cable reel.

The cable manufacturer shall be ISO 9001 registered.

**(E) Packaging.** Top and bottom ends of the cable shall be available for testing.

Both ends of the cable shall be sealed to prevent the ingress of moisture. Each reel shall have a weather resistant reel tag attached identifying the reel and cable.

The reel tag shall include the following information:

- |                          |                   |
|--------------------------|-------------------|
| Cable number             | Gross Weight      |
| Shipped length in meters | Job order number  |
| Product Number           | Date cable tested |

Each cable shall be accompanied by a cable data sheet. Cable data shall include manufacturer number, billable length, bandwidth specs and measured attenuation of each fiber.

**647.03 Construction Requirements.**

**(A) Material Sample and Certificate of Compliance.** The Contractor shall submit material samples according to Subsection 106.04 – Material Sample, and any certificates of compliance according to Subsection 106.07 – Certificate of Compliance.

The Contractor shall submit a fiber optic cable pulling plan for review and approval by the Engineer prior to beginning fiber optic cable installation. The fiber optic cable pulling plan shall include:

- (1) Location of start and end of pulls,
- (2) Location of cable reel trailers during installation,
- (3) Location of any “figure-eight” of fiber optic cable, and
- (4) Location of staged equipment.

Upon completion of the work, submit an “As Built” or corrected plan showing in detail the following:

- (1) Construction changes,

139                   (2) Location and attenuation of every event along the installed  
140 fiber optic cable,

141  
142                   (3) Index of refraction of installed fiber,

143  
144                   (4) Fiber optic cable index of refraction, and

145  
146                   (5) Sequential fiber optic cable markings at each pullbox,  
147 cabinet, and splice closure.

148  
149 **(B) Excavation and Backfill.** Excavation and backfill shall conform to  
150 Section 204 – Excavation and Backfill for Miscellaneous Facilities.

151  
152                   The Contractor shall be responsible for the repair of any damage to  
153 pavements, sidewalks and other improvements. Place the material from  
154 the excavation to prevent damage and obstruction to vehicular and  
155 pedestrian traffic and interference with surface drainage.

156  
157 **(C) Fiber Optic Cable.** The fiber optic cable Subcontractor shall install  
158 the new fiber optic cable underground in conduits as shown on the plans.  
159 The Contractor will be responsible for furnishing and pulling the new fiber  
160 in PVC ductlines using a breakaway swivel to prevent exceeding the  
161 tensile load during installation.

162  
163                   All fiber optic splices shall be fusion splices. Mechanical splices  
164 shall not be used. Fiber optic splice locations are permitted only at splice  
165 points where splice cabinets are shown on the plans. Fiber optic fibers  
166 shall be spliced in every splice cabinet location, and it is the responsibility  
167 of the Contractor to maintain a continuous run throughout the system.  
168 The Contractor shall leave a minimum of 25-feet of cable service loops at  
169 every cabinet or splice location.

170  
171                   Provide documented historical cable pulling data indicating tensile  
172 forces exerted on the cable during the installation. Any tension  
173 measurements, which exceed the manufacturer's recommendation, will be  
174 considered means for the cable rejection. The fiber optic cable  
175 Subcontractor shall be fully responsible for the quality and integrity of the  
176 installed cable and the operability of the final fiber optic cable product. All  
177 fibers shall be spliced at camera cabinets, hubs, and splice cabinets and  
178 shall have no more than 0.07 dB loss per splice based on the appropriate  
179 system operating wavelength.

180  
181                   The Contractor shall complete all required fiber optic splices prior to  
182 final testing and acceptance. As part of the final testing and acceptance,  
183 submit optical time domain reflectometer (OTDR) readings in both  
184 hardcopy and electronic formats (such that it can be examined using the  
185 manufacturer's OTDR software) to the Engineer for review. Testing shall

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be conducted on all singlemode fibers at 1310 nm and 1550 nm. Powermeter attenuation testing should be performed at dual wavelength, bi-directionally.

All necessary equipment and plug-in, fittings, splice tags, enclosures, and work to complete an operational system shall be furnished and installed by the Contractor, unless otherwise indicated, at no added cost, and will be considered included in the cost of the contract items in this Section.

In every pullbox, store at least 20 feet of slack fiber optic cable for every cable that passes through the pullbox. If a cable runs from the pullbox directly to an equipment cabinet, store at least 25 feet in the pullbox and store at least 25 feet of slack for it in the cabinet. Store slack cable neatly on the walls of the pullbox or cabinet using racking hardware acceptable to the Engineer.

**(D) Services Provided By The City.**

The City and County of Honolulu, Department of Transportation Services (DTS) will be responsible for coordinating phasing with contractor.

The Contractor shall be responsible for the following:

- (1) Arrange for phases of work with DTS or as specified by the Engineer.
- (2) Give at least seven calendar days of advance notice to DTS when phases of the work require its services.
- (3) All splices and connections in pullboxes and cabinet locations where indicated on plans.

**(E) Restoring Pavements and Other Improvements.** Restore the existing pavements and other improvements such as driveways, sidewalks, curbs and gutters disturbed by excavation to their original condition according to the contract. Materials used for restoration work shall be equal to or better in quality than the materials the Contractor will replace, and matching in thickness, texture, and color whenever applicable. The grades of the restored surfaces shall conform to the existing grades.

**(F) Warranty.** Materials and equipment installed for permanent construction shall be new. The contract contemplates the use of first-class material and equipment throughout the performance of the contract.

232 Secure from the manufacturer(s), a warranty or warranties  
233 guaranteeing equipment from defects in materials, design and  
234 workmanship for not less than 12 months from the date of acceptance.  
235

236 When requiring adjustments or repairs during the warranty period,  
237 adjust or repair the existing unit within 24 hours from the time of  
238 notification.  
239

240 When requiring repairs that need factory corrections during the  
241 warranty period, replace the existing unit with an accepted temporary  
242 operational replacement unit within 24 hours from the time of notification  
243 until the Contractor can install the new unit. Install the new, identical non-  
244 defective unit within 30 days from the time of notification.  
245

246 **647.04 Method of Measurement.** The Engineer will measure the fiber optic  
247 cables per linear foot in accordance with the contract documents. Splice will be  
248 measured and paid under Section 647 – Fiber Optic Communication System.  
249

250 **647.05 Basis of Payment.** The Engineer will pay for the accepted fiber optic  
251 cable underground at the contract unit price per linear foot complete in place.  
252 The price includes full compensation for messenger cable both, existing and  
253 new, and all other materials required to complete a fully functioning fiber optic  
254 infrastructure; submitting the equipment list and drawing; furnishing, installing,  
255 and taping the cable, as required; making the connections; providing turn-on  
256 service, restoring pavements and other improvements; testing and furnishing  
257 equipments, tools, labor, materials and other incidentals necessary to complete  
258 the work. Payment will be full compensation for the work prescribed in this  
259 section and the contract documents.  
260

261 The Engineer will pay for the following pay item when included in the proposal  
262 schedule:

| 263 <b>Pay Item</b>   | 263 <b>Pay Unit</b> |
|---|---------------------|
| 264 Aala Street to Pali Hwy, Fiber Optic Cable in Conduit   | 264 Lin. Ft         |
| 265   |                     |
| 266 Middle Street to Ahua Street, Fiber Optic Cable in Conduit  | 266 Lin. Ft         |
| 267   |                     |
| 268 Waiawa Road Stub, Fiber Optic Cable in Conduit  | 268 Lin. Ft         |
| 269   |                     |
| 270 Farrington/Kamehameha cabinet to H2 South CCTV to H2 VMS Cabinet,<br>271 Fiber Optic Cable in Conduit | 271 Lin. Ft         |
| 272   |                     |
| 273 Waihona Street Stub, Fiber Optic Cable in Conduit   | 273 Lin. Ft         |
| 274   |                     |
| 275 Waikele CCTV, Fiber Optic Cable in Conduit  | 275 Lin. Ft"        |
| 276   |                     |
| 277   |                     |
| 278   |                     |

**END OF SECTION 647**

**NH-0300(152)  
647-6a**

**6/25/21**



1 Make the following section a part of the Standard Specifications.

2 **“SECTION 652 – HORIZONTAL DIRECTIONAL DRILLING CROSSINGS**

3 **652.01 Description.**

4 The work of this section shall consist of furnishing and installing utility  
5 sleeves by the horizontal directional drilling (HDD) method; grouting of annular  
6 spaces between sleeves and the product pipes; and installation of specified  
7 appurtenances as shown on the plans and in accordance with the requirements  
8 specified herein. Open-cut excavation will not be allowed, except where noted  
9 on the plans, due to highway utility installation restrictions.

10 **(A) Definitions.**

11 **(1) Horizontal Directional Drilling.** A trenchless, steerable  
12 installation method of using a multi-axis drilling machine to bore a  
13 small diameter pilot hole. The pilot hole is bored using either  
14 controlled fluid jetting or fluid assisted mechanical cutting, or  
15 combinations thereof. The pilot hole is reamed, as necessary, to  
16 accommodate the sleeve pipe. The sleeve is pulled back into the  
17 reamed hole by the drilling machine. The sleeve is cleaned and  
18 prepared for product pipe installation.

19 **(2) Slurry System.** Transportation of excavated material in the  
20 slurry flow matched to the excavation rate. System balances  
21 groundwater pressures and separates soil from slurry at the end of  
22 the process. Soil separation methods are not limited to mechanical  
23 means. Soil separation method may be chemical in nature.

24 **(3) Entry Pit.** A pit used for starting the horizontal drilled bore.

25 **(4) Reception/Exit Pit.** A pit where the horizontal drilled bore  
26 ends.

27 **(5) Reinstatement.** The backfilling, compaction and resurfacing  
28 of any excavation in order to restore the surface and underlying  
29 structure to enable it to perform its original function.

30 **(B) Submittals.** Working drawings and documentation for horizontal  
31 directional drilling shall be submitted to the Engineer for review.

32 **(1) Horizontal Directional Drilling.**

33 **(a)** Submit for approval complete working drawings  
34 showing details of the proposed method of construction and  
35 the sequence of operations to be performed during

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construction. Show the method of horizontal directional drilling (HDD), including the HDD system to be used, location of working pits including method of excavation, shoring and bracing appurtenance installation, and dewatering techniques that are proposed to be used. These submittals shall include all the restrictions and limitations imposed in Subsection 652.01(C) - Highway Procedures and Requirements. The following is not intended to be limited to, but to provide, the minimum of details that must be included.

1. A detailed description of the HDD procedure including operational sequences and construction techniques to provide the access required to install the sleeve in conformance with Contract Documents.
2. Manufacturer's literature describing in detail the HDD system to be used including details of the guidance or locating system. Detailed description of projects on which this system has been successfully used including the names, addresses, and telephone numbers of the owner's representatives for these projects as well as the length, diameter, ground conditions encountered, and pipe material used.
3. Calculations and drawings indicating limits of the access pits and any ground support to be utilized.
4. A groundwater stabilization scheme covering the excavations for entry and exit pits. Verify this plan to stabilize anticipated unstable soil conditions. Such verification shall include all calculations and detail drawings for methods of controlling groundwater.
5. Certification by the HDD manufacturer of the thrust, condition, and operational characteristics of all equipment to be used for installing the specified sleeves.
6. Working Drawings, including the following:
  - a. Layout of HDD and ancillary equipment at each of the crossing location.
  - b. Grade and alignment control details.
  - c. Pipe sleeve details.

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- 7.** Material Safety Data Sheets (MSDS) for all material used in making up drilling fluids.
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- 8.** Details of grouting the annulus space after the product pipes has been installed including injection pressure and method of controlling grout pressures, where required.
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- 9.** Calculations demonstrating that the sleeve selected has been designed to support the maximum anticipated earth loads and superimposed live loads, both static and dynamic, which may be imposed on the sleeve. Determine the additional stresses imposed on the sleeve during pull back operations and upgrade the quality and strength of the sleeve and sleeve joints to the extent necessary to withstand the additional stresses imposed by the HDD operation.
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- 10.** Contractor's safety plan for personnel conducting the HDD operations including provisions for lighting, electrical safeguards, and safety to the public.
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- 11.** Keep and maintain at the construction site a complete set of field drawings for recording as-built conditions. It shall have marked or noted thereon all field information, properly dated, and recording as-built conditions. This set of field drawings shall be kept up to date.
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- 12.** Pipe certification of compliance.
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- 13.** Sleeve jointing method and details.
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- 14.** Casing spacer details.
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- 15.** All Contractor submittals requiring structural design shall be signed by a licensed structural engineer registered in the State of Hawaii.
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- 16.** Written documentation summarizing the qualifications of the project superintendent, operators, and site safety representative.



108                   **(b)** The Contractor shall prepare a schedule for the work  
109 and submit it to the Engineer for approval. The schedule shall  
110 include all major tasks to be performed including the following:

- 111                   1. Sleeve delivery
- 112                   2. Rig mobilization and setup
- 113                   3. Pilot hole drilling
- 114                   4. Reaming
- 115                   5. Sleeve assembly and testing before installation
- 116                   6. Sleeve pulling
- 117                   7. Testing and pigging sleeve after installation

118                   **(c)** At least 30 days prior to mobilization of equipment, the  
119 Contractor shall submit a detailed installation plan to the  
120 Engineer for review and approval. The plan shall also include  
121 a detailed plan and profile of the bore plotted at a scale no  
122 smaller than 1 inch equals 20 feet horizontally and vertically.

123                   **(d)** Submit a computer-generated log of the HDD  
124 operations. As a minimum, the log shall consist of the  
125 following:

- 126                   1. The position of the sleeve in relation to the  
127 design line and grade.
- 128                   2. The date, the starting time, and the finish time.
- 129                   3. Inclination.
- 130                   4. Advance rates.

131                   **(e)** Submit a separate computer-generated log tracking  
132 sleeve lubricant used in gallons, its viscosity, and  
133 pumping pressure. Log shall be submitted daily.

134                   **(f)** The Engineer will base the review of submitted details  
135 and data with consideration of requirements for the  
136 completed work, utilities, and the possibility of unnecessary  
137 details in the execution of the work to be constructed under  
138 this contract. Review of the Contractor submittals by the

139 Engineer shall not relieve the Contractor of his/her  
140 responsibilities under this Contract.

141 (g) Equipment and installation methods shall be  
142 adequate to preserve the quality of the sleeve.

143 **(C) Highway Procedures and Requirements.**

144 The Contractor shall perform all work in accordance with  
145 Subsection 104.09 - Maintenance of Traffic. The requirements of  
146 this subsection are in addition to, and shall take precedence over  
147 conflicting requirements with Subsection 104.09 – Maintenance of  
148 Traffic.

149 (1) Maintain traffic at all times. Pit locations shall be kept clear  
150 of intersections and within a single lane of traffic in order to  
151 minimize disruption to the flow of traffic. Pit locations along  
152 Interstate Route H-1 shall be kept out of the existing travel ways  
153 and shoulders. No lane closures will be allowed along Interstate  
154 Route H-1 in conjunction with any trenchless sleeve installation  
155 unless noted on the plans.

156 (2) The Contractor is responsible for containing the slurry and  
157 contaminants such that it does not reach any water body or storm  
158 drainage system. Traffic barriers are required between the active  
159 traffic and any work space.

160 (3) The Contractor shall monitor ground movements associated  
161 with the sleeve installation work, take readings, and provide the  
162 Engineer with copies of the monitoring data. These actions are  
163 meant to supplement the Contractor's monitoring system and do  
164 not relieve the Contractor of his responsibility, nor place on the  
165 Engineer, responsibility for control of ground movement and  
166 protection of work and adjacent structures. The Contractor shall  
167 stop work immediately at the first sign of any surface subsidence.

168 (4) Control line and grade of sleeve to within the specified  
169 tolerances as accepted by the Engineer. Monitor line and grade  
170 continuously during sleeve installation. When the installation is off  
171 line and/or grade, return to plan line and/or grade at a rate of not  
172 more than one inch (1") per one hundred feet (100'), unless  
173 approved by the Engineer. If the sleeve installation is sufficiently  
174 far off specified tolerances to require redesign of product pipelines,  
175 the Contractor shall do so at no additional cost to the State.

176 **652.02 Materials**

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**(A) General.**

Steel plate covers shall be structural steel conforming to the requirements of ASTM A 36.

Concrete shall conform to the requirements of Section 601 - Structural Concrete and shall be Class B unless specified otherwise.

Materials shall meet the requirements specified in the following subsections of Division 700 - Materials, as modified herein.

|                          |        |
|--------------------------|--------|
| Trench Backfill Material | 703.21 |
| Reinforcing Steel        | 709.01 |

**(B) Sleeve Pipe.**

**(1) Sleeve Pipe for Trenchless Systems Crossings.**

**(a)** Sleeve pipe shall be high density polyethylene (HDPE).

**(b)** Minimum sleeve nominal diameter shall be 8 inches. Sleeve wall thickness shall be determined by the Contractor based on the static and dynamic loads from traffic loading and the anticipated installation forces. Sleeve lengths shall be determined by the Contractor.

**(c)** HDPE sleeves shall have a smooth exterior wall, with standard dimension ratio (SDR) of 11 or thicker. The HDPE sleeve at Ductline 1 between Station 0+84.87 and Station 5+46.77 shall have an SDR of 9 or thicker. All HDPE sleeves shall be coilable, whenever possible. HDPE sleeves shall be equipped with a factory installed rope or tape to aid in the installation of the systems conduits and casing spacers. The ducts shall have a durable identification showing duct size and schedule.

**(d)** Grout Around Systems Conduits. The grout around the systems conduits within the trenchless sleeve, where specified, shall meet the requirements in Subsection 712.04(A) - Non-shrink Grout of the Standard Specifications.

**(e)** Casing Spacers. The casing spacers shall be centered and restrained; slides easily (coefficient of friction = 0.1 to 0.6); dielectrically isolated from carrier pipe; and shall be PSI (Pipeline Seal and Insulator, Inc.) Casing Spacers, APS (Advanced Products & Systems, Inc.), or equal.

- 213           **(C)   Horizontal Directional Drilling.**
- 214           **(1)   Materials.**
- 215           Drilling fluids shall be free of all admixtures that would  
216           adversely affect the environment.
- 217           **(2)   Equipment.**
- 218           **(a)**    Drilling equipment.
- 219           **(b)**    Water pumps, hoses, fittings, storage tanks, filters, hay  
220           bales, and silt fences, as required.
- 221           **(c)**    Drilling fluids containment, collection, cleaning and  
222           disposal equipment, and material.
- 223           **(d)**    Fuel and lubricants.
- 224           **(e)**    Slurry and related mixing equipment.
- 225           **(f)**    All hydrostatic testing equipment and materials.
- 226           **(g)**    Sidebooms, cranes, backhoes, trucks and other  
227           equipment and materials necessary to load and unload pipe  
228           and to support and smoothly transition the pipe strings while  
229           being pulled into the reamed hole.
- 230           **(h)**    Line and grade control shall include, as a minimum, the  
231           capability to report the operating parameters listed in  
232           Subsection 652.01(B)(1)(d).

233   **652.03       Construction Requirements.**

234           **(A)   Equipment list and Drawings.** Within 30 days following the award  
235           of the Contract, the Contractor shall submit to the Engineer for approval a  
236           list of all materials and equipment to be incorporated in the work. The list  
237           shall comprise of all items of the work and for each item shall typically  
238           include identification enabling ready determination of its intended  
239           application; and, manufacturer's product identification including size,  
240           rating, and technical description. Manufacturer's catalog cuts, diagrams,  
241           charts, and other descriptive data shall also be submitted to facilitate the  
242           Engineer's review of the equipment list. If the Engineer requests samples  
243           of materials or equipment proposed for installation, the Contractor shall  
244           furnish such samples without claim for additional compensation.

245                   Upon completion of the work, the Contractor shall submit 'as-built'  
246 plans, reflecting construction departures from the Contract plans.

247                   **(B) Existing Utilities.** Existing utilities shown on the drawings are in  
248 the approximate locations for the convenience of the Contractor. The fact  
249 that any utility is not shown on the drawings shall not relieve the  
250 Contractor of his responsibility. It shall be the Contractor's responsibility to  
251 ascertain the location of all existing utilities, which may be subject to  
252 damage by reason of his operations. The Contractor shall be responsible  
253 for and shall pay for all damages to existing utilities of all types.

254                   **(C) Excavation and Backfill.** Excavation and backfill shall conform to  
255 the applicable requirements of Section 204 - Excavation and Backfill for  
256 Miscellaneous Facilities.

257                   Excavation shall be performed in a manner to prevent damage to  
258 pavements, gutters, sidewalks, and other improvements. The material  
259 from the excavation shall be placed so as to prevent damage and  
260 obstruction to vehicular and pedestrian traffic and interferences with  
261 surface drainage.

262                   **(D) Quality Assurance.**

263                   **(1) Qualifications.** The project superintendent must have at  
264 least three years of experience with the construction method to be  
265 used and must have worked on at least two projects in similar  
266 ground conditions using the same equipment required for this  
267 project. The operator must have at least two years of experience  
268 and must have worked on at least one project using the same  
269 equipment required for this project. Submit documentation of the  
270 work experience attesting to the job experience. The document  
271 must state project name, linear footage drilled, detailed description  
272 of work done, contact person, equipment used, etc. Review and  
273 acceptance of the project superintendent must be obtained from the  
274 Engineer before any work is started.

275                   All welders shall be currently certified in accordance with AWS D1.1  
276 Structural Welding Code — Steel in all types of welding, positions,  
277 material, and equipment that will be used before the  
278 commencement of pipe welding operations. Submit 10 copies of  
279 current and valid certifications. Welding must not be performed by  
280 welders that lack proper certification.

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282                   **(2) Field Tests and Inspections.**

283 (a) The Engineer will witness field tests as specified in  
284 this Section.

285 (b) Perform field tests and provide labor, equipment, and  
286 incidentals required for testing. Be able to produce  
287 evidence, when required, that each item of work has been  
288 constructed properly in accordance with the Contract  
289 Documents.

290 (3) **Casing Testing.** Check each straight run of sleeve for  
291 gross deficiencies by holding a light in the casing; it shall show a  
292 practically full circle of light through the casing when viewed from  
293 the adjoining end of line.

294 (4) **Quality Control**

295 (a) Contractor shall establish and maintain quality control  
296 for operations under this Section to assure compliance with  
297 contract requirements and maintain records of his quality  
298 control for materials, equipment, and construction operations  
299 including but not limited to the following:

300 1. Preparatory Inspection: (To be conducted prior  
301 to commencing work).

302 a. Check sleeve for conformance to  
303 approved certified tests.

304 b. Check sleeve for proper storage and  
305 handling.

306 c. Discuss and review sleeve installation  
307 procedure with Engineer to include placing of  
308 sleeve, joint preparation and application of  
309 each sleeve used.

310 2. Initial Inspection: (To be conducted after a  
311 representative sample of the work is complete).

312 a. Check for proper depth and grade for  
313 sleeve.

314 b. Check method of joining sleeves.

315 c. Check the sleeve for proper alignment.

316 (5) **Project Conditions.**

317 (a) Provide adequate lighting for the nature of the activity  
318 being conducted by workers. Separate both power and  
319 lighting circuits and thoroughly insulate. Lighting voltage not  
320 to exceed 120 VAC protected by a ground fault circuit  
321 interrupter.

322 (6) **Construction.**

323 (a) **Pits.**

324 1. Construction techniques required to provide  
325 access shall be such as to ensure the safety of the  
326 work. Acceptable excavation methods include the  
327 use of interlocked steel sheet piling or open  
328 excavation.

329 2. Final dimensions of access pits selected by  
330 Contractor shall conform as a minimum to the  
331 dimensions required to permit installation of the work.

332 3. The Contractor shall be required to properly  
333 support all excavations and to prevent all movement  
334 of the soil, pavement, utilities or structures outside of  
335 the excavation. All pits shall conform with applicable  
336 Local Safety Standards, OSHA Standards, trenching,  
337 and shoring standards.

338 4. If at any time the method being used by the  
339 Contractor for supporting any material or structure  
340 adjacent to any excavation is not safe, in the opinion  
341 of the Engineer or applicable Federal, State or local  
342 inspection authorities, the Engineer may require and  
343 the Contractor shall provide additional bracing and  
344 support necessary to furnish the added degree of  
345 safety required by the Engineer. The Contractor shall  
346 provide such added bracing and support by such  
347 method acceptable to the Engineer, as he/she may  
348 elect to use, but the taking of such added precautions  
349 shall in no way relieve the Contractor of his/her sole  
350 final responsibility for the safety of lives, work, and  
351 structures. The use of such additional bracing and  
352 support shall be without additional cost to the State.  
353 The absence of an order from the Engineer for the  
354 aforementioned additional bracing shall in no way  
355 relieve the Contractor of his sole and final  
356 responsibility.

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5. All work of excavating shoring and bracing, and sleeve installation shall be so executed such that settlement is minimized, the in-place casing shall have full bearing against earth, and no voids or pockets are left in any portion of the work.

6. Before beginning construction at any location of this project, adequately protect existing structures and other permanent objects. The repair of or compensation for damage to permanent facilities due to negligence or lack of adequate protection on the part of the Contractor will be at no additional cost to the State.

7. Provide surface drainage during the period of construction to protect the work.

8. Conduct operations in such a fashion that trucks and other vehicles do not create a dirt nuisance. Secure the required permits and promptly remove and dispose of any spillage.

9. Size and locate pits and work areas so as to avoid interferences with all forms of traffic.

**(b) Control of Line and Grade.**

1. The Contractor will establish the baseline and benchmarks indicated on the plans. Check these baselines and benchmarks at the beginning of the contract period and report any error or discrepancies to the Engineer.

2. Use these baselines and benchmarks to furnish and maintain all reference lines and grades for the sleeve installation. Use these lines and grades to establish the exact starting location of the sleeve.

3. Submit to the Engineer copies of field notes used to establish all lines and grades; however, the Contractor remains fully responsible for the accuracy of his/her work and the correction of the work, if required.



392                           **4.**     The excavation and run of sleeve installed  
393                           shall be controlled such that the deviation from grade  
394                           is below the design grade.

395                           **(7)     Installation.**

396                           **(a)**    No work shall commence until the design and  
397                           construction procedures have been accepted in writing by  
398                           the Engineer. The Contractor is fully responsible for the  
399                           performance of the equipment and methods selected. The  
400                           Engineer's approval signifies only that the construction  
401                           process is compatible with the overall objectives of the  
402                           project.

403                           **(b)**    Be responsible for monitoring ground movements  
404                           associated with the work and making suitable changes in the  
405                           construction methods to control ground movements and  
406                           prevent damage or detrimental movement to the work and  
407                           adjacent structures and pavements. Permissible tolerances  
408                           with respect to settlement of ground surface and alignment  
409                           of sleeve shall not be exceeded.

410                       **652.04        Method of Measurement.**

411                       The sleeves installed by trenchless installation methods for systems  
412                       conduits will be measured per linear foot.

413                       **652.05        Payment**

414                       **(A)**    The accepted quantities of trenchless systems sleeves will be paid  
415                       for at the contract unit price as indicated in the proposal, and will be paid  
416                       for under "Horizontal Directional Drilling Crossings." The unit price shall  
417                       be full compensation for furnishing all materials, fittings, labor, tools, and  
418                       equipment for doing all the work involved in installing trenchless sleeves,  
419                       complete in place. Included are stakeout, excavation of pits, removing  
420                       sleeve cutouts, backfilling sleeves with grout, trench backfilling, and  
421                       restoration of existing pavement, private property and/or other facilities  
422                       affected by this work.

423                       **(B)**    Damaged pipe shall be repaired or replaced at no additional cost to  
424                       the State.

425                       **(C)**    If the Contractor believes that damage or decreased production are  
426                       due to differing subsurface conditions, the Contractor shall make  
427                       notifications as required for possible price and time adjustments. However,

428 the Contractor shall not discontinue installation operations in order to avoid  
429 disturbing such conditions.

430 Payment will be made under:

| 431 | <b>Pay Item</b>                                    | <b>Pay Unit</b> |
|-----|--|-----------------|
| 432 | HDD (Ductline 1 – Sta. 0+00 to Sta. 0+84.87)       | Linear Foot     |
| 433 | HDD (Ductline 1 – Sta. 0+84.87 to Sta. 5+46.77)    | Linear Foot     |
| 434 | HDD (Ductline 1 – Sta. 5+46.77 to Sta. 10+73.49)   | Linear Foot     |
| 435 | HDD (Ductline 2 – Sta. 0+00 to Sta. 2+93.93)       | Linear Foot     |
| 436 | HDD (Ductline 3 – Sta. 0+00 to Sta. 1+97.48)       | Linear Foot     |
| 437 | HDD (Ductline 4 – Station 0+00 to Station 7+39.96) | Linear Foot”    |

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440

**END OF SECTION 652**

441

1 Make this Section a part of the Standard Specifications:

2  
3 **“SECTION 681 – CCTV POLE AND LOWERING SYSTEM**

4  
5 **681.01 Description.** This project involves the installation of closed circuit  
6 television (CCTV) cameras with lowering systems on the H-1 and H-201  
7 freeways on the Island of Oahu.

8  
9 In general, this installation consists of the following components:

- 10  
11 (A) CCTV poles and foundations,  
12  
13 (B) Camera lowering devices on the top of the poles,  
14  
15 (C) CCTV cabinet on the ground, and equipment pad,  
16  
17 (D) CCTV camera attached to camera lowering device, power supply in  
18 the CCTV cabinet,  
19  
20 (E) Installation of encased conduits from the pole to the CCTV cabinet,  
21 (F) Electrical power supply and distribution, and  
22  
23 (G) Testing and checkout of equipment.  
24

25 Contractor shall be responsible for physically installing the equipment on  
26 the pole, or in the CCTV cabinet, connecting power and communications cables,  
27 and the testing the equipment and communications network and providing a fully  
28 operational CCTV system.  
29

30 **Compliance with Other Specifications and Standards.** All electrical  
31 equipment must conform to the standards *NEMA Standards Publication TS 1-*  
32 *1989*), the Underwriters' Laboratories, Inc. UL, and the EIA, wherever applicable.  
33 All materials and workmanship must conform to the requirements of the MUTCD;  
34 NEC; NESC; *Standard Specifications For Structural Supports For Highway*  
35 *Signs, Luminaires And Traffic Signals*, a publication of AASHTO, and any State  
36 of Hawaii legislation, codes and ordinances which may apply. Wherever  
37 reference is made to any such specification, manual, code, or standard, the  
38 reference is construed to mean the version, as revised, that is in effect on the  
39 date of advertising for bids for this project.  
40

41 **Definition of Terms.**

- 42  
43 (A) **Abbreviations.** Wherever the following abbreviations are used  
44 in these Special Provisions or on the Plans, they shall have the following

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meaning:

SBW System Bond Wire

FM Factory Mutual

IEEE Institute of Electrical and Electronics Engineers

City City and County of Honolulu

**(B) Provide.** Where used in these Special Provisions, unless otherwise indicated, this shall mean "furnish and install, complete, including any required electrical connection and testing."

**681.02 Materials.** The design of traffic signal standards and appurtenances shall conform to AASHTO publication *Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals, 2009* and all applicable interims.

**(A) CCTV Camera.** See Section 683 - CCTV Camera.

**(B) CCTV Pole.** The 50-foot CCTV pole's tubular member cross-section shall have a constant linear taper as indicated on the contract drawings. It shall conform to the requirements of ASTM A572 Grade 65. The CCTV pole shall be equipped with base plate, hand holes, cable entry holes and pole cap as shown in the contract documents.

**(1) Welding.** All welding shall be performed by qualified welding operators and shall conform to the requirements of Sections 1 through 8 of the American Welding Society (AWS) D1.1, Structural Welding Code. Longitudinal seam welds shall be performed with automatic processes, be free of cracks and excessive undercut, and be visually inspected. All circumferential butt-welded pole and arm splices shall be ultrasonically and radiographically inspected. If, in the evaluation of the Engineer, any welds are of questionable quality, all such welds shall be tested radiographically as directed by the Engineer.

**(2) Handholes.** Handholes shall have steel reinforcing frame securely welded into the shaft, complete with gasketed aluminum covers and captive stainless steel attachment screws. Finish handholes smoothly and neatly without rough edges and with a reinforcing frame and cover designed to maintain the required pole strength. Handhole covers shall be connected to the

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pole with rustproof chain that connects the inside of the cover to an attachment point inside the pole, just below the handhole. The chain shall be long enough to permit the cover to dangle 3 inches below the handhole opening.

**(3) Weatherhead.** Weatherhead shall be galvanized 2 inch weather head compatible with the threaded nipple and coupling on the pole.

**(4) Galvanizing.** The entire pole assembly shall be galvanized inside and outside in accordance with ASTM A123. No double dipping will be allowed. All miscellaneous hardware shall be galvanized per ASTM A153. Prior to galvanizing, all weld flux shall be mechanically removed and the surface shall be prepared by immersion in a series of baths: caustic; sulfuric acid; water; and zinc ammonium chloride flux. After drying, the pole shall be galvanized by dipping in molten zinc, with the pole totally immersed. Flux ash shall be skimmed from the bath prior to immersion and again prior to extraction from the bath. Repair damage to galvanized coatings using ASTM A780 zinc rich paint for galvanizing damage including but not limited to handling, transportation, cutting, welding, or bolting. Do not heat surface to which repair paint has been applied.

**(5) Identification Tag.** The pole shall have an identification tag permanently attached. The tag shall state the length of the pole.

**(6) Grounding.** The Contractor shall bond the bottom of the pole to one or more ground rods, using exothermic welding at each end of the ground wire (unless the pole has a suitable grounding lug). The Contractor shall use a device that measures resistance to ground using the three-point fall-of-potential method to ensure that the resistance from the sign's ground bar to ground does not exceed 10 ohms. The Contractor shall add more ground rods if necessary to achieve this requirement.

**(7) Anchor Bolt Assembly.** Anchor bolt material shall conform to the requirements of ASTM F1554 Grade 55. The bolts shall be galvanized in accordance with ASTM A153. Anchor plates shall match the hole pattern for each type standard and be clearly marked. The strength of the nuts shall equal or exceed the proof load of the bolts. Anchor bolt assembly shall be delivered partly assembled. The anchor bolts or rods shall come with all nuts, flat

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washers and split washers on each rod with templates. The six anchors bolts shall then be matched with two plates and delivered as a bundled unit.

**(8) Material Certifications.** All materials shall comply with the American Society for Testing and Materials (ASTM) specifications. The supplier shall furnish two copies of mill certificates reflecting the physical and chemical properties of the base metal of the pole, mast arm shafts, base plates and anchor bolts. Two certified copies of the galvanizing test report shall be furnished.

**(9) Certification and Mill Test Reports.** Certification and mill test reports shall be submitted with the following information:

- (a)** List of component parts including the following:
  - 1. Description of each part.
  - 2. Material manufacturing location (including ASTM number where applicable).
  - 3. Certificate of compliance.
- (b)** Shop drawings, accompanied by complete and detailed engineering computations that justify selection of dimensions and material. Hawaii Licensed Professional Engineer (Structural) shall certify computations.
- (c)** Copy of mill test report for structural members (posts), including physical and chemical descriptions of material incorporated.

**(10) Construction.** Perform work in accordance with requirements of the contract documents and the following: General Order Nos. 6 and 10 of the 82 Hawaii Public Utilities Commission; ASTM; ANSI; local utility company rules; and 83 local ordinances that may apply.

**(11) Equipment List and Drawings.** Submit within seven days following contract award, 10 copies of materials and equipment list. Include name of manufacturer, size and identifying number of each item, detailed scale drawings, wiring diagrams of special equipment, and proposed deviations from the contract. If required, submit samples of materials. Upon completion and acceptance of

177 work, submit construction as-built drawings showing detailed  
178 construction changes. See section 648 – Field Posted Drawings.

179  
180 **(12) Painting.** Paint CCTV pole and exposed anchor bolt assembly  
181 per Section 708 – Paints. Color shall be “Aluminum” or “Silver” to  
182 match light poles. Submit color sample for review.

183  
184 **(C) Camera Lowering System.** The Camera Lowering System  
185 (CLS) shall include the following components:

- 186 • Contact unit
- 187
- 188 • Self-aligning divided support arm, two per pole
- 189
- 190 • Adapter for attachment to pole
- 191
- 192 • CCTV Control Cable junction box at the top of the pole

193  
194 **(1) General.** The CLS shall be designed to support and  
195 lower a standard closed circuit television camera, lens, housing,  
196 pan-tilt-zoom (PTZ) mechanism, cabling, connectors, and other  
197 supporting components without damage or causing degradation of  
198 camera operations. The CLS shall consist of a contact unit, self-  
199 aligning divided support arm, an adapter for attachment to a pole,  
200 and a camera connection box. The divided support arm and  
201 receiver brackets shall be designed to self-align the contact unit  
202 during installation and ensure the contact unit cannot twist under  
203 high wind conditions. The CLS shall withstand wind forces of 100  
204 mph with a 30 percent gust factor using a 1.65 safety factor. The  
205 CLS shall effectively operate within a temperature range of –40°F  
206 to 191°F. The CLS manufacturer shall furnish independent  
207 laboratory testing documents certifying adherence to the stated  
208 wind force criteria utilizing, as a minimum effective projected area  
209 EPA, the actual EPA or an EPA greater than that of the camera  
210 system to be attached. The CLS to be furnished shall be the  
211 product of manufacturers with a minimum of 2 years experience in  
212 the successful manufacturing of such systems. The lowering  
213 device provider shall be able to identify a minimum of 3 previous  
214 projects where the purposed system has been installed  
215 successfully.

216  
217 The CLS manufacturer shall furnish a factory representative  
218 to assist the installation Contractor with the assembly and testing of  
219 the first lowering system onto the pole. Arrange for the Engineer to  
220 witness this installation and testing. The Contractor shall ensure the

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CLS vendor coordinates with the camera pole vendor to ensure proper integration of the CLS and camera pole. At the time of installation of the CLS, the manufacturer shall furnish the Department documentation certifying that the Contractor has been instructed on the installation, operation and safety features of the CLS.

All pulleys for the CLS and portable lowering tool shall have sealed, self lubricated bearings, oil tight bronze bearing, or sintered bronze bushings. The lowering cable shall be a minimum 1/8 in. diameter stainless steel aircraft cable with a minimum breaking strength of 1700 pounds.

All electrical and video connections between the fixed and lowerable portion of the contact block shall be protected from exposure to the weather by a waterproof seal to prevent degradation of the electrical contacts. The electrical connections between the fixed and movable lowering device components shall be designed to conduct 100BaseT Ethernet communications as well as the power requirements for operation of dome environmental controls.

The interface and locking components shall be made of stainless steel and/or aluminum. All external components of the CLS shall be made of corrosion resistant materials, powder coated, galvanized, or otherwise protected from the environment by industry-accepted coatings to withstand exposure to a corrosive environment. A weep hole with screen shall be included on the underside of the weight box. A composite cable assembly shall be included for each CLS.

**(2) Suspension Contact Unit and Contact Block.**

The suspension contact unit shall have a load capacity 600 lbs. with a 4 to 1 safety factor. There shall be a locking mechanism between the fixed and moveable components of the lowering device. The movable assembly shall have a minimum of 2 latches. This latching mechanism shall securely hold the device and its mounted equipment. The latching mechanism shall operate by alternately raising and lowering the assembly using the winch and lowering cable. When latched, all weight shall be removed from the lowering cable. The fixed unit shall have a heavy duty cast tracking guide and means to allow latching in the same position each time. The contact unit housing shall be weatherproof with a gasket provided to seal the interior from dust and moisture. The entire



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unit shall have a minimum temperature rating of -40 degrees F to +190 degrees F (-40C to 90C).

The prefabricated components of the lift unit support system shall be designed to preclude the lifting cable from contacting the power or video cabling. The lowering device manufacturer shall provide a conduit mount adapter for housing the lowering cable. This adapter shall have an interface to allow the connection of a contractor provided 1.25 inch PVC conduit and be located just below the cable stop block at the back of the lowering device. The Contractor shall supply internal conduit in the pole as directed by the Lowering Device provider. The only cable permitted to move within the pole or lowering device during lowering or raising shall be the stainless steel lowering cable. All other cables must remain stable and secure during lowering and raising operations.

The Lowering Device must be specifically equipped with electrical contacts connectors designed for simultaneous Analog (Coax) and video transmission along with PTZ control. The Contact Connectors shall be designed for extreme environmental outdoor use.

The female and male socket contact halves of the connector block shall be made of a UL94, V-0 rated thermosetting synthetic rubber. The female barrel contacts and the male pin contacts shall be permanently and integrally encased in this rubber material to ensure optimum protection from moisture and the environment.

All current carrying male pin and female socket/barrel contacts shall be Gold-plated per ASTM B-488 over Nickel plated CA 360 per QQ-N-290m.

The configuration contact connector shall include:

Seven (7) specifically designed Male contacts sized a minimum of 0.125 inches while the female contacts shall be at least 0.125 inches I.D. at the contact area. All seven (7) contacts shall be soldered to #18/1 UL lead wire and affixed with numbered tags. Two of these wires shall be equipped with a factory installed BNC connector for video transmission/connection from the CCTV.

Thirteen (13) specifically designed Male contacts sized a minimum of 0.09 inches while the female contacts shall be at

309 least 0.09 inches I.D. at the contact area. Eight of the  
310 thirteen contacts shall be soldered to CAT5e Wire end  
311 terminated with an RJ45-Male connector. Five of the  
312 thirteen contacts shall be soldered to #18/1 UL lead wire and  
313 affixed with numbered tags, which may be used for  
314 additional camera requirements including but not limited to  
315 power, control, alarms or grounds.  
316

317 All current carrying male pin and female socket/barrel contacts shall  
318 be Gold-plated per ASTM B-488 over Nickel plated CA 360 per  
319 QQ-N-290m. Each individual female barrel contact shall have a  
320 Nickel plated CA 360 sleeve which prevents foreign matter from  
321 entering the contact area as well as preclude the possibility of the  
322 leaves of the female contact from opening beyond allowable limits  
323 and ensure a snug fit around the respective male pins. There shall  
324 be at least one contact that is positioned in a manner which will  
325 allow it to make first and break last providing optimum grounding  
326 performance.  
327

328 All soldering shall be per IPC J STD-001E. Each individual  
329 contact shall be rated for up to 600v and 7A but de-rated according  
330 to the wire used in the application. For optimum weatherproofing,  
331 each male shall be self-wiping with a shoulder at the base of each  
332 male contact so that it will recess into the female block, thereby  
333 giving a rain-tight seal to each individual contact when mated.  
334 Further, the wire leads from both the male and female rubber  
335 contact blocks shall be permanently and integrally molded in the  
336 synthetic rubber body. The facility manufacturing the electrical  
337 contact connector must comply with Mil Spec Q-9858 and Mil Spec  
338 I-45208.  
339

340 **(3) Lowering Tool.** The CLS shall be operated by use of a  
341 portable lowering tool. The tool shall consist of a lightweight metal  
342 frame and winch assembly with cable as described herein, a quick  
343 release cable connector, an adjustable safety clutch and a variable  
344 speed industrial duty electric drill motor. When attached to the  
345 assembly, the tool shall support itself and the load assuring  
346 lowering operations and provide a means to prevent freewheeling  
347 when loaded. The lowering tool shall be delivered to the  
348 Department upon project completion. The lowering tool shall have  
349 a reduction gear to reduce the manual effort required to operate the  
350 lifting handle to raise and lower a capacity load. The lowering tool  
351 shall be provided with an adapter for operating the lowering device  
352 by a portable drill using a clutch mechanism. The lowering tool

353 shall be equipped with a positive locking mechanism to secure the  
354 cable reel during raising and lowering operations. The  
355 manufacturer shall provide a variable speed, heavy-duty reversible  
356 drill motor and a minimum of two lowering tools. The lowering tool  
357 shall be made of durable and corrosion resistant materials, powder  
358 coated, galvanized, or otherwise protected from the environment by  
359 industry-accepted coating to withstand exposure to a corrosive  
360 environment.

361  
362 **(D) Cable and Hardware.**

363  
364 **(1) CCTV Cable.** The Contractor shall provide a CCTV  
365 control cable between the cabinet and the contact unit on the  
366 lowering device.

367  
368 CCTV control cables shall be composite cables  
369 consisting of one outdoor rated cables as recommended by  
370 the CCTV manufacturer. On the cabinet end, the video  
371 cable shall be terminated compatible with the interface on  
372 the CCTV camera, and the power shall be terminated and  
373 connected to the camera power supply. On the camera end,  
374 all wires shall be terminated on an MS style connector with  
375 gold pins. The Contractor shall coordinate with the camera  
376 manufacturer to ensure proper connectivity.

377  
378 Applicable Specifications: UL/NEC/CEC CATV or CM.  
379 Flame Resistance: UL 1581 Vertical Tray.

380  
381 Connectors shall be installed as necessary, and shall  
382 match the connector interface requirements for the  
383 equipment being connected. Adapters are not acceptable.

384  
385 **(2) CCTV Camera.** See Section 683 – CCTV Camera.

386  
387 **(3) Cable Attachment Hardware.** Cable attachment  
388 hardware and strandvices shall be hot-dipped galvanized, shall be  
389 new, and shall be approved by the Engineer.

390  
391 **(E) Air Terminal.** Furnish a solid aluminum rod,  $\frac{3}{4}$  inch in  
392 diameter. The length of the rod shall be such that it projects 5 feet above  
393 the top of the lowering device. Attachment hardware shall not interfere  
394 with the lowering device cables within the pole.  
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**(F) Cabinets.** Furnish a cabinet meeting the requirements for a Model 334 cabinet in the latest edition of Traffic Signal Control Equipment Specifications published by Caltrans, except as specified below:

- (1) Cabinets shall be fabricated from 0.125-inch-thick anodized aluminum.
- (2) Power supply surge protector shall be furnished.
- (3) Front and back fluorescent lights shall be activated upon opening either door.
- (4) Convenience ground-fault circuit interrupter (GFCI) receptacles shall be provided.
- (5) Door locks shall be of solid brass rim Best Lock Series 516RL3XA7559-606 and include two keys.
- (6) Labeling shall be by silk screening only.
- (7) One each 24-inch by 36-inch cabinet print shall be attached in weatherproof plastic jacket to front and back cabinet doors.

The manufacturer must be on the list of the Department-Accepted manufacturers of controller cabinets and racks.

The following components are required:

- (1) **Sunshields.** On southward facing side and the top.
- (2) **Housing.** 1A or 1B, Mounting Cage 1, and Service Panel # 1.
- (3) **Rack-mounted,** slide out shelf with storage tray.
- (4) **Mounting panel.** For terminal blocks, surge protectors, and other small items on a side wall.
- (5) **Terminal blocks.** For all conductors entering the cabinet. The blocks shall be the barrier type with nickel-plated brass screw terminals and solid backs. Each terminal shall be clearly and permanently labeled on a contiguous surface using silk screening or other approved method. Terminal blocks for conductors carrying more than 60 volts must be covered by a clear acrylic

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shield.

**(6) Two interior fluorescent lights.** One above each door switch. Each door shall have a door switch. When either door is opened, both lights shall light.

**(7) Door switch.** If this is the same switch used to control the lights, then there must be separate, electrically isolated contacts for detecting an open door.

**(8) Duplex ground fault interrupt outlet.** For use by technicians.

**(9) Thermostatically controlled fan.** The fan shall move 100 CFM through vents at the top of the cabinet. The air intake shall be through louvers in the door, and the air shall pass through a replaceable filter as it enters the cabinet.

**(10) Anchor Bolts, Nuts, and Washers.** Shall be as specified in the contract documents.

**(11) Electrical Distribution System.** Provide breaker panels for all cabinets. The circuit breaker panel shall be 120/240 volt, split phase, equipped with a solid neutral. The panel shall be UL listed.

Equip the panel with 30 amp main breakers and two 15 amp branch circuit breakers. Connect one branch circuit to the second stage of the surge suppressor and to at least eight outlets for the equipment. A second branch circuit shall power auxiliary devices in the cabinet, such as the fan, light, and GFCI outlet.

All cabinets shall include a grounding system. Connection to ground must be bare, solid AWG 1 #6 copper wire or equivalent bonding strap.

Provide a lightning arrestor designed to protect 120/240 VAC split phase breaker panels. The protector shall use metal oxide varistors as the protective elements. The response time shall be under five nanoseconds and the maximum surge current shall be at least 40,000 amps. The clamping voltage shall not exceed 400 volts. The device shall protect line-to-line and line-to-neutral.

484 **(12) Miscellaneous.** All doors shall have cabinet identification  
485 labels displaying the cabinet identifier. The Engineer will provide  
486 a list of the identifiers for each location, as well as the format for the  
487 labels.

488  
489 All seams shall be continuously welded and ground smooth.

490  
491 All fasteners must be stainless steel.

492  
493 All cabinets shall have an unfinished anodized aluminum  
494 finish, free from blemishes.

495  
496 **(G) Drilled Shaft and Pile Cap Foundation.**

497  
498 The drilled shaft and pile cap installation shall be in accordance  
499 with Section 511 - Drilled Shafts.

500  
501 **(H) Ethernet Switch.** See Section 682 - Ethernet Switch.

502  
503 **(I) Conduit.** Provide conduit from CCTV cabinet to CCTV pole.  
504 Lay polyvinyl chloride (PVC) conduits carefully in trenches prepared to  
505 receive conduits. Concrete encase PVC Schedule 40 conduits.

506  
507 **(J) Tracer Cable.** Tracer cable shall conform to Section 623 –  
508 Traffic Signal System. Tracer cable shall be No. 14 AWG bare, stranded  
509 copper wire.

510 **(K) CCTV Camera.** See Section 683 – CCTV Camera.

511  
512 **681.03 Construction Requirements**

513  
514 **(A) Submittals**

515  
516 **(1) Submittal Data.** Prior to the purchase or  
517 fabrication of any equipment or material for use on this project,  
518 submit for review by the Engineer catalog cut sheets and  
519 specifications for all standard, off-the-shelf items, and shop  
520 drawings for all custom items. These documents shall contain  
521 sufficient technical data for the Engineer to evaluate the system  
522 proposed. The quality, function, and capability of each deliverable  
523 item shall be described. Documents shall be originals or copies  
524 equal to originals. Shop drawings for each fabricated item shall also  
525 be submitted. These drawings shall contain all information required  
526 for complete fabrication in accordance with the Contract  
527 Documents, such as: materials, welds, finish, etc. Shop drawings

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shall be on sheets 24 inches in height and 36 inches long.

Furnish four copies of 8 ½-inch x 11-inch submittals, and four copies of shop drawings. One of these will be returned to the Contractor with appropriate notations within 30 calendar days.

The purpose of the submittal data is to show specifically and in detail how the Contractor intends to satisfy the requirements of the Contract Documents. If preprinted literature is utilized to satisfy some or all of these requirements, no statements on the literature should conflict with the Contract Documents. Cross off and initial any such statements and attach an appropriate statement clearly indicating how the requirements of the Contract Documents will be fulfilled. Clearly label each item of submittal data with the bid item number or other description of the item(s) to which it applies.

Each submittal must contain sufficient information and details to permit the Engineer to fully evaluate the particular component. Submittals which are, in the judgment of the Engineer, insufficient to permit proper evaluation will not be reviewed. Do not deviate from submittals marked "Review Completed" or "Correct as Noted" without the prior written consent of the Engineer. The Department will not be liable for any material purchased, labor performed, or delay to the work prior to the approval of the equipment.

Because of the nature of this work, unusually detailed submittal data is required prior to approval of most of the items in order to avoid nonconformance, which does not become apparent until it is too late to correct without serious consequences. In addition, because certain groups of items as set forth below are closely interrelated, it is required that the submittals be made in groups. If more than one submittal is required, complete information from the entire group must be resubmitted. Plan the submittal data effort accordingly.

In order to expedite the submittal data process and equipment review, take care to address all of the requirements of the Contract Documents in the submittal data, leaving nothing to assumption, and clearly addressing the functional and technical interrelationships among the various items. In general, detailed wiring diagrams are not required as part of the submittal data, nor will they be reviewed unless specifically required by these Project Special Provisions or by the Engineer's request.

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Plan for any given package of submittal data to be in the possession of the Engineer for 30 calendar days. The Engineer will date stamp the letters of transmittal for all such data and return a copy of the stamped letters to the Contractor with the submittal data for his records. Following review of the submittal data, the Engineer will return to the Contractor one copy of the submittal marked "No Exceptions Taken", "Correct as Noted", "Correct and Resubmit", or "Rejected". Proceed with any items marked "Review Completed" and items marked "Correct as Noted". Do not proceed with any items which are marked "Rejected" or "Correct and Resubmit", but proceed immediately to correct said items and resubmit them for review. No time extensions will be granted to the Contractor as a result of the need to resubmit items for review.

Develop a submittal data transmittal form and submit same to the Engineer for approval as to format. Assign a submittal number to each submittal package, to be transmitted under the cover of the approved form. The numbering system must be logical and ascending. Specifically list on the transmittal sheet each item or element included and the bid item and Special Provision section to which that element belongs. (An element is one part of several parts of information related to the same bid item.) When drawings are submitted, list each separately. Completely fill out all portions of the transmittal sheet except those reserved for use by the Engineer. The transmittal sheet will be used by the Engineer to indicate the action taken on the submittal package, and a copy of the transmittal sheet showing these actions will be returned to the Contractor. Transmit only clearly related items under the same transmittal sheet.

Approval by the Engineer of a catalog cut sheet and/or shop drawing does not relieve the Contractor of any of his responsibility under the contract for the successful completion of the work in conformity with the requirements of the Contract Documents in providing a fully integrated operational system.

**(2) Equipment Manuals** Two manuals for each individual component of the system. The manuals supplied for the off-the-shelf items shall be those supplied by the equipment manufacturer.

**(B) Documentation.** Provide two types of documentation for this project: submittal data and field-posted documentation. All documentation, except as specifically approved by the Engineer, shall be no smaller than 8 ½-inches x 11- inches and no larger than 24-inches x 36-inches.



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Electronic documentation shall be provided on a CD-ROM.

All 8 1/2 x 11-inch documentation, except standard bound manuals, shall be bound in logical groupings in 3-ring loose-leaf binders or plastic slide-ring, loose-leaf binders. Such binders may also include 11-inch x 17-inch documentation, if "Z-folded". Each bound grouping of documentation shall be permanently and appropriately labeled.

Electronic documentation shall conform to the following file formats: tables shall be provided in current versions of Microsoft Excel or Microsoft Word file format; manuals, reports and other narrative text documents shall be provided in Microsoft Word file format; and drawings shall be provided as CAD files in data exchange (.DXF) file format compatible with the most recent version of Microstation.

All literature from manufacturers shall be original documents provided by the manufacturers or copies equal to originals. All documentation will be paid for under the item Field-Posted Drawings, as described in Section 648 of the Standard Specifications.

**(1) Field-Posted Drawings.** Provide the field-posted drawings in accordance with Section 648 – Field-Posted Drawings.

**(C) Training.** Provide one training course covering operation and maintenance of the CLS. Contractor’s representative, who is familiar with the installation, operation and maintenance of the CLS shall conduct the training course.

At least 30 days prior to the training course, submit an outline of the course, draft manuals and handouts, and resume of the instructor. The Engineer shall review and request modifications of the material.

Up to eight (8) individuals designated by the Department will be trained. Each individual shall control the lowering of the camera, removal of the camera from the lowering device, reinstallation of the camera on the lowering device, raising the camera, and testing the camera for correct operation. Each individual shall receive a three-ring binder with complete documentation for installing, operating and maintaining the CLS. The documentation shall provided by manufacturer of the CLS, supplemented by material based upon the Contractor’s experience with installation of the CLSs.

Take video the training course, using acceptable video format, and deliver the files to the Department at the conclusion of the training on a

660 USB thumb drive or equivalent.

661

662 **(D) Installation.** Connect equipment to power, communication,  
663 and ground cables, and test the completed installation and report any  
664 problems to the Engineer.

665

666 **(1) Ethernet Switch.** See Section 682 – Ethernet Switch.

667

668 **(2) CCTV Camera.** See Section 683 – CCTV Camera.

669

670 **(3) Camera Pole.** Connect the bottom of the pole to one or  
671 more ground rods using a bare, solid AWG # 6 copper wire. Use  
672 exothermic welding for all ground wire connections, except the  
673 connection to the pole, which shall use the pole's grounding lug.  
674 Use a device that measures resistance to ground using the three-  
675 point fall-of-potential method to ensure that the resistance from the  
676 air terminal to ground does not exceed 8 ohms. Add more ground  
677 rods if necessary to achieve this requirement. Perform all work  
678 related to the installation of the air terminal in accordance with NFPA  
679 780.

680

681 Flatten the bottom 6 inches of the air terminal so that it  
682 makes good electrical contact when bolted to the pole. If the  
683 lowering device includes a junction box above the camera lowering  
684 device, bend the air terminal so that comes no closer than 2 inches  
685 to the box. Taper the top of the rod to a point. Bolt the rod to the  
686 pole 90 degrees from the arm supporting the camera. Use at least  
687 two stainless steel bolts passing through the rod and pole wall.  
688 Use a sealant on the inside of the pole to prevent the entry of  
689 moisture, but do not use any nonconductive material between the  
690 rod and pole. Perform all work related to the installation of the air  
691 terminal in accordance with NFPA 78.

692

693 **(4) Camera Lowering System.** Refer to the camera  
694 orientation details that depict the approximate mounting positions to  
695 ensure the lowering system has an adequate field of view.

696

697 Attach the CLS to the top of the pole per the manufacturer's  
698 installation details. Route the CLS lowering cable inside the pole.  
699 Connect the composite power/data cable from the CLS connector  
700 to the 'J'-hook inside the pole top, using a cable grip. Tension the  
701 CLS composite cable against the inside of the pole to prevent it  
702 from interfering with the CLS lowering cable. Route the CLS  
703 composite cable from the pole base to the CCTV cabinet. Plug a  
704 test cable into the CLS connector, and test camera power and data  
705 connectivity between the CCTV cabinet and the CLS connector.

706  
707 **(5) Cabinets.** Prior to bolting the cabinet to the foundation,  
708 apply silicone sealant to the mating surface of the cabinet to  
709 prevent water from seeping between the cabinet and foundation.  
710 The silicone sealant shall be guaranteed by the manufacturer to  
711 last the lifetime of the cabinet without peeling or cracking. Ensure  
712 that the cabinet is plumb, using shims if necessary, and ensure that  
713 it is properly seated on the foundation.

714  
715 **(E) Testing.** Testing of all equipment, cables and materials  
716 purchased by the Contractor under this contract shall be the responsibility  
717 of the Contractor and shall be conducted in the presence of the Engineer.  
718 Document all testing, and provide the results to the Engineer in hard copy  
719 and electronic format. The Engineer reserves the right to perform any  
720 inspections deemed necessary to assure that the equipment, cables and  
721 materials conform to the requirements specified herein.

722  
723 **(1) Camera Lowering System Testing.** Prior to attaching the CLS  
724 to the pole, the composite cabling and CLS connector shall be  
725 tested by plugging a test cable into the CCTV camera connector.  
726 Power shall be checked with a voltmeter. Ethernet connectivity will  
727 be tested by plugging the RJ-45 connectors on the test cable and  
728 the composite cable into two laptops, and transferring data between  
729 the two laptops using a "ping" test, file transfer, or other method of  
730 communicating between the two laptops.

731  
732 After the CLS is attached to the pole, and the pole erected,  
733 the tests in the paragraph above shall be repeated.

734  
735 Once installed, the Contractor shall exercise each CLS once  
736 per month and perform maintenance per manufacturer's  
737 instructions until the project is complete.

738  
739 **(1) Ethernet Switch Testing.** See Section 682 –  
740 Ethernet Switch.

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**(2) CCTV Camera Testing.** See Section 683 – CCTV Camera.

**(3) Cabinet Testing.** The Contractor shall develop a proposed test procedure for the cabinets and submit it to the Engineer for approval. It shall include visual inspection, testing of lights, fan, heater, air conditioner, power outlets and alarm sensors. It shall also include a test in which each branch circuit is shorted to the cabinet wall to confirm that the breaker trips. The Contractor shall revise the proposed test procedure until it is acceptable to the Engineer.

The Contractor shall provide all equipment and personnel needed to safely conduct the tests, arrange for the Engineer’s representative to witness the tests, and give the Engineer a report documenting the result of every visual inspection and test. The Contractor shall include a summary indicating whether the cabinet passed every test. The cabinet must pass every test to be accepted.

If the cabinet fails, the Contractor shall correct the problems and arrange for a new test. If the test of the breakers reveals breakers that do not trip, the resistance to ground is too high; lower the resistance by adding more ground rods and improving the connections in the ground system.

**(F) Warranty.** See Subsection 108.17 – Guarantee of Work.

**681.04 Measurement.** Measurement for payment of equipment and materials in this contract will be made as follows.

**(A) CCTV Pole** of the height specified, will be measured by each pole furnished and installed. The Contractor shall provide all necessary mounting hardware and communication, power, air terminal and grounding cable and conduit installed in the pole and painting of pole.

**(B) Camera Lowering System** will be measured by each unit installed on pole (2 per new pole and 1 on the existing pole described in Section 681.03(G) and 1 spare unit) to provide a fully operational system installed and tested with an installed CCTV camera, which will include all necessary mounting hardware, 2 lowering winches (total), cabling, CCTV cables, and monthly CLS maintenance.

**(C) CLS Training** will be paid as a lump sum and shall include

785 preparing and duplicating all documentation and materials, instructor, and  
786 taking video of the training. Measurement for payment will not apply.

787  
788 **(D) CCTV Cabinet** will be measured by each cabinet fully installed and  
789 wired for internal power and communications, including necessary circuit  
790 breakers and surge protectors.

791  
792 **(E) Cabinet Foundation** will be measured and paid for in units of  
793 each. This price shall include concrete, reinforcing steel, anchor bolts,  
794 bolt circle templates, stub poles, grounding equipment, conduits and any  
795 miscellaneous hardware necessary for mounting a cabinet, excavating,  
796 backfilling, compacting, disposing of surplus and unsuitable material, and  
797 restoring existing areas.

798  
799 **(F) Conduit Concrete Encased**, of the type and size specified, will be  
800 measured as a lump sum, which will include all trenching and backfill, and  
801 landscaping restoration, conduit couplers, and elbows, and end bushings,  
802 and concrete between the CCTV cabinet and CCTV pole and will include  
803 all conduit couplers, and elbows, and end bushings.

804  
805 **(G) Testing**, the Engineer will not pay for testing separately. The  
806 Engineer shall consider the cost for all of the accepted testing as included  
807 in the contract price of the various contract items.

808  
809 Measurement for pile cap and drilled shafts will be in accordance  
810 and under Section 511 – Drilled Shafts.

811  
812 Measurement for electrical and communication systems including VMS  
813 cabinets, VMS cabinet foundation, fiber splice cabinets, fiber splice  
814 cabinet foundation, conduit and innerduct will be in accordance and under  
815 Section 621 – Electric and Communication Systems.

816  
817 Measurement for fiber optic cable will be in accordance and under  
818 Section 647 – Fiber Optic Cable.

819  
820 Measurement for CCTV camera will be in accordance and under  
821 Section 683 – CCTV Camera.

822  
823 Measurement for Ethernet Switch will be in accordance and under  
824 Section 682 – Ethernet Switch.

825  
826 Measurement for, Fiber Optic Pigtail, Fiber optic Jumper, Fiber  
827 Optic Splice, Rack Mounted Interconnect Center, Additional Testing,  
828 Splicing and Equipment will be in accordance and under Section 687 –

829 Fiber Optic Communications System.

830

831 **681.05 Payment.** The Engineer will pay for the accepted pay items  
832 listed below at the contract price per pay unit. Payment will be full compensation  
833 for work prescribed in this section and the contract documents.

834

835 The Engineer will pay for the following pay items when included in the  
836 proposal schedule:

837

| Pay Item | Pay Unit |
|----------|----------|
|----------|----------|

838

|                    |      |
|--------------------|------|
| CCTV Pole, 50-Foot | Each |
|--------------------|------|

841

|                        |      |
|------------------------|------|
| Camera Lowering System | Each |
|------------------------|------|

843

|              |          |
|--------------|----------|
| CLS Training | Lump Sum |
|--------------|----------|

845

|              |      |
|--------------|------|
| CCTV Cabinet | Each |
|--------------|------|

847

|                    |      |
|--------------------|------|
| Cabinet Foundation | Each |
|--------------------|------|

849

|  |          |
|--|----------|
| Two 2-Inch Conduit, SCH 40 PVC, Concrete Encased | Lump Sum |
|--|----------|

851

852 The Engineer will pay for drilled shafts and pile caps in accordance and  
853 under Section 511 – Drilled Shafts.

854

855 The Engineer will pay for electrical and communication systems  
856 modifications and VMS cabinets, VMS cabinet foundation, fiber splice cabinets,  
857 fiber splice cabinet foundation, conduit and innerduct in accordance and under  
858 Section 621 – Electric and Communication Systems.

859

860 The Engineer will pay for fiber optic cable in accordance and under  
861 Section 647 – Fiber Optic Cable.

862

863 The Engineer will pay for fiber optic pigtail, fiber optic jumper, fiber optic  
864 splice, rack mounted interconnect center, modifications in existing cabinets,  
865 additional testing, splicing and equipment in accordance and under Section 687 –  
866 Fiber Optic Communications System.

867

868 The Engineer will pay for Ethernet Switch in accordance and under  
869 Section 682 – Ethernet Switch.

870

871 The Engineer will pay for CCTV Camera in accordance and under Section  
872 683 – CCTV Camera.”

873  
874  
875

**END OF SECTION 681**

1 Make the following Section a part of the Standard Specifications:  
2

3 **“SECTION 682 – ETHERNET SWITCH**  
4

5 **682.01 Description.** This Section describes installation of Ethernet Switches  
6 (ES), accessories and power supplies configuring and installing the switches in  
7 as indicated on the Contract documents.  
8

9 **682.02 Materials.** ES, SFP modules, memory cards, power modules and will  
10 be government furnished equipment (GFE)  
11

12 **(A)** The ES, SFP modules, memory cards, power modules and will be  
13 government furnished equipment (GFE). This material will be available at  
14 the H-3 Tetsuo Harano tunnels, Halawa electrical shop. The contractor  
15 shall give the Engineer at least 90 working days notice prior to requiring  
16 materials. Upon receipt of materials, the Contractor shall check the  
17 quantities and verify the correctness of the materials supplied. Any  
18 discrepancies or shortages shall be reported immediately to the Engineer.  
19

20 **(B)** All costs for receiving, securing, packaging, wrapping, loading,  
21 where applicable, transporting and off-loading materials shall be borne by  
22 the Contractor. Any standby charges incurred by the shipping company  
23 shall be borne by the Contractor.  
24

25 **(C)** The Contractor shall provide replacement insurance for all GFE  
26 supplied material. The policy shall start on the pickup date by the  
27 Contractor. For insurance purposes, the estimated value of the GFE  
28 supplied material is \$12,000.00 per each ES and associated equipment.  
29

30 **(D)** Provide a secure storage area for all GFE-supplied materials. The  
31 Contractor shall replace at his own cost any material which is lost or  
32 damaged.  
33

34 **(E)** The Contractor shall coordinate work and arranging for inspection  
35 of work with the Engineer and other agencies as required.  
36

37 **(F)** Turning over to the Department a complete and operating system  
38 according to the contract.  
39

40 Furnish and install the incidental parts that the contract does not show and  
41 that are necessary to complete the system as though such parts were in the  
42 contract.  
43

44 **682.03 Construction Requirements.**  
45

46 **(A) Pre-Installation.** Upon receipt of the assembly, Contractor shall  
47 demonstrate that each device is in working order per a Contractor-  
48 provided and HDOT -approved device delivery test plan.  
49



50 Contractor and HDOT shall meet within two (2) weeks of issuance of a  
51 notice to proceed to review Contractor's schedule, resource plan and  
52 other information relevant to project start-up.

53  
54 **(B) Installation.** Confirm all installation locations with the Engineer  
55 prior to installation.

56  
57 Supply all cables, mounting hardware, attenuators and incidental  
58 equipment required to make the items operational. Install appropriate  
59 SFP modules and configure the ES using the network information  
60 provided by the Engineer and furnish and install attenuators as required to  
61 provide a fully operational system.

62  
63 Configure ports connected to equipment as access ports, and ports  
64 connected to other switches as trunked ports. Disable all unused ports.  
65 Hard code all Ethernet interfaces for appropriate speed and duplex  
66 settings. Burn in and test the configured switch for a minimum of 24 hours  
67 in a lab; if the ES fails, replace the failed equipment item using one of the  
68 spares and notify the vendor immediately to obtain a replacement under  
69 warranty.

70  
71 Install the ES rack mount adapter in the rack of the equipment cabinet, as  
72 required to enable communications as shown on the contract documents.  
73 Mount the ES power supply in the equipment cabinet on the din rail rack  
74 adapter. Install the ES on the din rail rack adapter, per the manufacturer's  
75 instructions. Connect the ES power supply and ground to the ES per  
76 manufacturer's instructions; connect the ES power supply to AC power  
77 and power up the ES. Test the ES using the manufacturer's diagnostics. If  
78 the ES fails, replace the failed equipment item using one of the spares and  
79 notify the vendor immediately to obtain a replacement under warranty.

80  
81 Configure each ES to trunk the appropriate VLANs identified in the  
82 contract documents. Provide other configuration modifications as required,  
83 to provide a fully operational system.

84  
85 After the ES is installed in the equipment cabinet, the manufacturer's  
86 diagnostic tests shall be run by the Contractor. A laptop shall be plugged  
87 into the console port of the ES use a "ping" test, file transfer, or other  
88 method to ping the IP address of other switches upstream and  
89 downstream. Test the PVST to verify the redundancy of the network if  
90 there is a link failure as specified in Section 681 – CCTV Pole and  
91 Lowering System.

92  
93 **682.04 Method of Measurement.** The Engineer will measure each switch  
94 and power supply installed as a unit, configured and tested with an operational  
95 CCTV camera or VMS and fiber optic cables, as required. The Contractor shall  
96 provide all necessary mounting hardware, DIN rails or rack adapters,

97 communication cables, cross-over cables, attenuators and power cables required  
98 for a fully operational system. Provide configuration files for the switches in  
99 accordance with Section 648 – Field-Posted Drawings. All costs for receiving,  
100 securing, packaging, wrapping, loading, where applicable, transporting and off-  
101 loading materials shall be borne by the Contractor. Any standby charges  
102 incurred by the shipping company shall be borne by the Contractor.

103

104 **682.05 Basis of Payment.** The Engineer will pay for accepted pay items  
105 listed below at contract price per pay unit, as shown in the proposal schedule.  
106 Payment will be full compensation for the work prescribed in this Section, the  
107 Engineer, and the contract documents.

108

109 The Engineer will pay for the following pay items when included in the  
110 proposal schedule:

111

| Pay Item | Pay Unit |
|----------|----------|
|----------|----------|

112

|                             |       |
|-----------------------------|-------|
| Install GFE Ethernet Switch | Each” |
|-----------------------------|-------|

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116

**END OF SECTION 682**

1 Make this Section a part of the Standard Specifications:  
2

3 **“SECTION 683 – CCTV CAMERA**  
4

5 **683.01 Description.** This work includes furnishing labor, materials,  
6 tools, machinery, and equipment necessary to install operating closed circuit  
7 television (CCTV) cameras complete in place according to the Contract  
8 Documents.  
9

10 (A) The CCTV cameras will be installed on 50-foot high CCTV poles  
11 with a dual Camera Lowering System (CLS) with 2 cameras per site as  
12 indicated on the Contract Documents. CCTV cameras will also be  
13 installed on structures as indicated on the Contract Documents.  
14

15 **683.02 Materials.**

16 (A) CCTV cameras shall meet the following requirements:  
17

18 (1) General Requirements  
19

- 20 a. Shall be of manufacturer’s official product line,  
21 designed for 24/7/365 commercial and/or industrial  
22 use.  
23 b. Shall be a pan-tilt-zoom (PTZ) camera in a dome  
24 casing  
25 c. Shall comply with the FY 2019 National Defense  
26 Authorization Act (NDAA). In particular, Section  
27 889(b) prohibits Federal agencies, after August  
28 13, 2020, from obligating or expending financial  
29 assistance to obtain certain telecommunications  
30 and video surveillance services and equipment  
31 from specific producers.  
32 d. Shall not contain any added PVC, including all  
33 camera components.

34 (2) Environmental Requirements.

- 35 a. Issue free operations with temperatures up to  
36 50°C.  
37 b. Issue free storage with temperatures up to 70°C.  
38 c. Issue free operations with relative humidity indices  
39 from 10% to 100%, condensing.  
40 d. Issue free storage with relative humidity indices  
41 from 5% to 95%, non-condensing.  
42 e. Issue free operations with shock and vibration  
43 effects expected to be encountered on the project  
44 CCTV poles with CLS as well as VMS structures,  
45 including image stabilization feature.

46 (3) Physical Requirements

- 47 a. Casing shall be IK08, IP66- and NEMA 4X-rated  
48 b. Casing shall be of aluminum with a clear  
49 polycarbonate dome

- 50 c. Enclosure/circuitry design and fabrication shall
- 51 support the operating environment.
- 52 d. Does not exceed 30 lbs., including ancillary
- 53 components and mounting hardware.
- 54 e. Provides a processing feature that can improve
- 55 images in fog or haze.
- 56 f. FCC Part 15 – Subpart B Class A certified.
- 57 (4) Operating Requirements
- 58 a. Powered by High Power over Ethernet (HPoE).
- 59 b. Capable of day/night operations based upon light
- 60 level.
- 61 c. Optical zoom of 30x and digital zoom of 12x
- 62 d. Maximum resolution of 1920x1080 (configurable)
- 63 e. Frame rate of 60 frames per second (configurable)
- 64 f. Pan speeds of up to 100 degrees per second with
- 65 360 degrees of endless rotation (speed decreases
- 66 proportionally to depth of zoom)
- 67 g. Tilt speeds of up to 30 degrees per second (speed
- 68 decreases proportionally to depth of zoom)
- 69 h. Auto-focus and auto-iris capable
- 70 i. Configurable for color or black and white images
- 71 j. Shall support multiple streams and still images
- 72 simultaneously (unicast and multicast)
- 73 k. Supports preset camera orientations.
- 74 l. Supports text/image overlays (e.g., date, time,
- 75 name and logo)
- 76 m. Imbedded analytics and alarming capabilities
- 77 based upon configurable rules
- 78 n. Supports local image storage
- 79 o. Horizontal field of view up to 63 degrees
- 80 p. Vertical field of view up to 38 degrees
- 81 (5) Networking/Interface Requirements
- 82 a. Operates under a Windows OS environment
- 83 b. Mobile device compatible browser-based interface
- 84 for configuration and viewing.
- 85 c. Password protected configuration
- 86 d. Supports 10Base-T/100Base-TX (RJ45)
- 87 networking interface
- 88 e. Serial interface to support RS-422 / RS-485
- 89 f. Supports the following protocols: TCP/IP, UDP/IP,
- 90 IPv4, IPv6, SNMP, QoS, HTTP, HTTPS, IGMP,
- 91 UPnP, DNS, DHCP, RTP, RTSP, NTP, SNMP,
- 92 LDAP, SSH, SSL, SMTP, FTP and 802.1x.
- 93 g. Supports H.264 High, Main or Base profiles and
- 94 JPEG compression standards
- 95 (6) Maintenance Requirements
- 96 a. On board diagnostics/self-test
- 97 b. Over-the-air software updates
- 98 c. MTBF greater than 50,000 hours

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- d. MTR within 14 calendar days upon receipt of failed device
- e. Manufacturer-provided 3-year warranty

**(B)** All costs for securing, packaging, wrapping, loading, where applicable, transporting and off-loading materials shall be borne by the Contractor. Any standby charges incurred by the shipping company shall be borne by the Contractor.

**(C)** The Contractor shall provide replacement insurance for all GFE material. The policy shall start on the pickup date by the Contractor. For insurance purposes, the estimated value of the Owner supplied material is \$10,000.00 per each CCTV camera assembly.

**(D)** Provide a secure storage area for all Owner-supplied materials. The Contractor shall replace at his own cost any material which is lost or damaged.

**(E)** The Contractor shall coordinate work and arranging for inspection of work with the Engineer and other agencies as required.

**(F)** Turning over to the Department a complete and operating system according to the Contract.

Furnish and install the incidental parts that the contract does not show and that are necessary to complete the system as though such parts were in the contract. This includes all mounting hardware and accessories required to install as shown in the contract.

**683.03 Construction Requirements.**

**Pre-Installation.** Provide onsite training for HDOT in the proper installation and maintenance of the CCTV at delivery of first set of equipment.

Confirm all installation locations with the Engineer prior to installation.

**(A) Installation.**

Install the new CCTV cameras on the poles using the CLS or on the structure using manufacturer's recommended hardware. Install the CCTV Camera power supply in the equipment cabinet. Connect the camera power supply to the AC power. Prior to attaching the CCTV camera to the CLS, connect the camera to the camera power supply and the Ethernet switch using a test cable. Power up the camera. Using a laptop computer plugged into the Ethernet switch, test the camera.

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Attach the camera to the CLS. Raise the camera to the pole top using the CLS. Connect the power conductors from the CLS composite cable to the camera power supply. Ensure the Ethernet connector from the CLS composite cable is connect to the Ethernet Switch. Power up the camera. Using a laptop computer plugged into the Ethernet switch, test the camera functions.

Contractor shall supply all cables, conduits, mounting hardware, power supplies, per manufacturer's requirements and incidental equipment required to make the system operational for the various configurations shown on the Contract documents.

**683.04 Method of Measurement.**

The Engineer will measure CCTV Camera per each, complete-in-place. The Contractor shall provide all necessary mounting hardware for the various installation shown on the Contract documents to provide a fully operational system that is installed and operational.

**683.05 Basis of Payment.**

The Engineer will pay for the accepted CCTV cameras at the contract price per pay unit. The price includes full compensation for supplying and mounting the CCTV cameras, furnishing, assembling, wiring, conduits, and housing; testing, training; coordinating work with manufacturer; and furnishing equipment's, tools, labor, materials and other incidentals necessary to complete the work.

The Engineer will consider full compensation for additional materials and labor not specifically shown or called for that are necessary to complete the work incidental to the various contract items in the proposal.

Engineer will pay for following pay items when included in proposal schedule:

| <b>Pay Item</b>    | <b>Pay Unit</b> |
|--------------------|-----------------|
| CCTV Camera on CLS | Each"           |

**END OF SECTION 683**

1 Make this Section a part of the Standard Specifications:  
2

3 **“SECTION 687 – FIBER OPTIC COMMUNICATION SYSTEM**  
4

5 **687.01 Description.** This project involves the installation of fiber optic  
6 communication systems and associated electrical systems to provide  
7 communications for CCTV at various locations on the Island of Oahu.  
8

9 There shall be a locally based Contractor or Subcontractor of the system  
10 components, fiber optic cables, fiber optic hardware and networking equipment  
11 who shall have at least three years of experience in installing systems over  
12 \$250,000, specifically for outdoor highway and traffic applications. The firm shall  
13 be responsible for testing all fiber optic hardware and cables to provide a  
14 documented optical budget loss analysis for each link to and from a hub station.  
15 The Contractor will be responsible for all hookup, assignments, dedication,  
16 testing, matching, and splicing of the fiber optic cables. Pigtails shall be spliced  
17 on all fiber optic members and attached to fiber optic hardware, patch panels and  
18 components with ST- or LC-connectors. The Contractor shall be fully  
19 responsible for all splices, budget loss, attenuators, appropriate fiber hardware,  
20 accessories, and pigtail connections for a fully operational system. All other  
21 hardware, equipment, and labor necessary shall be considered incidental to the  
22 items in this Section. The Contractor shall furnish and install new Ethernet  
23 switches (ES), and modify new and existing switches as required, to enable  
24 communications as shown in the contract documents.  
25

26 In general, this installation consists of the following components:  
27

- 28 (A) Ethernet switches in the CCTV or VMS cabinet, and at the H-3  
29 Tunnel Control Room and at the City TMC, and existing cabinets.
- 30
- 31 (B) Installation of underground (in duct), fiber optic cable,  
32
- 33 (C) Splicing of fiber optic cable,  
34
- 35 (D) Electrical power supply and distribution, and  
36
- 37 (E) Testing and checkout of equipment.  
38

39 HDOT currently operates (24 x 7) a monitoring and traffic operations  
40 center at the Honolulu portal of the H-3 tunnel. The CCTV cameras installed by  
41 this project will be monitored and operated from this H-3 tunnel operations  
42 center. These CCTV cameras and VMS is system will be an expansion of the  
43 existing HDOT systems.  
44

45 Existing CCTV cameras are connected to the H-3 tunnel operations center  
46 via fiber optic cable from the operations center to a communications hub at the

47 H-3 Halawa interchange or via digital subscriber line. From the Halawa  
48 interchange hub, the cameras will be connected via fiber optic cables and  
49 wireless communications equipment to the existing H-3 fiber optic cable.  
50 Additionally, cameras at several locations will be connected to existing City and  
51 County of Honolulu fiber optic cables. The communications of video images and  
52 camera control commands will be via a digital switched Ethernet network. A  
53 detailed graphical depiction of the connectivity between the various components  
54 of the system is shown in the “Communications Plan” on the Contract documents  
55 Plans.

56

57 Contractor shall be responsible for physically installing the equipment in  
58 the cabinets, connecting power and communications cables, and the testing the  
59 equipment and communications network and providing a fully operational  
60 system.

61

62 Portions of the work on this project will require access to communications  
63 hubs, fiber splice cabinets, communications ducts and pull boxes, and other  
64 existing system components that support currently operational equipment. The  
65 Contractor shall maintain communications with, and all normal operation of, all  
66 existing equipment and systems throughout the construction of this project. The  
67 design of this project will require disruption of, or splicing into, existing, active  
68 fiber optic cables. It also involves splicing into “dark” fibers within existing  
69 cabinets and splice trays. During these splicing operations, the Contractor shall  
70 coordinate with the appropriate agency to notify them about possible disruptions  
71 and minimize down time to existing communications to the fullest extent possible.

72

73 Portions of the work on this project will involve connecting to existing  
74 electrical power circuits that provide power to roadway lighting, sign lighting, or  
75 similar circuits. All access to these electrical circuits shall be coordinated through  
76 the Engineer, and shall be done only during daylight hours; and all circuits shall  
77 be returned to fully operational condition before nightfall. Other portions of the  
78 work will involve connecting to, or routing power conductors through conduits  
79 associated with, arterial controllers, and shall be coordinated through the  
80 Engineer. If such activities require disabling the arterial controller, the Contractor  
81 shall comply with Section 645 – Work Zone Traffic Control.

82

83 When working in the H-3 tunnel control room, City control center, or a  
84 City-owned field cabinet, notify the appropriate agency at least 72 hours prior to  
85 beginning any work. Inspect City cabinets and fiber and present any requests  
86 for information during the early phases of the project to ensure proper lead time  
87 for a City response.

88

89 **Compliance with Other Specifications and Standards.** All electrical  
90 equipment must conform to the standards *NEMA Standards Publication TS 1-*  
91 *1989*), the Underwriters' Laboratories, Inc. UL, and the EIA, wherever applicable.  
92 All materials and workmanship must conform to the requirements of the MUTCD;



93 NEC; NESC; *LRFD Specifications For Structural Supports For Highway Signs,*  
94 *Luminaires And Traffic Signals*, a publication of AASHTO, and any State of  
95 Hawaii legislation, codes and ordinances which may apply. Wherever reference  
96 is made to any such specification, manual, code, or standard, the reference is  
97 construed to mean the version, as revised, that is in effect on the date of  
98 advertising for bids for this project.

99  
100 **Definition of Terms.**

101  
102 **(A) Abbreviations.** Wherever the following abbreviations are used  
103 in these Special Provisions or on the Plans, they shall have the following  
104 meaning:

105  
106 SBW System Bond Wire

107  
108 FM Factory Mutual

109  
110 IEEE Institute of Electrical and Electronics Engineers

111  
112 City City and County of Honolulu

113  
114 **(B) Provide.** Where used in these Special Provisions, unless  
115 otherwise indicated, this shall mean "furnish and install, complete,  
116 including any required electrical connection and testing."

117  
118 **687.02 Materials.**

119  
120 **(A) CCTV Camera.** See Section 683- CCTV Camera.

121  
122 **(B) CCTV Pole and Lowering System.** See Section 681 - CCTV Pole  
123 and Lowering System.

124  
125 **(C) CCTV Cable.** See Section 681 - CCTV Pole and Lowering System.

126  
127 **(D) Fiber Optic Cable.** See Section 647 – Fiber Optic Cable.

128  
129 **(E) Pigtails and Jumpers.** Pigtails shall be factory-made, buffered,  
130 and strengthened with aramid yarn to reduce the possibility that accidental  
131 mishandling will damage the fiber or connection. Pigtails shall be yellow.  
132 They must use a connector that is ST compatible, with ceramic ferrules  
133 and suitable for use in traffic cabinets and shall be designed for single  
134 mode fibers. Each pigtail must contain one fiber. Length shall suffice to  
135 provide 2 feet of slack after installation.

136  
137 Jumpers shall meet the requirements for pigtails, but shall have a  
138 connector on each end. The second connector shall be as specified

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above except where a different connector is required for compatibility with the equipment to which the jumper connects. Length shall suffice to provide approximately two feet of slack after installation.

**(F) Rack Mounted Interconnect Center.** The fiber splice enclosure shall have brackets and all other hardware required for rack mounting in an EIA standard 19-inch equipment rack. The enclosure shall take up no more than five rack units in the cabinet. It shall be made of powder-coated aluminum. The enclosure shall have provisions for cable strain-relief. It shall have hinged front and rear doors.

The enclosure shall include aluminum splice trays with clear plastic covers, designed for outdoor use. Each shall accommodate 12 fusion splices. The trays shall have a black powder coat finish. The trays shall have both perforations for cable ties and crimpable metal tabs for buffer tube strain relief. The Contractor shall provide enough splice trays for all the splices made in the enclosure. The enclosure shall include a splice tray holder with capacity for 12 trays. It shall be mounted on a sliding shelf inside the enclosure so that individual trays can be removed from the enclosure without disturbing the other trays or removing the enclosure itself from the cabinet. The patch panel modules shall have ST connectors on both sides and have 12 fiber slots in a 2 by 6 configuration. The Contractor shall provide enough patch panels for all of the connections made in the enclosure plus two spare 2 by 6 units.

**(G) Cable Attachment Hardware.** Cable attachment hardware and strandvices shall be hot-dipped galvanized, shall be new, and shall be approved by the Engineer.

**(H) CCTV Cabinets.** See Section 681 – CCTV Pole and Lowering System.

**(I) VMS and Splice Cabinets.** See Section 621 – Electric and Communication Systems.

**(J) Ethernet Switch.** See Section 682 - Ethernet Switch.

**(K) CCTV Camera.** See Section 683 – CCTV Camera.

**687.03 Construction Requirements**

**(A) Submittals**

**(1) Submittal Data.** Prior to the purchase or fabrication of any equipment or material for use on this project, submit for review by the Engineer catalog cut sheets and

185 specifications for all standard, off-the-shelf items, and shop  
186 drawings for all custom items. These documents shall contain  
187 sufficient technical data for the Engineer to evaluate the system  
188 proposed. The quality, function, and capability of each deliverable  
189 item shall be described. Documents shall be originals or copies  
190 equal to originals. Shop drawings for each fabricated item shall also  
191 be submitted. These drawings shall contain all information required  
192 for complete fabrication in accordance with the Contract  
193 Documents, such as: materials, welds, finish, etc. Shop drawings  
194 shall be on sheets 24 inches in height and 36 inches long.  
195

196 Furnish four copies of 8 ½-inch x 11-inch submittals, and four  
197 copies of shop drawings. One of these will be returned to the  
198 Contractor with appropriate notations within 30 calendar days.  
199

200 The purpose of the submittal data is to show specifically and  
201 in detail how the Contractor intends to satisfy the requirements of the  
202 Contract Documents. If preprinted literature is utilized to satisfy some  
203 or all of these requirements, no statements on the literature should  
204 conflict with the Contract Documents. Cross off and initial any such  
205 statements and attach an appropriate statement clearly indicating  
206 how the requirements of the Contract Documents will be fulfilled.  
207 Clearly label each item of submittal data with the bid item number or  
208 other description of the item(s) to which it applies.  
209

210 Each submittal must contain sufficient information and details  
211 to permit the Engineer to fully evaluate the particular component.  
212 Submittals which are, in the judgment of the Engineer, insufficient to  
213 permit proper evaluation will not be reviewed. Do not deviate from  
214 submittals marked "Review Completed" or "Correct as Noted"  
215 without the prior written consent of the Engineer. The Department  
216 will not be liable for any material purchased, labor performed, or  
217 delay to the work prior to the approval of the equipment.  
218

219 Because of the nature of this work, unusually detailed  
220 submittal data is required prior to approval of most of the items in  
221 order to avoid nonconformance, which does not become apparent  
222 until it is too late to correct without serious consequences. In  
223 addition, because certain groups of items as set forth below are  
224 closely interrelated, it is required that the submittals be made in  
225 groups. If more than one submittal is required, complete information  
226 from the entire group must be resubmitted. Plan the submittal data  
227 effort accordingly.  
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229 In order to expedite the submittal data process and equipment  
230 review, take care to address all of the requirements of the Contract  
231 Documents in the submittal data, leaving nothing to assumption, and

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clearly addressing the functional and technical interrelationships among the various items. In general, detailed wiring diagrams are not required as part of the submittal data, nor will they be reviewed unless specifically required by these Project Special Provisions or by the Engineer's request.

Plan for any given package of submittal data to be in the possession of the Engineer for 30 calendar days. The Engineer will date stamp the letters of transmittal for all such data and return a copy of the stamped letters to the Contractor with the submittal data for his records. Following review of the submittal data, the Engineer will return to the Contractor one copy of the submittal marked "No Exceptions Taken", "Correct as Noted", "Correct and Resubmit", or "Rejected". Proceed with any items marked "Review Completed" and items marked "Correct as Noted". Do not proceed with any items which are marked "Rejected" or "Correct and Resubmit", but proceed immediately to correct said items and resubmit them for review. No time extensions will be granted to the Contractor as a result of the need to resubmit items for review.

Develop a submittal data transmittal form and submit same to the Engineer for approval as to format. Assign a submittal number to each submittal package, to be transmitted under the cover of the approved form. The numbering system must be logical and ascending. Specifically list on the transmittal sheet each item or element included and the bid item and Special Provision section to which that element belongs. (An element is one part of several parts of information related to the same bid item.) When drawings are submitted, list each separately. Completely fill out all portions of the transmittal sheet except those reserved for use by the Engineer. The transmittal sheet will be used by the Engineer to indicate the action taken on the submittal package, and a copy of the transmittal sheet showing these actions will be returned to the Contractor. Transmit only clearly related items under the same transmittal sheet.

Approval by the Engineer of a catalog cut sheet and/or shop drawing does not relieve the Contractor of any of his responsibility under the contract for the successful completion of the work in conformity with the requirements of the Contract Documents in providing a fully integrated operational system.

**(2) Equipment Manuals** Two manuals for each individual component of the system. The manuals supplied for the off-the-shelf items shall be those supplied by the equipment manufacturer.

**(B) Documentation.** Provide two types of documentation for this

279 project: submittal data and field-posted documentation. All documentation,  
280 except as specifically approved by the Engineer, shall be no smaller than  
281 8 ½-inches x 11- inches and no larger than 24-inches x 36-inches.  
282 Electronic documentation shall be provided on a CD-ROM.

283  
284 All 8 1/2 x 11-inch documentation, except standard bound manuals,  
285 shall be bound in logical groupings in 3-ring loose-leaf binders or plastic  
286 slide-ring, loose-leaf binders. Such binders may also include 11-inch x 17-  
287 inch documentation, if "Z-folded". Each bound grouping of documentation  
288 shall be permanently and appropriately labeled.

289  
290 Electronic documentation shall conform to the following file formats:  
291 tables shall be provided in current versions of Microsoft Excel or Microsoft  
292 Word file format; manuals, reports and other narrative text documents  
293 shall be provided in Microsoft Word file format; and drawings shall be  
294 provided as CAD files in data exchange (.DXF) file format compatible with  
295 the most recent version of Microstation.

296  
297 All literature from manufacturers shall be original documents  
298 provided by the manufacturers or copies equal to originals. All  
299 documentation will be paid for under the item Field-Posted Drawings, as  
300 described in Section 648 of the Standard Specifications.

301  
302 **(1) Field-Posted Drawings.** Provide the field-posted drawings  
303 in accordance with Section 648 – Field-Posted Drawings.

304  
305 **(C) Installation.** Install equipment in new roadside cabinets,  
306 existing roadside cabinets, the Department H-3 Tunnel Control Room, and  
307 the City and County of Honolulu Traffic Management Center: 740 Kinalau  
308 Place, Honolulu, HI 96813, (808) 527-6988. Supply all cables, mounting  
309 hardware, and incidental equipment required to make these items  
310 operational. Contractor shall coordinate with the appropriate agency to  
311 gain access to the H-3 TOC or the City TMC or existing field cabinets.  
312 Connect equipment to power, communication, and ground cables, and test  
313 the completed installation and report any problems to the Engineer.

314  
315 **(1) Ethernet Switch.** See Section 682 – Ethernet Switch.

316  
317 **(2) Fiber Optic Cable.** See Section 647 - Fiber Optic Cable.

318  
319 **(3) CCTV Cabinets.** See Section 681 – CCTV Pole and  
320 Lowering System.

321  
322 **(4) Fiber Optic Splice.** All optical fibers, including  
323 spares, shall be spliced to provide continuous runs except where  
324 shown in the contract documents. Splices shall be allowed only

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in CCTV, VMS, or splice cabinets.

All splices shall be made using a fusion splicer that automatically positions the fibers using a system of light injection and detection. Provide all equipment and consumable supplies.

Package each spliced fiber in a protective housing. Re-coat bare fibers completely with a protective room temperature vulcanizing (RTV) coating, gel or similar substance, prior to insertion in the housing.

Prior to splicing to a fiber installed by others, measure and record the optical loss over that fiber.

Use a different splice tray for each buffer tube color. If an enclosure contains multiple buffer tubes of the same color, but none of the fibers in one of the tubes are spliced to fibers in other tubes of the same color, use a separate splice tray for that tube.

**(5) Modifications In Existing Cabinets.** The Contractor shall coordinate with the appropriate agency to gain access to existing field cabinets. The Contractor shall coordinate with the appropriate agency to gain access to the H-3 TOC or the City TMC.

The Contractor shall establish an optical path on existing fiber optic cables where existing trunk fiber may not be spliced through as noted on Plans. The Contractor shall use an optical test set and or optical time-domain reflectometer test (OTDR) to verify the optical path between cabinets as required to determine fiber assignments to complete the specified optical path to make the system operational. The Contractor shall coordinate with DTS to gain access to City cabinets and verify with DTS and the Engineer prior to performing any splicing or notification of possible disruption to the existing system.

**(D) Testing.** Testing of all equipment, cables and materials purchased by the Contractor under this contract shall be the responsibility of the Contractor and shall be conducted in the presence of the Engineer. Document all testing, and provide the results to the Engineer in hard copy and electronic format. The Engineer reserves the right to perform any inspections deemed necessary to assure that the equipment, cables and materials conform to the requirements specified herein.

**(1) Ethernet Switch Testing.** See Section 682 – Ethernet Switch.

**(2) CCTV Camera Testing.** See Section 683 – CCTV

**(3) Fiber Optic Link Testing.** Fiber optic links shall be tested as follows.

**(a)** Test the fiber after installation; including all splicing and termination, is complete. Note, however, that this test procedure involves measuring the loss of fiber installed by others before splicing to it.

**(b)** For each fiber optic link, including spare fibers, determine whether the optical loss is within the limits permitted by these specifications. A link is a continuous segment of fiber between one connector (or unterminated end) and another connector (or unterminated end).

**(c)** When testing links that do not have connectors on both ends, use a mechanical splice to attach a pigtail to the unterminated fiber for the duration of the test. Mechanical splices will not be measured for separate payment.

**(d)** For each fiber link, follow this procedure:

1. If the link includes fiber installed by others, use an optical loss test set to measure and record the optical loss over that portion of the link before it is spliced to new fiber.

2. Calculate the maximum allowable loss for the completed link, both at 1310 nm and at 1550 nm. Use the following formula:

$$\begin{aligned} \text{Maximum link loss} = & \\ & \text{Measured loss over portion installed by others} \\ & + (\text{Fiber length in km}) \times (0.35 \text{ for } 1310 \text{ nm} \\ & \text{and } 0.25 \text{ for } 1550 \text{ nm}) \\ & + (\text{Number of fusion splices}) \times (0.05) \\ & + (\text{Number of mechanical splices [for temp.} \\ & \text{connection]}) \times (0.3) \\ & + (\text{Number of connections}) \times (0.3) \end{aligned}$$

Provide this calculation to the Engineer along with the test results

3. Calibrate an optical loss test set and provide evidence satisfactory to the Engineer that the set produces accurate results at both wavelengths. This

419 can be a demonstration that the set correctly  
420 measures the loss of a test fiber whose loss is known.

421  
422 **4.** Use the test set to measure the loss of the link  
423 under test. Record the results at both 1310 nm and  
424 1550 nm.

425  
426 **5.** If the measured loss exceeds the calculated  
427 maximum, use an optical time domain reflectometer  
428 and other test equipment to troubleshoot the link.  
429 Take whatever corrective action is required, including  
430 cable replacement, to achieve a loss less than the  
431 calculated maximum.

432  
433 **(e)** Documentation. Prepare a diagram showing all of the  
434 links tested in this project. For the portions installed in this  
435 project, show the cabinets, splices, and pigtails. On each  
436 line representing a link, show the maximum allowable loss  
437 and the actual loss. The actual loss shall be the one  
438 measured after all corrective actions have been taken.

439  
440 **(4) Fiber Optic Cable Testing.** See Section 647 - Fiber  
441 Optic Cable.

442  
443 **(E) Warranty.** See Subsection 108.17 – Guarantee of Work.

444  
445 **687.04 Measurement.** Measurement for payment of equipment and  
446 materials in this contract will be made as follows.

447  
448 **(A) Fiber Optic Pigtail** will be measured by each pigtail installed.  
449 Splicing of each pigtail will be measured separately from this item.

450  
451 **(B) Fiber Optic Jumper** will be measured by each jumper installed.  
452 Duplex jumper cables shall be measured as two (2) units.

453  
454 **(C) Fiber Optic Splice** will be measured by each pair of two (2) single  
455 mode fibers fusion spliced together, which will include splices of mainline  
456 fiber with each other and splices of mainline fibers with fiber optic pigtails  
457 in existing and new cabinets.

458  
459 **(D) Rack Mounted Interconnect Center** will be measured by each  
460 center installed, which will include all necessary mounting hardware, patch  
461 panels, and splice trays installed in new CCTV, Splice and VMS cabinets.

462  
463 **(E) Additional Testing, Splicing and Equipment** the Engineer will  
464 measure additional splicing, testing and fiber optic equipment such as  
465 patch panels, media converters, SFP modules, attenuators, pigtails and



466 jumper cables, if ordered by the Engineer to complete the system on a  
467 force account basis, in accordance with Subsection 109.06 – Force  
468 Account Provisions and Compensation.

469  
470 This work may include but not be limited to the establishing, testing  
471 and troubleshooting of a fiber optic link from the H3 Hub at Halekou  
472 Interchange to the H-3 TOC.

473  
474 **(F) Testing,** the Engineer will not pay for testing separately. The  
475 Engineer shall consider the cost for all of the accepted testing as included  
476 in the contract price of the various contract items.

477  
478 Measurement for electrical and communication systems including  
479 VMS cabinets, splice cabinets, VMS cabinet foundation, splice cabinet  
480 foundation, conduit and innerduct will be in accordance and under Section  
481 621 – Electric and Communication Systems.

482  
483 Measurement for fiber optic cable will be in accordance and under  
484 Section 647 – Fiber Optic Cable.

485  
486 Measurement for CCTV cabinet and foundation will be in  
487 accordance and under Section 681 – CCTV Camera Pole and Lowering  
488 System.

489  
490 Measurement for CCTV camera will be in accordance and under  
491 Section 683 – CCTV Camera.

492  
493 Measurement for Ethernet Switch will be in accordance and under  
494 Section 682 – Ethernet Switch.

495  
496 **687.05 Payment.** The Engineer will pay for the accepted pay items  
497 listed below at the contract price per pay unit. Payment will be full compensation  
498 for work prescribed in this section and the contract documents.

499  
500 The Engineer will pay for the following pay items when included in the  
501 proposal schedule:

| 502 | <b>Pay Item</b>                            | <b>Pay Unit</b> |
|-----|--|-----------------|
| 503 |  |                 |
| 504 |  |                 |
| 505 | Fiber Optic _____                          | Each            |
| 506 |  |                 |
| 507 | Rack Mounted Interconnect Center           | Each            |
| 508 |  |                 |
| 509 | Additional Testing, Splicing and Equipment | Force Account   |
| 510 |  |                 |

511 The Engineer will pay for electrical and communication systems  
512 modifications and VMS cabinets, splice cabinets, VMS cabinet foundation, splice

513 cabinet foundation, conduit and innerduct in accordance and under Section 621 –  
514 Electric and Communication Systems.

515  
516 The Engineer will pay for fiber optic cable in accordance and under  
517 Section 647 – Fiber Optic Cable.

518  
519 The Engineer will pay for CCTV cabinets and foundations in accordance  
520 and under Section 681 – CCTV Pole and Lowering Device.

521  
522 The Engineer will pay for Ethernet Switch in accordance and under  
523 Section 682 – Ethernet Switch.

524  
525 The Engineer will pay for CCTV Camera in accordance and under Section  
526 683 – CCTV Camera.”

527

**END OF SECTION 687**

528

529

1 Make the following Section a part of the Standard Specifications:  
2

3 **“SECTION 695 - PROJECT VEHICLES**  
4

5 **695.01 Description.**  
6

7 This work shall consist of furnishing and maintaining vehicles as  
8 specified hereinafter, for use by State personnel or as directed by the Engineer.  
9

10 **695.02 General Requirements.**  
11

12 **(A) Responsibility of the Contractor.**  
13

14 The Contractor shall:  
15

16 **(1)** Maintain each vehicle in a good and safe operating condition  
17 at all times.  
18

19 **(2)** Provide complete maintenance of all vehicles including  
20 supplied accessories. This shall include but not be limited to, tune-  
21 ups, all types of lubrication work, all types of adjustments, all repairs  
22 requested by the Engineer and other related service work thereto.  
23

24 **(3)** Perform all repair and/or replacement work, including repair  
25 and replacement of tires. Repair and/or replacement work shall be  
26 performed in such a manner that the vehicle shall be equivalent to  
27 what it was when originally supplied, i.e. material used in the repair  
28 and/or replacement work shall be equal to or better than what was  
29 originally supplied on the vehicles.  
30

31 **(4)** Provide all oil and lubricants necessary for the mentioned  
32 maintenance and service work.  
33

34 **(5)** Respond to all trouble calls and requests for repairs  
35 immediately, but no more than three hours after the request or at a  
36 time designated by the State. Respond to all trouble calls and  
37 requests for repairs wherever the vehicle is located. This shall  
38 include the pickup and delivery of the vehicle during and after  
39 working hours including Saturdays, Sundays, and holidays at the  
40 location designated by the State.  
41

42 **(6)** Provide another vehicle in kind as a replacement any time a  
43 vehicle is detained by the Contractor or a vehicle is damaged or  
44 inoperable due to an accident or other causes. A replacement for  
45 every vehicle detained or out of service shall be provided within 24  
46 hours unless otherwise directed by the Engineer.  
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(7) Provide all labor, equipment, tools, materials, and supplies necessary for all required maintenance and service work.

(8) Comply with all State and City and County safety ordinances, regulations, and inspections. The Contractor shall bear the cost of all fees necessary to meet these requirements.

(9) Provide insurance coverage for all furnished vehicles including but not limited to bodily injury liability, property damage liability, comprehensive loss damages, collision or upset, or other damages. Insurance coverage shall be valid anywhere in the State of Hawaii.

Automobile bodily injury and property damage liability insurance shall not be less than the following limits:

**Bodily Injury Liability:**

\$1,000,000 each occurrence

**Property Damage Liability:**

\$1,000,000 each occurrence

The Contractor shall submit to the Engineer within fifteen (15) days from the date of award of the contract three (3) copies each of insurance certification, stating that the Contractor has taken out the aforementioned coverages with the State of Hawaii named as additional insured. The Contractor shall provide a copy of a valid no-fault insurance card for each vehicle.

(10) Provide and bear the cost thereof, all safety checks, license plates, and all fees and taxes in connection with the vehicle.

(11) Provide two (2) complete sets of keys for each vehicle supplied.

(12) Provide a charge card for each vehicle to be used by the State to fuel vehicle at a local area gas station. Anticipated mileage is 1000 miles per month.

**(B) Responsibility of the State.**

(1) The State will park vehicles after working hours at the State Project Field Office.

94                   (2) The State will retain fuel receipts to be provided to the  
95 Contractor at a time interval mutually agreed by the State and the  
96 Contractor.  
97

98 **695.03 Delivery and Inspection.**  
99

100                   The Contractor shall deliver all vehicles to the State Project Field Office.  
101 The vehicles shall be delivered on the Notice to Proceed date or at a later date as  
102 designated by the Engineer.  
103

104                   A joint inspection of the vehicles shall be done by representatives of the  
105 Contractor and the State before acceptance of the vehicles. The State will  
106 document any deficiencies found, and the Contractor will remedy those  
107 deficiencies to the satisfaction of the State.  
108

109 **695 .04 Termination.**  
110

111                   The Contractor shall furnish and maintain the vehicles for use by the  
112 State from the delivery date to a date directed by the Engineer but no later than 30  
113 days after the Contractor's approval and the Engineer's acceptance of the final  
114 monthly estimate.  
115

116 **695.05 Liquidated Damages.**  
117

118                   If the Contractor fails to furnish the vehicles within the time specified  
119 herein, including conditions described in Subsection 695.02A(5)&(6), then  
120 damages will be sustained by the State. The amount of such damages resulting  
121 from loss of project management duties will be fixed at the sum of \$500.00 per  
122 vehicle for each and every calendar day, including weekends and holidays. The  
123 State may deduct such amount thereof from any monies due or that may become  
124 due the Contractor under this contract.  
125

126 **695.06 Vehicles to be Furnished for this Project.**  
127

128                   The vehicles furnished and maintained shall be new at the beginning of  
129 the contract, shall be unmarked, and shall be a 2-door white midsized pickup truck.  
130

131 **695 .07 Measurement.** The Engineer will measure project vehicles per  
132 vehicle/month.  
133

134 **695.08 Payment.** The Engineer will pay for the accepted project vehicles  
135 at the Contract unit price per vehicle/month.  
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The Engineer will make payment under:

**Pay Item**

**Pay Unit**

Project Vehicles (1 Vehicle)

Veh/Month"

**END OF SECTION 695**

1 Make the following Section a part of the Standard Specifications:

2  
3 **“SECTION 696 – MAINTENANCE OF TRAILERS**

4  
5  
6 **696.01 Description.** This Section describes maintenance of the existing field  
7 office used exclusively by the Project Engineer as a field office.

8  
9 **696.02 Materials.** Furnish and install new material necessary to complete this  
10 work.

11  
12 **696.03 Construction Requirements.** This force account work includes the  
13 monthly utility charges; maintaining the trailer and surrounding ground of the  
14 trailers; maintaining the furnishings, appliances, and other equipment in good  
15 order, treating the ground under the buildings for termites; providing rubbish  
16 pickup service twice a week; providing and maintaining the toilet facility;  
17 providing janitorial services for both buildings; and relocating the buildings, if  
18 necessary or as ordered by the Engineer.

19  
20 **696.04 Method of Measurement.** The Engineer will measure maintenance  
21 of trailer on a force account basis in accordance to Subsection 109.06 – Force  
22 Account Provisions and Compensation and as ordered by the Engineer.

23  
24 **696.05 Basis of Payment.** The Engineer will pay for the accepted  
25 maintenance of trailers at the contract price per pay unit, as shown in the  
26 proposal schedule. Payment will be full compensation for the work prescribed in  
27 this Section, the Engineer, and the contract documents.

28  
29 The Engineer will pay for the following pay item when included in the  
30 proposal schedule:

| <b>Pay Item</b>             | <b>Pay Unit</b> |
|-----------------------------|-----------------|
| Maintenance of Field Office | Force Account”  |

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38 **END OF SECTION 696**

**SECTION 699 – MOBILIZATION**

Make the following amendments to said Section:

(I) Amend **699.03 Applicability** by revising from lines 21 to 24 to read as follows:

**“699.03 Applicability.** Maximum bid allowed for this item is an amount not to exceed 6 percent of the sum of all items excluding the bid price of this item.”

(II) Amend **699.05 Payment** by revising from lines 44 to 47 to read as follows:

“Mobilization (Not to exceed 6 percent of the sum of all items  
excluding the bid price of this item) Lump Sum”

**END OF SECTION 699**



1  
2  
3 **SECTION 708 – PAINTS**

4 Make the following amendments to said Section:

5 **(I)** Add **Section 708.06 High Performance Coating System** by adding the  
6 following paragraph after line 79:

7  
8 **“708.06 High Performance Coating System for CCTV Poles:** Coating  
9 system shall be provided by the same manufacturer and shall be submitted to the  
10 Engineer for review. Color shall match “Aluminum” or “Silver” paint to match  
11 aluminum light poles. Submit color sample for review. Repair damage to coatings  
12 per coating manufacturer for damage including but not limited to handling,  
13 transportation, cutting, welding, or bolting.

14  
15 **(A) Exterior Galvanized Metal, Stainless Steel**

16  
17 **(1) Primer/Intermediate Coat.** Epoxy Polyamide MIL-DTL-  
18 24441. 6 Mils Dry Film Thickness applied in 2 coats of 3 Mils Dry  
19 Film Thickness. Carboline Carboguard 893 SG or approved equal.

20  
21 **(2) Top Coat.** Fluorourethane AAMA 605.2. 5 Mils Dry Film  
22 Thickness applied in 2 coats of 2-3 Mils Dry Film Thickness.  
23 Carboline Carboxane 950 or approved equal.”  
24

25  
26 **END OF SECTION 708**

1           **SECTION 711 – CONCRETE CURING MATERIALS AND ADMIXTURES**

2  
3       Make the following amendments to said Section:

4  
5       **(II)**    Amend **Subsection 711.03(A) – Admixture Materials** by adding the  
6       following paragraph after line 31:

7  
8                       “Corrosion inhibitor admixture shall be MCI-2005 NS or approved  
9                       equal. Corrosion inhibitor dosage shall be 24 oz. per cubic yard of mix, or  
10                      in accordance with manufacturer’s recommendations. ASTM C 494 and  
11                      ASTM G 109 shall apply for all corrosion inhibitor admixtures.

12  
13                     High-range water-reducing admixture shall be ADVA 170 or  
14                     approved equal. ASTM C 494 Type A and F and ASTM C 1017 Type I  
15                     shall apply for all high-range water-reducing admixtures.”

16  
17  
18   **END OF SECTION 711**

1 **SECTION 712 - MISCELLANEOUS**

2  
3 Make the following amendment to said Section:

4  
5 **(I)** Amend **Subsection 712.04(B) – Epoxy Grout** by revising the last  
6 paragraph from lines 65 to 69 to read as follows:

7  
8 “Epoxy adhesive products shall conform to Table 712.04-3 –  
9 Properties of Neat Material requirements and International Code Council  
10 report AC308, Acceptance Criteria for Post-Installed Adhesive Anchors in  
11 Concrete Elements. The following products or approved equal shall be  
12 used:

- 13  
14 **(1)** Simpson SET-XP by Simpson Strong-Tie  
15  
16 **(2)** Hilti HIT-HY 150 Max by Hilti Corporation.”  
17

18 **END OF SECTION 712**  
19

1           **SECTION 713 – STRUCTURAL STEEL AND RELATED MATERIALS**

2  
3    Make the following amendment to said Section:

4  
5    **(I)**    Amend **Section 713.01 Structural Steel** by adding the following after line  
6    30:

7  
8           **“(E) Baseplates.** AASHTO M270 Grade 50 (ASTM A 572, Grade 50)  
9           conforming to Supplementary Requirement S5 (ASTM A709  
10           Supplementary Requirement S83).

11  
12          **(F) CCTV Poles.** ASTM A572 (AASHTO M-223), Grade 65 for 50’-0”  
13          poles.

14  
15          **(G) Anchor Bolts.** ASTM F1554 (AASHTO M-314), Grade 55 hot  
16          dipped galvanized.”

17  
18  
19   **END OF SECTION 713**

1 **SECTION 718 – STEEL FASTENERS**

2  
3 Make the following amendment to said Section:

4  
5 **(l)** Amend **Section 718.02 High Strength Bolts And Studs** by adding the  
6 following paragraph after line 25:

7  
8 “AASHTO M164 specifications corresponds to ASTM F3152, Grade  
9 F1852, hot dip galvanized. All bolts shall be “Twist Off” type load indicator bolts  
10 Type 1. Bolts shall have a manufactured notch between the bolt tip and threads.  
11 The bolt shall be designed to react to the opposing rotational torques applied by  
12 the installation wrench, with the bolt tip automatically shearing off when the  
13 proper torque is obtained. Provide galvanizing repair of sheared tip using ASTM  
14 A780 zinc rich paint.”

15  
16 **END OF SECTION 718**

1           **SECTION 750 – TRAFFIC CONTROL SIGN AND MARKER MATERIALS**

2  
3       Make the following amendments to said Section:

4  
5       **(I)**     Amend **Subsection 750.01(A)(1) Retroreflectorization** by replacing lines  
6       8 through 31 to read:

7  
8       **“(1) Retroreflectorization.** The following shall be retroreflectorized:

9  
10       **(a)**     Background for illuminated guide signs and exit number panels (“E”  
11       designation) with ASTM D 4956 Type XI retroreflective sheeting.

12  
13       **(b)**     Background for non-illuminated guide signs and exit number panels  
14       (“D” designation) with ASTM D 4956 Type XI retroreflective sheeting.

15  
16       **(c)**     Messages, arrows, and borders of guide signs and exit number  
17       panels (“D” and “E” designations) with ASTM D 4956 Type XI  
18       retroreflective sheeting.

19  
20       **(d)**     Regulatory and warning signs, directional signs (“DIR” designation),  
21       route and auxiliary markers, shield symbols, yellow “EXIT ONLY” panels,  
22       construction warning signs, and barricade rails, completely, with Type III,  
23       IV, or IX retroreflective sheeting.

24  
25       **(e)**     Pedestrian, school, bicycle crossing series, completely with Type IX  
26       fluorescent yellow green retroreflective sheeting.”

27  
28  
29       **(II)**     Amend **Subsection 750.01(B) Backing** by replacing lines 72 through 73  
30       to read:

31  
32       “Aluminum sheet shall conform to ASTM B 209, alloy 5052-H38 or 6061-  
33       T6 flat sheet.”

34  
35       **(III)**     Amend **Subsection 750.01(E) Retroreflective Sheeting Materials** by  
36       replacing lines 1126 through 1137 to read:

37  
38       **“(E) Retroreflective Sheeting Materials.** Retroreflective sheeting  
39       includes white or colored sheeting having smooth outer surface.

40  
41       Retroreflective sheeting shall be classified in accordance with ASTM D  
42       4956.

43  
44       The coefficient of retroreflection shall meet the minimum requirements of  
45       ASTM D 4956 for the type of reflective sheeting specified.

47           The color shall conform to the latest appropriate standard color tolerance  
48 chart issued by the U.S. Department of Transportation, Federal Highway  
49 Administration and to the daytime and nighttime color requirements of ASTM D  
50 4956.

51  
52           Test methods and procedures shall be in accordance with ASTM.”

53  
54 **(IV)** Amend **Subsection 750.02 Sign Posts** by replacing lines 1168 through  
55 1172 to read:

56  
57 **“(C) Square Tube Posts.** Square and other tube posts shall conform to  
58 ASTM A 653 for cold-rolled, carbon steel sheet, commercial quality; or ASTM A  
59 787 for electric-resistance-welded, metallic-coated carbon steel mechanical  
60 tubing.”

61  
62  
63  
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70  
71

**END OF SECTION 750**

1                                   **SECTION 755 – PAVEMENT MARKING MATERIALS**

2  
3    Make the following amendments to said Section:

4  
5    **(I)**    Amend **Subsection 755.02 (C) Retroreflective Pavement Markers** by  
6    revising lines 223 to 236 to read:

7  
8            “Exterior surface of shell shall be smooth and contain one or two  
9    retroreflective faces of specified color.”

10  
11   **(II)**   Amend **Subsection 755.05 (C)(1) Glass Beads** by adding the following  
12   after line 869:

13  
14            **(f)**   The glass spheres shall not contain more than 200 ppm (total)  
15            arsenic, 200 ppm (total) antimony nor more than 200 ppm (total)  
16            lead, when tested according to EPA Methods 3052 and 6010C.  
17            Other suitable x-ray fluorescence spectrometry analysis methods  
18            may be used to screen samples of glass spheres for arsenic and  
19            lead content.”

20  
21  
22  
23  
24  
25  
26  
27                                   **END OF SECTION 755**



## **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: HI20210001 09/03/2021

Superseded General Decision Number: HI20200001

State: Hawaii

Construction Types: Building, Heavy (Heavy and Dredging),  
Highway and Residential

Counties: Hawaii Statewide.

BUILDING CONSTRUCTION PROJECTS; RESIDENTIAL CONSTRUCTION  
PROJECTS (consisting of single family homes and apartments up  
to and including 4 stories); HEAVY AND HIGHWAY CONSTRUCTION  
PROJECTS AND DREDGING

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.95 for calendar year 2021 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, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.95 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2021. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate, if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at [www.dol.gov/whd/govcontracts](http://www.dol.gov/whd/govcontracts).

| Modification Number | Publication Date |
|---------------------|------------------|
| 0                   | 01/01/2021       |
| 1                   | 01/08/2021       |
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| 5                   | 03/19/2021       |
| 6                   | 05/07/2021       |
| 7                   | 07/02/2021       |
| 8                   | 07/09/2021       |
| 9                   | 07/16/2021       |
| 10                  | 09/03/2021       |

ASBE0132-001 08/30/2020

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.....\$ 41.90 25.65

-----  
BOIL0627-005 01/01/2013

|                  | Rates    | Fringes |
|------------------|----------|---------|
| BOILERMAKER..... | \$ 35.20 | 27.35   |

-----  
BRHI0001-001 08/31/2020

|   | Rates    | Fringes |
|---|----------|---------|
| BRICKLAYER                                  |          |         |
| Bricklayers and Stonemasons.....            | \$ 45.95 | 29.59   |
| Pointers, Caulkers and Weatherproofers..... | \$ 46.21 | 29.59   |

-----  
BRHI0001-002 08/31/2020

|  | Rates    | Fringes |
|--|----------|---------|
| Tile, Marble & Terrazzo Worker           |          |         |
| Terrazzo Base Grinders.....              | \$ 41.69 | 28.11   |
| Terrazzo Floor Grinders and Tenders..... | \$ 40.14 | 28.11   |
| Tile, Marble and Terrazzo Workers.....   | \$ 43.50 | 28.11   |

-----  
CARP0745-001 08/31/2020

|  | 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..... | \$ 50.50 | 23.59   |
| Millwrights and Machine Erectors.....  | \$ 50.75 | 23.59   |
| Power Saw Operators (2 h.p. and over).....   | \$ 50.65 | 23.59   |

-----  
CARP0745-002 08/31/2020

|   | Rates    | Fringes |
|---|----------|---------|
| Drywall and Acoustical Workers and Lathers..... | \$ 50.50 | 23.59   |

-----  
ELEC1186-001 08/23/2020

|               | Rates | Fringes |
|---------------|-------|---------|
| Electricians: |       |         |

|                              |          |       |
|------------------------------|----------|-------|
| Cable Splicers.....          | \$ 56.71 | 31.16 |
| Electricians.....            | \$ 51.55 | 29.58 |
| Telecommunication worker.... | \$ 32.69 | 12.96 |

-----  
ELEC1186-002 08/23/2020

|                              | Rates    | Fringes |
|------------------------------|----------|---------|
| Line Construction:           |          |         |
| Cable Splicers.....          | \$ 56.71 | 31.16   |
| Groundmen/Truck Drivers....  | \$ 38.66 | 25.63   |
| Heavy Equipment Operators... | \$ 46.40 | 28.00   |
| Linemen.....                 | \$ 51.55 | 29.58   |
| Telecommunication worker.... | \$ 32.69 | 12.96   |

-----  
ELEV0126-001 01/01/2021

|                        | Rates    | Fringes    |
|------------------------|----------|------------|
| ELEVATOR MECHANIC..... | \$ 63.18 | 35.825+a+b |

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.

-----  
ENGI0003-002 09/03/2018

|   | Rates    | Fringes |
|---|----------|---------|
| Diver (Aqua Lung) (Scuba))                                |          |         |
| Diver (Aqua Lung) (Scuba)<br>(over a depth of 30 feet)... | \$ 66.00 | 31.26   |
| Diver (Aqua Lung) (Scuba)<br>(up to a depth of 30 feet).. | \$ 56.63 | 31.26   |
| Stand-by Diver (Aqua Lung)<br>(Scuba).....                | \$ 47.25 | 31.26   |
| Diver (Other than Aqua Lung)                              |          |         |
| Diver (Other than Aqua<br>Lung).....                      | \$ 66.00 | 31.26   |
| Diver Tender (Other than<br>Aqua Lung).....               | \$ 44.22 | 31.26   |
| Stand-by Diver (Other than<br>Aqua Lung).....             | \$ 47.25 | 31.26   |
| Helicopter Work   |          |         |
| Airborne Hoist Operator<br>for Helicopter.....            | \$ 45.80 | 31.26   |
| Co-Pilot of Helicopter.....                               | \$ 45.98 | 31.26   |
| Pilot of Helicopter.....                                  | \$ 46.11 | 31.26   |
| Power equipment operator -<br>tunnel work                 |          |         |
| GROUP 1.....  | \$ 42.24 | 31.26   |
| GROUP 2.....  | \$ 42.35 | 31.26   |
| GROUP 3.....  | \$ 42.52 | 31.26   |
| GROUP 4.....  | \$ 42.79 | 31.26   |
| GROUP 5.....  | \$ 43.10 | 31.26   |
| GROUP 6.....  | \$ 43.75 | 31.26   |
| GROUP 7.....  | \$ 44.07 | 31.26   |
| GROUP 8.....  | \$ 44.18 | 31.26   |
| GROUP 9.....  | \$ 44.29 | 31.26   |
| GROUP 9A.....   | \$ 44.52 | 31.26   |

|                            |          |       |
|----------------------------|----------|-------|
| GROUP 10.....              | \$ 44.58 | 31.26 |
| GROUP 10A.....             | \$ 44.73 | 31.26 |
| GROUP 11.....              | \$ 44.88 | 31.26 |
| GROUP 12.....              | \$ 45.24 | 31.26 |
| GROUP 12A.....             | \$ 45.60 | 31.26 |
| Power equipment operators: |          |       |
| GROUP 1.....               | \$ 41.94 | 31.26 |
| GROUP 2.....               | \$ 42.05 | 31.26 |
| GROUP 3.....               | \$ 42.22 | 31.26 |
| GROUP 4.....               | \$ 42.49 | 31.26 |
| GROUP 5.....               | \$ 42.80 | 31.26 |
| GROUP 6.....               | \$ 43.45 | 31.26 |
| GROUP 7.....               | \$ 43.77 | 31.26 |
| GROUP 8.....               | \$ 43.88 | 31.26 |
| GROUP 9.....               | \$ 43.99 | 31.26 |
| GROUP 9A.....              | \$ 44.22 | 31.26 |
| GROUP 10.....              | \$ 44.28 | 31.26 |
| GROUP 10A.....             | \$ 44.43 | 31.26 |
| GROUP 11.....              | \$ 44.58 | 31.26 |
| GROUP 12.....              | \$ 44.94 | 31.26 |
| GROUP 12A.....             | \$ 45.30 | 31.26 |
| GROUP 13.....              | \$ 42.22 | 31.26 |
| GROUP 13A.....             | \$ 42.49 | 31.26 |
| GROUP 13B.....             | \$ 42.80 | 31.26 |
| GROUP 13C.....             | \$ 43.45 | 31.26 |
| GROUP 13D.....             | \$ 43.77 | 31.26 |
| GROUP 13E.....             | \$ 43.88 | 31.26 |

#### POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Fork Lift (up to and including 10 tons); Partsman (heavy duty repair shop parts room when needed).

GROUP 2: Conveyor Operator (Handling building material); Hydraulic Monitor; Mixer Box Operator (Concrete Plant).

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.

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).

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.

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).

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).

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).

GROUP 9: Combination Mixer and Compressor (gunite); Do-Mor Loader and Adams Elegrader; Dozer (D-7 or equal); Wheel and/or Ladder Trencher (over 6 feet and 200 to 749 h.p.).

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).

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.

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).

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).

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).

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, Liebherr, 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.

GROUP 13: Truck Driver (Utility, Flatbed, etc.)

GROUP 13A: Dump Truck, 8 cu.yds. and under (water level);



Water Truck (up to and including 2,000 gallons).

GROUP 13B: Water Truck (over 2,000 gallons); Tandem Dump Truck, over 8 cu. yds. (water level).

GROUP 13C: Truck Driver (Semi-trailer. Rock Cans, Semi-Dump or Roll-Offs).

GROUP 13D: Truck Driver (Slip-In or Pup).

GROUP 13E: End Dumps, Unlicensed (Euclid, Mack, Caterpillar or similar); Tractor Trailer (Hauling Equipment); Tandem Trucks hooked up to Trailer (Hauling Equipment)

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 |

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ENGI0003-004 09/04/2017

|  | Rates    | Fringes |
|--|----------|---------|
| Dredging: (Boat Operators)               |          |         |
| Boat Deckhand.....                       | \$ 41.22 | 30.93   |
| Boat Operator.....                       | \$ 43.43 | 30.93   |
| Master Boat Operator.....                | \$ 43.58 | 30.93   |
| Dredging: (Clamshell or Dipper Dredging) |          |         |
| GROUP 1.....                             | \$ 43.94 | 30.93   |
| GROUP 2.....                             | \$ 43.28 | 30.93   |
| GROUP 3.....                             | \$ 42.88 | 30.93   |
| GROUP 4.....                             | \$ 41.22 | 30.93   |
| Dredging: (Derricks)                     |          |         |
| GROUP 1.....                             | \$ 43.94 | 30.93   |
| GROUP 2.....                             | \$ 43.28 | 30.93   |
| GROUP 3.....                             | \$ 42.88 | 30.93   |
| GROUP 4.....                             | \$ 41.22 | 30.93   |
| Dredging: (Hydraulic Suction Dredges)    |          |         |
| GROUP 1.....                             | \$ 43.58 | 30.93   |

|              |          |       |
|--------------|----------|-------|
| GROUP 2..... | \$ 43.43 | 30.93 |
| GROUP 3..... | \$ 43.28 | 30.93 |
| GROUP 4..... | \$ 43.22 | 30.93 |
| GROUP 5..... | \$ 37.88 | 26.76 |
| Group 5..... | \$ 42.88 | 30.93 |
| GROUP 6..... | \$ 37.77 | 26.76 |
| Group 6..... | \$ 42.77 | 30.93 |
| GROUP 7..... | \$ 36.22 | 26.76 |
| Group 7..... | \$ 41.22 | 30.93 |

CLAMSHELL OR DIPPER DREDGING CLASSIFICATIONS

- GROUP 1: Clamshell or Dipper Operator.
- GROUP 2: Mechanic or Welder; Watch Engineer.
- GROUP 3: Barge Mate; Deckmate.
- GROUP 4: Bargeman; Deckhand; Fireman; Oiler.

HYDRAULIC SUCTION DREDGING CLASSIFICATIONS

- GROUP 1: Leverman.
- GROUP 2: Watch Engineer (steam or electric).
- GROUP 3: Mechanic or Welder.
- GROUP 4: Dozer Operator.
- GROUP 5: Deckmate.
- GROUP 6: Winchman (Stern Winch on Dredge)
- GROUP 7: Deckhand (can operate anchor scow under direction of Deckmate); Fireman; Leveeman; Oiler.

DERRICK CLASSIFICATIONS

- GROUP 1: Operators (Derricks, Piledrivers and Cranes).
- GROUP 2: Saurman Type Dragline (over 5 cubic yards).
- GROUP 3: Deckmate; Saurman Type Dragline (up to and including 5 yards).
- GROUP 4: Deckhand, Fireman, Oiler.

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 ENGI0003-044 09/03/2018

Rates                      Fringes

Power Equipment Operators  
 (PAVING)

|  |          |       |
|--|----------|-------|
| Asphalt Concrete Material  |          |       |
| Transfer.....  | \$ 42.92 | 32.08 |
| Asphalt Plant Operator.....  | \$ 43.35 | 32.08 |
| Asphalt Raker.....   | \$ 41.96 | 32.08 |
| Asphalt Spreader Operator...\$   | 43.44    | 32.08 |
| Cold Planer.....   | \$ 43.75 | 32.08 |
| Combination Loader/Backhoe<br>(over 3/4 cu.yd.).....   | \$ 41.96 | 32.08 |
| Combination Loader/Backhoe<br>(up to 3/4 cu.yd.).....  | \$ 40.98 | 32.08 |
| Concrete Saws and/or<br>Grinder (self-propelled<br>unit on streets, highways,<br>airports and canals)..... | \$ 42.92 | 32.08 |
| Grader.....  | \$ 43.75 | 32.08 |
| Laborer, Hand Roller.....  | \$ 41.46 | 32.08 |
| Loader (2 1/2 cu. yds. and<br>under).....  | \$ 42.92 | 32.08 |
| Loader (over 2 1/2 cu.<br>yds. to and including 5<br>cu. yds.).....  | \$ 43.24 | 32.08 |
| Roller Operator (five tons   |          |       |

|  |          |       |
|--|----------|-------|
| and under).....                          | \$ 41.69 | 32.08 |
| Roller Operator (over five<br>tons)..... | \$ 43.12 | 32.08 |
| Screed Person.....                       | \$ 42.92 | 32.08 |
| Soil Stabilizer.....                     | \$ 43.75 | 32.08 |

IRON0625-001 09/01/2020

|   | Rates    | Fringes |
|---|----------|---------|
| Ironworkers:.....   | \$ 42.50 | 36.84   |
| 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. |          |         |

LAB00368-001 09/02/2020

|   | Rates    | Fringes |
|---|----------|---------|
| Laborers:   |          |         |
| Driller.....                                      | \$ 39.70 | 22.68   |
| Final Clean Up.....                               | \$ 29.65 | 18.17   |
| Gunite/Shotcrete Operator<br>and High Scaler..... | \$ 39.20 | 22.68   |
| Laborer I.....                                    | \$ 38.70 | 22.68   |
| Laborer II.....                                   | \$ 36.10 | 22.68   |
| Mason Tender/Hod Carrier....                      | \$ 39.20 | 22.68   |
| Powderman.....                                    | \$ 39.70 | 22.68   |
| Window Washer (bosun chair).\$                    | 38.20    | 22.68   |

LABORERS CLASSIFICATIONS

Laborer I: Air Blasting run by electric or pneumatic compressor; Asphalt Laborer, Ironer, Raker, Luteman, and Handroller, and all types of Asphalt Spreader Boxes; Asphalt Shoveler; Assembly and Installation of Multiplates, Liner Plates, Rings, Mesh, Mats; Batching Plant (portable and temporary); Boring Machine Operator (under streets and sidewalks); Buggymobile; Burning and Welding; Chainsaw, Faller, Logloader, and Bucker; Compactors (Jackson Jumping Jack and 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, and sidewalks); Concrete Core Cutter (Walls, Floors, and 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 and cleaning of equipment); Concrete and/or Asphalt Saw (Walking or Handtype) (cutting walls or flatwork) (scoring old or new concrete and/or asphalt) (cutting for expansion joints) (streets and ways for laying of pipe, cable or conduit for all purposes); 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 and the pouring of concrete to secure the hole; Cribbers, Shorer, Lagging, Sheeting, and Trench Jacking and Bracing, Hand-Guided Lagging Hammer Whaling Bracing; Curbing (Concrete and Asphalt); Curing of Concrete (impervious membrane and form oiler) mortar and other materials by any mode or method; Cut Granite Curb Setter (setting, leveling and grouting of all precast concrete or stone curbs); Cutting and Burning Torch (demolition); Dri Pak-It Machine; Environmental Abatement: removal of asbestos, lead, and bio hazardous materials (EPA and/or OSHA certified); Falling, bucking, yarding, loading or burning of all trees or timber on construction site; Forklift (9 ft. and under); Gas, Pneumatic, and Electric tools; Grating and Grill work for drains or other purposes; Green Cutter of concrete or aggregate in any form, by hand, mechanical means, grindstone or air and/or water; Grout: Spreading for any purpose; Guinea Chaser (Grade Checker) for general utility trenches, sitework, and excavation; Headerboard Man (Asphalt or Concrete); Heat Welder of Plastic (Laborers' AGC certified workers) (when work involves waterproofing for waterponds, artificial lakes and reservoir) heat welding for sewer pipes and fusion of HDPE pipes; Heavy Highway Laborer (Rigging, signaling, handling, and installation of pre-cast catch basins, manholes, curbs and gutters); High Pressure Nozzleman - Hydraulic Monitor (over 100# pressure); Jackhammer Operator; Jacking of slip forms: All semi and unskilled work connected therewithin; Laying of all multi-cell conduit or multi-purpose pipe; Magnesite and Mastic Workers (Wet or Dry)(including mixer operator);Mortar Man; Mortar Mixer (Block, Brick, Masonry, and Plastering); Nozzleman (Sandblasting and/or Water Blasting): handling, placing and operation of nozzle; Operation, Manual or Hydraulic jacking of shields and the use of such other mechanical equipment as may be necessary; Pavement Breakers; Paving, curbing and surfacing of streets, ways, courts, under and overpasses, bridges, approaches, slope walls, and all other labor connected therewith; Pilecutters; Pipe Accessment in place, bolting and lining up of sectional metal or other pipe including corrugated pipe; Pipelayer performing all services in the laying and installation of pipe from the point of receiving pipe in the ditch until completion of operation, including any and all forms of tubular material, whether pipe, HDPE, metallic or non-metallic, conduit, and 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 and without regard to the nature of material from which tubular material is fabricated; No-joint pipe and stripping of same, Pipewrapper, Caulker, Bander, Kettleman, and men applying asphalt, Laykold, treating Creosote and similar-type materials (6-inch) pipe and over); Piping: resurfacing and 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 and marking of the joint used for main or side sewers and storm sewers; Laying of all clay, terra cotta, ironstone, vitrified concrete, HDPE or other pipe for drainage; Placing and setting of water mains, gas mains and all pipe including removal of skids; Plaster Mortar Mixer/Pump; Pneumatic Impact Wrench; Portable Sawmill Operation: Choker setters, off bearers, and lumber handlers

connected with clearing; Posthole Digger (Hand Held, Gas, Air and Electric); Powderman's Tender; Power Broom Sweepers (Small); Preparation and Compaction of roadbeds for railroad track laying, highway construction, and 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 and 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 and Signaling of building materials into high rise units; Riprap, Stonepaver, and Rock Slinger (includes placement of stacked concrete, wet or dry and loading, unloading, signaling, slinging and 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 and hanging) including maintenance thereof; Scaler; Septic Tank/Cesspool and Drain Fields Digger and Installer; Shredder/Chipper (tree branches, brush, etc.); Stripping and Setting Forms; Stripping of Forms: Other than panel forms which are to be re-used in their original form, and stripping of forms on all flat arch work; Tampers (Barko, Wacker, and similar type); Tank Scaler and Cleaners; Tarman; Tree Climbers and Trimmers; Trencher (includes hand-held, Davis T-66 and similar type); Trucks (flatbed up to and including 2 1/2 tons when used in connection with on-site Laborers' work; Trucks (Refuse and 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.

Laborer II: Asphalt Plant Laborer; Boring Machine Tender; Bridge Laborer; Burning of all debris (crates, boxes, packaging waste materials); Chainman, Rodmen, and Grade Markers; Cleaning, clearing, grading and/or removal for streets, highways, roadways, aprons, runways, sidewalks, parking areas, airports, approaches, and other similar installations; Cleaning or reconditioning of streets, ways, sewers and waterlines, all maintenance work and work of an unskilled and semi-skilled nature; Concrete Bucket Tender (Groundman) hooking and unhooking of bucket; Concrete Forms; moving, cleaning, oiling and carrying to the next point of erection of all forms; Concrete Products Plant Laborers; Conveyor Tender (conveying of building materials); Crushed Stone Yards and Gravel and Sand Pit Laborers and all other similar plants; Demolition, Wrecking and Salvage Laborers: Wrecking and dismantling of buildings and all structures, with use of cutting or wrecking tools, breaking away, cleaning and 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 and filling of she-bolt holes); Fence and/or Guardrail Erector: Dismantling and/or re-installation of all fence; Finegrader; Firewatcher; Flagman (Coning, preparing, stablishing and 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 and all other labor connected therewith; Digging of

trenches, ditches and manholes and the leveling, grading and other preparation prior to laying pipe or conduit for any purpose; Excavations and foundations for buildings, piers, foundations and holes, and all other construction. Preparation of street ways and bridges; General Laborer: Cleaning and Clearing of all debris and surplus material. Clean-up of right-of-way. Clearing and slashing of brush or trees by hand or mechanical cutting. General Clean up: sweeping, cleaning, wash-down, wiping of construction facility and equipment (other than "Light Clean up (Janitorial) Laborer. Garbage and Debris Handlers and Cleaners. Appliance Handling (job site) (after delivery unloading in storage area); Ground and Soil Treatment Work (Pest Control); Guniting/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 and reservoirs); Limbers, Brush Loaders, and Pilers; Loading, Unloading, carrying, distributing and handling of all rods and 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 and distribution of water mains, gas mains and all pipes; Loading and unloading of all materials, fixtures, furnishings and appliances from point of delivery to stockpile to point of installation; hooking and signaling from truck, conveyance or stockpile; Material Yard Laborers; Pipelayer Tender; Pipewrapper, Caulker, Bander, Kettlemen, and men applying asphalt, Laykold, Creosote, and similar-type materials (pipe under 6 inches); Plasterer Laborer; Preparation, construction and maintenance of roadbeds and sub-grade for all paving, including excavation, dumping, and 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, and Rail Transit Maintenance and Repair; Roustabout; Rubbish Trucks in connection with Building Construction Projects (excluding clearing, grubbing, and excavating); Salvage Yard: All work connected with cutting, cleaning, storing, stockpiling or handling of materials, all cleanup, removal of debris, burning, back-filling and landscaping of the site; Sandblasting Tender (Pot Tender): Hoses and pots or markers; Scaffolds: Erection, planking and removal of all scaffolds used for support for lathers, plasters, brick layers, masons, and other construction trades crafts; Scaffolds: (Specially designed by carpenters) laborers shall tend said carpenter on erection and dismantling thereof, preparation for foundation or mudsills, maintenance; Scraping of floors; Screeds: Handling of all screeds to be reused; handling, dismantling and conveyance of screeds; Setting, leveling and securing or bracing of metal or other road forms and expansion joints; Sheet Piling/trench shoring (handling and placing of skip sheet or wood plank trench shoring); Ship Scalers; Shipwright Tender; Sign Erector (subdivision traffic, regulatory, and street-name signs); Sloper; Slurry Seal Crews (Mixer Operator, Applicator, Squeegee Man, Shuttle Man, Top Man); Snapping of wall ties and removal of tie rods; Soil Test operations of semi and unskilled labor such as filling sand bags; Stripper (Asphalt, Concrete or other Paved Surfaces); Tool Room Attendant (Job Site); Traffic Delineating Device Applicator; Underpinning, lagging, bracing, propping and 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 and handling concrete forms an false work.

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LAB00368-002 09/01/2020

|                                 | Rates    | Fringes |
|---------------------------------|----------|---------|
| Landscape & Irrigation Laborers |          |         |
| GROUP 1.....                    | \$ 26.40 | 14.25   |
| GROUP 2.....                    | \$ 27.40 | 14.25   |
| GROUP 3.....                    | \$ 21.70 | 14.25   |

LABORERS CLASSIFICATIONS

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 of landscaping 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):.

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).

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 performance of other types of gardening, yardman, and horticultural-related work.

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LAB00368-003 09/02/2020

|                     | Rates    | Fringes |
|---------------------|----------|---------|
| Underground Laborer |          |         |
| GROUP 1.....        | \$ 39.30 | 22.68   |
| GROUP 2.....        | \$ 40.80 | 22.68   |
| GROUP 3.....        | \$ 41.30 | 22.68   |
| GROUP 4.....        | \$ 42.30 | 22.68   |
| GROUP 5.....        | \$ 42.65 | 22.68   |
| GROUP 6.....        | \$ 42.90 | 22.68   |



GROUP 7.....\$ 43.35

22.68

GROUP 1: Watchmen; Change House Attendant.

GROUP 2: Swamper; Brakeman; Bull Gang-Muckers, Trackmen; Dumpmen (any method); Concrete Crew (includes rodding and spreading); Grout Crew; Reboundmen

GROUP 3: Chucktenders and Cabetenders; Powderman (Prime House); Vibratorman, Pavement Breakers

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

GROUP 5: Shaft Work & Raise (below actual or excavated ground level); Diamond Driller; Gunite or Shotcrete Nozzleman; Rodman; Groundman

GROUP 6: Shifter

GROUP 7: Shifter (Shaft Work & Raiser)

-----  
PAIN1791-001 07/01/2021

|                         | Rates    | Fringes |
|-------------------------|----------|---------|
| Painters:               |          |         |
| Brush.....              | \$ 38.90 | 30.09   |
| Sandblaster; Spray..... | \$ 38.90 | 30.09   |

-----  
PAIN1889-001 07/01/2021

|               | Rates    | Fringes |
|---------------|----------|---------|
| Glaziers..... | \$ 40.50 | 36.18   |

-----  
PAIN1926-001 02/28/2021

|                        | Rates    | Fringes |
|------------------------|----------|---------|
| Soft Floor Layers..... | \$ 37.77 | 32.07   |

-----  
PAIN1944-001 01/05/2020

|            | Rates    | Fringes |
|------------|----------|---------|
| Taper..... | \$ 43.10 | 29.90   |

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\* PLAS0630-001 08/30/2021

|                | Rates    | Fringes |
|----------------|----------|---------|
| PLASTERER..... | \$ 44.21 | 32.83   |

-----  
PLAS0630-002 08/31/2020

|                              | Rates    | Fringes |
|------------------------------|----------|---------|
| Cement Masons:               |          |         |
| Cement Masons.....           | \$ 42.65 | 32.29   |
| Trowel Machine Operators.... | \$ 42.80 | 32.29   |

-----  
 PLUM0675-001 07/04/2021

|   | Rates    | Fringes |
|---|----------|---------|
| Plumber, Pipefitter,<br>Steamfitter & Sprinkler Fitter... | \$ 48.63 | 28.40   |

-----  
 ROOF0221-001 09/06/2020

|  | Rates    | Fringes |
|--|----------|---------|
| Roofers (Including Built Up,<br>Composition and Single Ply)..... | \$ 41.80 | 20.50   |

-----  
 SHEE0293-001 09/02/2018

|                         | Rates    | Fringes |
|-------------------------|----------|---------|
| Sheet metal worker..... | \$ 42.55 | 27.44   |

-----  
 SUHI1997-002 09/15/1997

|  | Rates    | Fringes |
|--|----------|---------|
| Drapery Installer.....                   | \$ 13.60 | 1.20    |
| FENCE ERECTOR (Chain Link<br>Fence)..... | \$ 9.33  | 1.65    |

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 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 [www.dol.gov/whd/govcontracts](http://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) (ii)).

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The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

#### Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which 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. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

#### Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of 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. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

#### Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of

each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

-----  
 WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- \* an existing published wage determination
- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter
- \* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write 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 the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write 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 by 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

4.) All decisions by the Administrative Review Board are final.  
 =====

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: FREEWAY MANGEMENT SYSTEM  
PHASE 3, Unit 1**

**PROJECT NO.: NH-0300(152)**

**COMPLETION TIME: 617 Working days from the Start Work Date from  
the Department.**

**DBE PROJECT GOAL: None specified or 10.9 %**

**DESIGN PROJECT MANAGER:**

**NAME Neal K. Honma  
ADDRESS 601 Kamokila Blvd., Rm 602  
PHONE NO. (808) 692-7675  
FAX NO. (808) 692-7690**

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 103D-323, Hawaii Revised Statutes.



2. That the quantities given in the attached proposal schedule are approximate only and are intended principally to serve as a guide in determining and comparing the bids.
3. That the Department does not either expressly or by implication, agree that the actual amount of work will correspond therewith, but reserves the right to increase or decrease the amount of any class or portion of the work, or to omit portions of the work, as may be deemed necessary or advisable by the Director of Transportation, and that all increased or decreased quantities of work shall be performed at the unit prices set forth in the attached proposal schedule except as provided for in the specifications.
4. In case of a discrepancy between unit prices and the totals in said Proposal Schedule, the unit prices shall prevail.
5. 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.

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, the Notice to Bidders, the Special Provisions, the Technical Provisions, the Proposal, the Contract and Bond Forms, and the Project Plans.

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

\_\_\_\_\_ Surety Bid Bond (Use standard form),

\_\_\_\_\_ Cash,

\_\_\_\_\_ Cashier's Check,

\_\_\_\_\_ Certified Check, or

\_\_\_\_\_ (Fill in other acceptable security.)

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

Addendum No. 1 \_\_\_\_\_ Addendum No. 3 \_\_\_\_\_

Addendum No. 2 \_\_\_\_\_ Addendum No. 4 \_\_\_\_\_

In accordance with Section 103D-302, Hawaii Revised Statutes, the undersigned as Bidder has listed the name of each person or firm, who will be engaged by the Bidder on the project as 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 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.

The undersigned bidder asserts that affirmative action has been taken to seek out and consider Disadvantaged Business Enterprises (DBEs) for portions of the work which can be subcontracted, and the affirmative actions of the bidder are fully documented in its records and are available upon request by the Department. It is also understood that it must meet or exceed the DBE contact goal listed on page P-1 or demonstrate that it made good faith efforts to meet the DBE project goal. The undersigned as bidder, agrees to utilize each participating DBE that it submitted to meet the contract goal of \_\_\_\_\_% (percentage to be completed by bidder) DBE participation if the contract is awarded to it, and shall maintain such DBE participation during the construction of this project.

**SUBCONTRACTOR LISTING**  
(Attach additional sheets if necessary.)

|                       | NAME OF FIRM | NATURE OF WORK |
|-----------------------|--------------|----------------|
| <b>SUBCONTRACTOR:</b> |              |                |
| 1.                    | _____        | _____          |
| 1a <sup>1</sup> .     | _____        | _____          |
| 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 Subcontractor 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 Subcontractor or Joint Contractor.

\_\_\_\_\_

<sup>1</sup> Second tier subcontractors

**JOINT CONTRACTOR LISTING**  
 (Attach additional sheets if necessary.)

|                          | NAME OF FIRM            | NATURE OF WORK |
|--------------------------|-------------------------|----------------|
| <b>JOINT CONTRACTOR:</b> |                         |                |
| 1.                       | _____                   | _____          |
|                          | 1a <sup>1</sup> . _____ | _____          |
| 1.                       | _____                   | _____          |
|                          | 2a. _____               | _____          |
| 2.                       | _____                   | _____          |
|                          | 3a. _____               | _____          |
| 3.                       | _____                   | _____          |
|                          | 4a. _____               | _____          |
| 4.                       | _____                   | _____          |
|                          | 5a. _____               | _____          |
| 5.                       | _____                   | _____          |
|                          | 6a. _____               | _____          |
| 6.                       | _____                   | _____          |
|                          | 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 Subcontractor 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 Subcontractor or Joint Contractor.

\_\_\_\_\_

<sup>1</sup> Second tier subcontractors

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

BY \_\_\_\_\_  
Authorized Signature

\_\_\_\_\_  
Title

\_\_\_\_\_  
Business Address

\_\_\_\_\_  
E-mail Address

\_\_\_\_\_  
Business Telephone

\_\_\_\_\_  
Date

\_\_\_\_\_  
Contact Person (If different from above.)

\_\_\_\_\_  
Phone Number & E-mail Address

NOTE:

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

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

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

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

| PROPOSAL SCHEDULE                 |  |                      |          |                |                  |
|-----------------------------------|--|----------------------|----------|----------------|------------------|
| ITEM NO.                          | ITEM   | APPROX. QUANTITY (a) | UNIT     | UNIT PRICE (c) | AMOUNT (a) x (c) |
| <b>BASE BID PROPOSAL SCHEDULE</b> |  |                      |          |                |                  |
| 201.0100                          | CLEARING AND GRUBBING  | 72,000               | S.F.     | \$ _____       | \$ _____         |
| 209.0100                          | INSTALLATION, MAINTENANCE, MONITORING, AND REMOVAL OF BMP        | 38                   | MONTHS   | \$ _____       | \$ _____         |
| 209.0200                          | ADDITIONAL WATER POLLUTION, DUST, AND EROSION CONTROL            | F.A.                 | F.A.     | F.A.           | \$ 46,000.00     |
| 212.0100                          | ARCHAEOLOGICAL MONITORING  | F.A.                 | F.A.     | F.A.           | \$ 25,000.00     |
| 511.0100                          | H2 SOUTH CCTV DRILLED SHAFT AND PILE CAP (1)                     | 13                   | LIN. FT. | \$ _____       | \$ _____         |
| 511.0200                          | WAIKELE CCTV DRILLED SHAFT AND PILE CAP (1)                      | 15                   | LIN. FT. | \$ _____       | \$ _____         |
| 621.0001                          | MIDDLE STREET TO AHUA STREET, TRENCH EXCAVATION                  | 430                  | LIN. FT. | \$ _____       | \$ _____         |
| 621.0002                          | MIDDLE STREET TO AHUA STREET, CONCRETE                           | 11                   | C.Y      | \$ _____       | \$ _____         |
| 621.0003                          | MIDDLE STREET TO AHUA STREET, 2"C PVC SCHEDULE 40                | 860                  | LIN. FT. | \$ _____       | \$ _____         |
| 621.0004                          | MIDDLE STREET TO AHUA STREET, 2"C PVC COATED GRC                 | 19,600               | LIN. FT. | \$ _____       | \$ _____         |
| 621.0005                          | MIDDLE STREET TO AHUA STREET, SPLICE CABINET                     | 2                    | EACH     | \$ _____       | \$ _____         |
| 621.0006                          | MIDDLE STREET TO AHUA STREET, 24"X36" TRAFFIC SIGNAL PULLBOX     | 2                    | EACH     | \$ _____       | \$ _____         |
| 621.0007                          | MIDDLE STREET TO AHUA STREET, 32"X32"X8" STAINLESS STEEL PULLBOX | 14                   | EACH     | \$ _____       | \$ _____         |
| 621.0008                          | MIDDLE STREET TO AHUA STREET, 32"X36"X8" STAINLESS STEEL PULLBOX | 14                   | EACH     | \$ _____       | \$ _____         |

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| PROPOSAL SCHEDULE                 |  |                      |          |                |                  |
|-----------------------------------|--|----------------------|----------|----------------|------------------|
| ITEM NO.                          | ITEM   | APPROX. QUANTITY (a) | UNIT     | UNIT PRICE (c) | AMOUNT (a) x (c) |
| <b>BASE BID PROPOSAL SCHEDULE</b> |  |                      |          |                |                  |
| 621.0009                          | MIDDLE STREET TO AHUA STREET, HECO METER PEDESTAL  | 1                    | EACH     | \$ _____       | \$ _____         |
| 621.0010                          | MIDDLE STREET TO AHUA STREET, HECO CHARGES   | F.A.                 | F.A.     | F.A.           | \$ _____         |
| 621.0011                          | WAIAWA ROAD STUB, TRENCH EXCAVATION  | 350                  | LIN. FT. | \$ _____       | \$ _____         |
| 621.0012                          | WAIAWA ROAD STUB, CONCRETE   | 9                    | C.Y      | \$ _____       | \$ _____         |
| 621.0013                          | WAIAWA ROAD STUB, 2"C PVC SCHEDULE 40  | 1600                 | LIN. FT. | \$ _____       | \$ _____         |
| 621.0014                          | WAIAWA ROAD STUB, SPLICE CABINET   | 1                    | EACH     | \$ _____       | \$ _____         |
| 621.0015                          | WAIAWA ROAD STUB, 24"X36" TRAFFIC SIGNAL PULLBOX   | 2                    | EACH     | \$ _____       | \$ _____         |
| 621.0016                          | FARRINGTON/KAMEHAMEHA CABINET TO H2 SOUTH CCTV TO H2 VMS CABINET, TRENCH EXCAVATION          | 4680                 | LIN. FT. | \$ _____       | \$ _____         |
| 621.0017                          | FARRINGTON/KAMEHAMEHA CABINET TO H2 SOUTH CCTV TO H2 VMS CABINET, CONCRETE                   | 111                  | C.Y      | \$ _____       | \$ _____         |
| 621.0018                          | FARRINGTON/KAMEHAMEHA CABINET TO H2 SOUTH CCTV TO H2 VMS CABINET, 2"C PVC SCHEDULE 40        | 9930                 | LIN. FT. | \$ _____       | \$ _____         |
| 621.0019                          | FARRINGTON/KAMEHAMEHA CABINET TO H2 SOUTH CCTV TO H2 VMS CABINET, 2"C PVC COATED GRC         | 4780                 | LIN. FT. | \$ _____       | \$ _____         |
| 621.0020                          | FARRINGTON/KAMEHAMEHA CABINET TO H2 SOUTH CCTV TO H2 VMS CABINET, ELECTRICAL CABLE           | 7820                 | LIN. FT. | \$ _____       | \$ _____         |
| 621.0021                          | FARRINGTON/KAMEHAMEHA CABINET TO H2 SOUTH CCTV TO H2 VMS CABINET, 24"X36" TRAFFIC SIGNAL BOX | 14                   | EACH     | \$ _____       | \$ _____         |

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| PROPOSAL SCHEDULE                 |   |                      |          |                |                  |
|-----------------------------------|---|----------------------|----------|----------------|------------------|
| ITEM NO.                          | ITEM  | APPROX. QUANTITY (a) | UNIT     | UNIT PRICE (c) | AMOUNT (a) x (c) |
| <b>BASE BID PROPOSAL SCHEDULE</b> |   |                      |          |                |                  |
| 621.0022                          | FARRINGTON/KAMEHAMEHA CABINET TO H2 SOUTH CCTV TO H2 VMS CABINET, TYPE "A" TRAFFIC RATED TRAFFIC SIGNAL BOX | 2                    | EACH     | \$ _____       | \$ _____         |
| 621.0023                          | FARRINGTON/KAMEHAMEHA CABINET TO H2 SOUTH CCTV TO H2 VMS CABINET, SPLICE CABINET                            | 2                    | EACH     | \$ _____       | \$ _____         |
| 621.0024                          | FARRINGTON/KAMEHAMEHA CABINET TO H2 SOUTH CCTV TO H2 VMS CABINET, 32"X32"X8" STAINLESS STEEL JUNCTION BOX   | 15                   | EACH     | \$ _____       | \$ _____         |
| 621.0025                          | FARRINGTON/KAMEHAMEHA CABINET TO H2 SOUTH CCTV TO H2 VMS CABINET, ENCLOSED CIRCUIT BREAKER                  | 1                    | EACH     | \$ _____       | \$ _____         |
| 621.0026                          | FARRINGTON/KAMEHAMEHA CABINET TO H2 SOUTH CCTV TO H2 VMS CABINET, STEPDOWN TRANSFORMER 2KVA PEDESTAL        | 1                    | EACH     | \$ _____       | \$ _____         |
| 621.0027                          | WAIHONA STREET STUB, TRENCH EXCAVATION  | 300                  | LIN. FT. | \$ _____       | \$ _____         |
| 621.0028                          | WAIHONA STREET STUB, CONCRETE   | 10                   | C.Y      | \$ _____       | \$ _____         |
| 621.0029                          | WAIHONA STREET STUB, 2"C PVC SCHEDULE 40  | 600                  | LIN. FT. | \$ _____       | \$ _____         |
| 621.0030                          | WAIHONA STREET STUB, SPLICE CABINET   | 1                    | EACH     | \$ _____       | \$ _____         |
| 621.0031                          | WAIHONA STREET STUB, 24"X36" TRAFFIC SIGNAL PULLBOX   | 2                    | EACH     | \$ _____       | \$ _____         |
| 621.0032                          | WAIKELE CCTV, TRENCH EXCAVATION   | 2500                 | LIN. FT. | \$ _____       | \$ _____         |
| 621.0033                          | WAIKELE CCTV, CONCRETE  | 80                   | C.Y.     | \$ _____       | \$ _____         |
| 621.0034                          | WAIKELE CCTV, 2"C PVC SCHEDULE 40   | 10,160               | LIN. FT. | \$ _____       | \$ _____         |
| 621.0035                          | WAIKELE CCTV, ELECTRICAL CABLE  | 6030                 | LIN. FT. | \$ _____       | \$ _____         |

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| PROPOSAL SCHEDULE                 |  |                      |          |                |                  |
|-----------------------------------|--|----------------------|----------|----------------|------------------|
| ITEM NO.                          | ITEM   | APPROX. QUANTITY (a) | UNIT     | UNIT PRICE (c) | AMOUNT (a) x (c) |
| <b>BASE BID PROPOSAL SCHEDULE</b> |  |                      |          |                |                  |
| 621.0036                          | WAIKELE CCTV, 24"X36" TRAFFIC SIGNAL PULLBOX   | 23                   | EACH     | \$ _____       | \$ _____         |
| 621.0037                          | WAIKELE CCTV, ENCLOSED CIRCUIT BREAKER   | 1                    | EACH     | \$ _____       | \$ _____         |
| 621.0038                          | WAIKELE CCTV, STEPDOWN TRANSFORMER 2KVA PEDESTAL   | 1                    | EACH     | \$ _____       | \$ _____         |
| 636.0100                          | E-CONSTRUCTION LICENSE   | F.A.                 | F.A.     | F.A.           | \$ 178,000.00    |
| 645.0100                          | TRAFFIC CONTROL H2 SOUTH SITE  | 45                   | DAYS     | \$ _____       | \$ _____         |
| 645.0200                          | TRAFFIC CONTROL H1/WAIKELE CCTV SITE   | 31                   | DAYS     | \$ _____       | \$ _____         |
| 645.0300                          | TRAFFIC CONTROL AALA TO PALI SITE  | 3                    | DAYS     | \$ _____       | \$ _____         |
| 645.0400                          | TRAFFIC CONTROL KEEHI IC SITE  | 33                   | DAYS     | \$ _____       | \$ _____         |
| 645.0500                          | TRAFFIC CONTROL WAIAWA IC SITE   | 48                   | DAYS     | \$ _____       | \$ _____         |
| 645.0600                          | ADDITIONAL POLICE OFFICERS, ADDITIONAL TRAFFIC CONTROL DEVICES, AND ADVERTISEMENT              | F.A.                 | F.A.     | F.A.           | \$ 105,000.00    |
| 647.0001                          | AALA STREET TO PALI HWY, FIBER OPTIC CABLE IN CONDUIT  | 2500                 | LIN. FT. | \$ _____       | \$ _____         |
| 647.0002                          | MIDDLE STREET TO AHUA STREET, FIBER OPTIC CABLE IN CONDUIT                                     | 7420                 | LIN. FT. | \$ _____       | \$ _____         |
| 647.0003                          | WAIAWA ROAD STUB, FIBER OPTIC CABLE IN CONDUIT   | 800                  | LIN. FT. | \$ _____       | \$ _____         |
| 647.0004                          | FARRINGTON/KAMEHAMEHA CABINET TO H2 SOUTH CCTV TO H2 VMS CABINET, FIBER OPTIC CABLE IN CONDUIT | 11,510               | LIN. FT. | \$ _____       | \$ _____         |
| 647.0005                          | WAIHONA STREET STUB, FIBER OPTIC CABLE IN CONDUIT  | 300                  | LIN. FT. | \$ _____       | \$ _____         |

| PROPOSAL SCHEDULE                 |  |                      |          |                |                  |
|-----------------------------------|--|----------------------|----------|----------------|------------------|
| ITEM NO.                          | ITEM   | APPROX. QUANTITY (a) | UNIT     | UNIT PRICE (c) | AMOUNT (a) x (c) |
| <b>BASE BID PROPOSAL SCHEDULE</b> |  |                      |          |                |                  |
| 647.0006                          | WAIKELE CCTV, FIBER OPTIC CABLE IN CONDUIT         | 3630                 | LIN. FT. | \$ _____       | \$ _____         |
| 648.0100                          | FIELD POSTED DRAWINGS                              | L.S.                 | L.S.     | L.S.           | \$ _____         |
| 652.0100                          | HDD (DUCTLINE 1 – STA. 0+00 TO STA. 0+84.87)       | 90                   | LIN. FT. | \$ _____       | \$ _____         |
| 652.0200                          | HDD (DUCTLINE 1 – STA. 0+84.87 TO STA. 5+46.77)    | 470                  | LIN. FT. | \$ _____       | \$ _____         |
| 652.0300                          | HDD (DUCTLINE 1 – STA. 5+46.77 TO STA. 10+73.49)   | 530                  | LIN. FT. | \$ _____       | \$ _____         |
| 652.0400                          | HDD (DUCTLINE 2 – STA. 0+00 TO STA. 2+93.93)       | 300                  | LIN. FT. | \$ _____       | \$ _____         |
| 652.0500                          | HDD (DUCTLINE 3 – STA. 0+00 TO STA. 1+97.48)       | 200                  | LIN. FT. | \$ _____       | \$ _____         |
| 652.0600                          | HDD (DUCTLINE 4 – STATION 0+00 TO STATION 7+39.96) | 750                  | LIN. FT. | \$ _____       | \$ _____         |
| 681.0100                          | CCTV POLE, 50 - FOOT                               | 2                    | EACH     | \$ _____       | \$ _____         |
| 681.0101                          | CAMERA LOWERING SYSTEM                             | 4                    | EACH     | \$ _____       | \$ _____         |
| 681.0102                          | CLS TRAINING                                       | L.S.                 | L.S.     | L.S.           | \$ _____         |
| 681.0103                          | CCTV CABINET                                       | 2                    | EACH     | \$ _____       | \$ _____         |
| 681.0104                          | CABINET FOUNDATION                                 | 2                    | EACH     | \$ _____       | \$ _____         |
| 681.0105                          | TWO 2-INCH CONDUIT, SCH 40 PVC, CONCRETE ENCASED   | L.S.                 | L.S.     | L.S.           | \$ _____         |
| 682.0100                          | INSTALL GFE ETHERNET SWITCH                        | 8                    | EACH     | \$ _____       | \$ _____         |
| 683.0100                          | CCTV CAMERA ON CLS                                 | 4                    | EACH     | \$ _____       | \$ _____         |

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| PROPOSAL SCHEDULE  |   |                      |         |                |                  |
|--|---|----------------------|---------|----------------|------------------|
| ITEM NO.   | ITEM  | APPROX. QUANTITY (a) | UNIT    | UNIT PRICE (c) | AMOUNT (a) x (c) |
| <b>BASE BID PROPOSAL SCHEDULE</b>  |   |                      |         |                |                  |
| 687.0100   | FIBER OPTIC PIGTAIL   | 228                  | EACH    | \$ _____       | \$ _____         |
| 687.0101   | FIBER OPTIC SPLICE  | 702                  | EACH    | \$ _____       | \$ _____         |
| 687.0102   | FIBER OPTIC JUMPER  | 110                  | EACH    | \$ _____       | \$ _____         |
| 687.0103   | RACK MOUNTED INTERCONNECT CENTER  | 7                    | EACH    | \$ _____       | \$ _____         |
| 687.0104   | ADDITIONAL TESTING, SPLICING AND EQUIPMENT  | F.A.                 | F.A.    | F.A.           | \$ 95,000.00     |
| 695.0100   | PROJECT VEHICLES (1 VEHICLE)  | 38                   | VEH/MON | \$ _____       | \$ _____         |
| 696.0000   | MAINTENANCE OF FIELD OFFICE   | F.A.                 | F.A.    | F.A.           | \$ 50,000.00     |
| 699.1000   | MOBILIZATION (NOT TO EXCEED 6 PERCENT OF THE SUM OF ALL ITEMS EXCLUDING BID PRICE OF THIS ITEM AND FORCE ACCOUNT ITEMS) | L.S.                 | L.S.    | L.S.           | \$ _____         |
| Sum of All Items .....   |   |                      |         |                | \$ _____         |
| <p>NOTE:</p> <ol style="list-style-type: none"> <li>1. Bidders must complete all unit prices and amounts. Failure to do so may be grounds for rejection of bid.</li> <li>2. Bids shall include all Federal, State, County and other applicable taxes and fees.</li> <li>3. The Sum of all Items will be used to determine the lowest responsible bidder.</li> <li>4. If a discrepancy occurs between unit bid price and the bid price, the unit bid price shall govern.</li> </ol> |   |                      |         |                |                  |

1 **PROPOSAL SCHEDULE**

2  
3 The bidder is directed to Subsection 105.16 – Subcontracts.

4  
5 The bidder's attention is directed to Sections 696 - Field Office and Project  
6 Site Laboratory and 699 - Mobilization for the limitation of the amount bidders are  
7 allowed to bid.

8  
9 If the bid price for any proposal item having a maximum allowable bid  
10 indicated therefore in any of the contract documents is in excess of such a  
11 maximum amount, the bid price for such proposal item shall be adjusted to reflect  
12 the limitation thereon. The comparison of bids to determine the successful  
13 bidder and the amount of contract to be awarded shall be determined after such  
14 adjustments are made, and such adjustments shall be binding upon the bidder.

15  
16 The bidder is directed to Section 717 – Cullet and Cullet-Made Materials  
17 regarding recycling of waste glass.



## Disadvantaged Business Enterprise (DBE) Confirmation and Commitment Agreement Trucking Company

This commitment is subject to the award and receipt of a signed contract from the Hawaii Department of Transportation (HDOT) for the subject project. DBEs must be certified by the bid opening date.

|  |                              |
|--|------------------------------|
| <b>Project #:</b>                      | <b>County:</b>               |
| <b>NAICS CODE/DESCRIPTION OF WORK:</b> | <b>SECONDARY NAICS CODE:</b> |

\*All quantities and units should match the bid tab item whenever possible.

The prime contractor shall inform HDOT the dates when the trucking firm starts and completes all work under the subcontract.

|   |  |
|---|--|
| <b>Estimated Beginning Date (Month/Year):</b> | <b>Estimated Completion Date (Month/Year):</b> |
|---|--|

| <b>TRUCKING COMPANY:</b>       | Item No. | Item Description | Unit | Unit Price / Rate | Amount    |
|--------------------------------|----------|------------------|------|-------------------|-----------|
|                                |          |                  |      | \$                | \$        |
|                                |          |                  |      | \$                | \$        |
|                                |          |                  |      | \$                | \$        |
| <b>TOTAL COMMITMENT AMOUNT</b> |          |                  |      |                   | <b>\$</b> |

1. Number of hours contracted or quantities to be hauled: \_\_\_\_\_
2. Number of fully operational trucks to be used: \_\_\_\_\_ Tractor/trailers: \_\_\_\_\_ Dump trucks: \_\_\_\_\_
3. Number of fully operational trucks owned by DBE: \_\_\_\_\_ Dump trucks: \_\_\_\_\_ Tractors/trailers: \_\_\_\_\_

| 4. If Owner Operators or additional trucking companies are to be used answer the following: |         |   |                                     |
|---|---------|---|-------------------------------------|
| Name of Trucking Company  | DBE Y/N | Estimated. Dollar Amount to be Contracted | Number and Type of Trucks (specify) |
|   |         | \$  |                                     |
|   |         | \$  |                                     |

The prime contractor certifies by signature on this agreement to utilize the DBE trucking company as listed on the agreement form. If a DBE trucking company is unable to perform the work as listed on this agreement form, the prime contractor will follow the substitution/replacement approval process as outlined in the contract DBE requirements. **IMPORTANT! The signatures of the DBE, prime contractor, and subcontractor (only if the DBE will be a second tier sub) confirms that all information on this Agreement is true and correct. Parties should sign Agreement in the order in which they are listed.**

|   |                            |
|---|----------------------------|
| <b>DBE NAME:</b>  | Name/Title (please print): |
| Address:  | Signature:                 |
| Phone:                      Fax:                                  |                            |
| Email:  |                            |
| <b>Prime Contractor:</b>  | Name/Title (please print): |
| Address:  | Signature:                 |
| Phone:                      Fax:                                  |                            |
| Email:  |                            |
| <b>Subcontractor (only if the DBE will be a second tier sub):</b> | Name/Title (please print): |
| Address:  | Signature:                 |
| Phone:                      Fax:                                  |                            |
| Email:  |                            |

HDOT retains the information collected through this form. With few exceptions, you are entitled on request to be informed about the information that we collect about you.



## Disadvantaged Business Enterprise (DBE) Confirmation and Commitment Agreement Trucking Company INSTRUCTIONS

The purpose of this agreement is to secure the commitment of the bidder/offeror to utilize the listed DBE trucking company, and the DBE's confirmation that it will perform work for the bidder/offeror on this project. The information on this form shall be provided by the DBE.

|   |   |
|---|---|
| Project #   | Self-explanatory  |
| County  | County where project is located   |
| NAICS Code/Description of Work                        | Primary North American Industry Classification System code under which DBE is certified to perform and description of work to be done |
| Secondary NAICS Code                                  | List other NAICS codes firm is certified to perform   |
| Estimated Beginning Date (Month/Year)                 | Date DBE shall begin work on the project  |
| Estimated Completion Date (Month/Year)                | Date DBE's work will be completed   |
| Trucking Company                                      | Name of DBE trucking company  |
| Item No.  | List pay item number  |
| Item Description                                      | Description of item   |
| Unit  | Unit of measure – e.g. weight or hours  |
| Unit Price/Rate                                       | Cost per unit or hourly rate  |
| Amount  | Total amount per pay item   |
| Total Commitment Amount                               | Sum of all pay items and total commitment of bidder/offeror to DBE  |
| Number of hours contracted or quantities to be hauled | Approximate number of hours or tonnage to be hauled   |
| Number of fully operational trucks to be used:        | Total number of trucks to be used for the project   |
| Tractor/Trailers                                      | Number of tractor trailers to be used   |
| Dump Trucks   | Number of dump trucks to be used  |
| Number of fully operational trucks owned by DBE       | Number of listed DBE's trucks to be used on this project  |
| Name of Trucking Company                              | If other trucking companies (DBE or non-DBE) are to be leased, list name and information about type of trucks in this section         |
| Estimated Dollar Amount to be Contracted              | Provide information about estimated cost to lease trucks  |
| Number of Dump Trucks, Tractor/Trailer                | Self-explanatory  |
| DBE NAME  | DBE Company name  |
| Name/Title  | Name and title of DBE's representative  |
| Address   | Self-explanatory  |
| Phone   | Self-explanatory  |
| Fax   | Self-explanatory  |
| Email   | Self-explanatory  |
| Signature   | Signature of DBE's representative   |
| Date  | Date agreement is signed  |
| Prime Contractor                                      | Company name  |

|  |  |
|--|--|
| Name/Title   | Name and title of prime contractor's representative  |
| Address  | Self-explanatory   |
| Phone  | Self-explanatory   |
| Fax  | Self-explanatory   |
| Email  | Self-explanatory   |
| Signature  | Signature of prime contractor's representative   |
| Date   | Date agreement is signed   |
| Subcontractor (only if the DBE will be a second tier sub): | Name of subcontractor only if the listed DBE trucking company will be performing work under this subcontractor |
| Name/Title   | Name and title of the subcontractor's representative   |
| Address  | Self-explanatory   |
| Phone  | Self-explanatory   |
| Fax  | Self-explanatory   |
| Email  | Self-explanatory   |
| Signature  | Signature of subcontractor   |
| Date   | Date agreement is signed   |



# Disadvantaged Business Enterprise (DBE) Confirmation and Commitment Agreement

## Subcontractor, Manufacturer, or Supplier

This commitment is subject to the award and receipt of a signed contract from the Hawaii Department of Transportation (HDOT) for the subject project. DBEs must be certified by the bid opening date.

|  |                              |
|--|------------------------------|
| <b>Project #:</b>                      | <b>County:</b>               |
| <b>NAICS CODE/DESCRIPTION OF WORK:</b> | <b>SECONDARY NAICS CODE:</b> |

\*All quantities and units should match the bid tab item whenever possible.

The prime contractor shall inform HDOT of the dates when the subcontractor starts and completes all work under the subcontract.

|   |  |
|---|--|
| <b>Estimated Beginning Date (Month/Year):</b> | <b>Estimated Completion Date (Month/Year):</b> |
|---|--|

| SUBCONTRACTOR:                 | Item No. | Item | Approx. Quantity | Unit | Unit Price | Amount |
|--------------------------------|----------|------|------------------|------|------------|--------|
|                                |          |      |                  |      | \$         | \$     |
|                                |          |      |                  |      | \$         | \$     |
|                                |          |      |                  |      | \$         | \$     |
|                                |          |      |                  |      | \$         | \$     |
| <b>TOTAL COMMITMENT AMOUNT</b> |          |      |                  |      |            | \$     |

| MANUFACTURER:                  | Item No. | Item | Approx. Quantity | Unit | Unit Price | Amount |
|--------------------------------|----------|------|------------------|------|------------|--------|
|                                |          |      |                  |      | \$         | \$     |
|                                |          |      |                  |      | \$         | \$     |
| <b>TOTAL COMMITMENT AMOUNT</b> |          |      |                  |      |            | \$     |

| SUPPLIER:                      | Item No. | Item | Approx. Quantity | Unit | Unit Price | Amount |
|--------------------------------|----------|------|------------------|------|------------|--------|
|                                |          |      |                  |      | \$         | \$     |
|                                |          |      |                  |      | \$         | \$     |
| <b>TOTAL COMMITMENT AMOUNT</b> |          |      |                  |      |            | \$     |

The prime contractor certifies by signature on this agreement that subcontracts will be executed between the prime contractor and the DBE subcontractors as listed on the agreement form. If a DBE subcontractor is unable to perform the work as listed on this agreement form, the prime contractor will follow the substitution/replacement approval process as outlined in the contract DBE requirements. **IMPORTANT! The signatures of the DBE, prime contractor, and subcontractor (only if the DBE will be a second tier sub) confirms that all information on this Agreement is true and correct. Parties should sign Agreement in the order in which they are listed.**

|   |                            |
|---|----------------------------|
| <b>DBE NAME:</b>  | Name/Title (please print): |
| Address:  | Signature:                 |
| Phone:                      Fax:                                  | Date:                      |
| Email:  | Name/Title (please print): |
| <b>Prime Contractor:</b>  | Signature:                 |
| Address:  | Date:                      |
| Phone:                      Fax:                                  | Name/Title (please print): |
| Email:  | Signature:                 |
| <b>Subcontractor (only if the DBE will be a second tier sub):</b> | Date:                      |
| Address:  | Signature:                 |
| Phone:                      Fax:                                  | Date:                      |
| Email:  | Signature:                 |

HDOT retains the information collected through this form. With few exceptions, you are entitled on request to be informed about the information that we collect about you.





## Disadvantaged Business Enterprise (DBE) Confirmation and Commitment Agreement Subcontractor, Manufacturer, or Supplier INSTRUCTIONS

The purpose of this agreement is to secure the commitment of the bidder/offeror to utilize the listed DBE, and the DBE's confirmation that it will perform work for the bidder/offeror on this project. The information on this form shall be provided by the DBE.

|  |  |
|--|--|
| Project #  | Self-explanatory   |
| County   | County where project is located  |
| NAICS Code/Description of Work                             | Primary North American Industry Classification System code under which DBE is certified to perform and description of work to be done              |
| Secondary NAICS Code                                       | List other NAICS codes firm is certified to perform  |
| Estimated Beginning Date (Month/Year)                      | Date DBE shall begin work on the project   |
| Estimated Completion Date (Month/Year)                     | Date DBE's work will be completed  |
| Subcontractor  | Name of DBE subcontractor (company name)   |
| Item No.   | List pay item number   |
| Item   | Description of item  |
| Approx. Quantity   | Self-explanatory   |
| Unit   | List unit of measure   |
| Unit Price   | Cost per unit  |
| Amount   | Total amount per pay item  |
| Total Commitment Amount                                    | Sum of all pay items and total commitment of bidder/offeror to DBE   |
| Manufacturer   | Name of DBE manufacturer   |
| Supplier   | Name of DBE supplier (aka regular dealer)  |
| DBE NAME   | DBE Company name   |
| Name/Title   | Name and title of DBE's representative   |
| Address  | Self-explanatory   |
| Phone  | Self-explanatory   |
| Fax  | Self-explanatory   |
| Email  | Self-explanatory   |
| Signature  | Signature of DBE's representative  |
| Date   | Date agreement is signed   |
| Prime Contractor   | Company name   |
| Name/Title   | Name and title of prime contractor's representative  |
| Address  | Self-explanatory   |
| Phone  | Self-explanatory   |
| Fax  | Self-explanatory   |
| Email  | Self-explanatory   |
| Signature  | Signature of prime contractor's representative   |
| Date   | Date agreement is signed   |
| Subcontractor (only if the DBE will be a second tier sub): | Name of subcontractor only if the listed DBE will be performing work under this subcontractor as a second tier subcontractor/supplier/manufacturer |

|            |   |
|------------|---|
| Name/Title | Name and title of the subcontractor's representative that the listed DBE will work under as a second tier subcontractor/supplier/manufacturer |
| Address    | Self-explanatory  |
| Phone      | Self-explanatory  |
| Fax        | Self-explanatory  |
| Email      | Self-explanatory  |
| Signature  | Signature of subcontractor's representative   |
| Date       | Date agreement is signed  |



## Disadvantaged Business Enterprise (DBE) Contract Goal Verification and Good Faith Efforts (GFE) Documentation For Construction

|                   |                   |
|-------------------|-------------------|
| Project #:        | County:           |
| DBE Project Goal: | Prime Contractor: |

As required by the specifications "Disadvantaged Business Enterprise Requirements," the dollar amount of each subcontract (both DBE and non-DBE firms) for all subcontractors, manufacturers, suppliers, and trucking companies is due five (5) days after bid opening. **Failure to provide required information shall be cause for bid/proposal rejection.**

Calculation of the DBE contract goal for this project is the proportionate contract dollar value of work performed, materials, and goods to be supplied by DBEs. DBE credit shall not be given for mobilization, force account items, and allowance items. This DBE contract goal is applicable to all the contract work performed for this project and is calculated as follows:

1. DBE contract goal percentage = Contract Dollar Value of the work to be performed by DBE subcontractors and manufacturers, plus 60% of the contract dollar value of DBE suppliers, divided by the sum of all contract items (sum of all contract items is the total amount for comparison of bids less mobilization, force account items, and allowance items).
2. The Department shall adjust the bidder's/offeror's DBE contract goal to the amount of the project goal if it finds that the bidder/offeror met the goal but erroneously calculated a lower percentage. If the amount the bidder/offeror submits as its contract goal exceeds the project goal, the bidder/offeror shall be held to the higher goal.

| Name of Subcontractor, Supplier, Manufacturer, and Trucking Company | DBE (Y/N) | Bid Item Number and Description | Approx. Quantity/Hours | Unit | Unit Price/Rate | Dollar Amount |
|---|-----------|---------------------------------|------------------------|------|-----------------|---------------|
|   |           |                                 |                        |      |                 |               |
|   |           |                                 |                        |      |                 |               |
|   |           |                                 |                        |      |                 |               |
|   |           |                                 |                        |      |                 |               |
|   |           |                                 |                        |      |                 |               |
|   |           |                                 |                        |      |                 |               |
|   |           |                                 |                        |      |                 |               |
|   |           |                                 |                        |      |                 |               |
|   |           |                                 |                        |      |                 |               |
|   |           |                                 |                        |      |                 |               |
|   |           |                                 |                        |      |                 |               |
|   |           |                                 |                        |      |                 |               |
|   |           |                                 |                        |      |                 |               |
|   |           |                                 |                        |      |                 |               |
|   |           |                                 |                        |      |                 |               |
|   |           |                                 |                        |      |                 |               |
|   |           |                                 |                        |      |                 |               |

|   |  |
|---|--|
| A. Dollar amount of the work to be performed by DBE subcontractors, manufacturers, and trucking companies, plus 60% of the dollar amount of DBE suppliers |  |
| B. Sum of all work items less mobilization, force account items, allowance items  |  |
| <b>A/B = DBE contract goal</b>  |  |

NAME and SIGNATURE of AUTHORIZED REPRESENTATIVE of PRIME CONTRACTOR: \_\_\_\_\_ DATE: \_\_\_\_\_

## Summary of Good Faith Efforts (GFE)

As required by the specifications "*Disadvantaged Business Enterprise Requirements*," if the DBE goal is not met, documentation of GFE shall be submitted within five (5) days of bid opening. The bidder is required to respond to the following questions and describe efforts to obtain DBE participation. Each item will require an explanation. Copies of correspondence return receipts, telephone logs, or other documentation will be required to support GFE. Attach additional sheets, if necessary. Based on responses given, HDOT shall make a determination of the bidders' GFE. **Failure to provide required information shall be cause for bid/proposal rejection.**

1. Did you submit the required information five days after bid opening (i.e. DBE name, address, NAICS code, description of work, project name, and number)?
2. Explain your GFE if any, to solicit through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising and/or written notices) the interest of all certified DBEs who have the capability to perform part or all of the work to be included under the contract.
  - a. Explain your GFE if any, to solicit the participation of potential DBEs as early in the procurement process as practicable.
  - b. Explain your GFE if any, to allow sufficient time for the DBEs to properly inquire about the project and respond to the solicitation.
  - c. Explain your GFE if any, to take appropriate steps to follow up with interested DBEs in a timely manner to facilitate participation by DBEs in this project.
3. Explain your GFE if any, to identify and break up portions of work that can be performed by DBEs in order to increase the likelihood that a DBE will be able to participate, and that the DBE goal could be achieved (e.g. breaking out contract items into economically feasible units to facilitate DBE participation even when you might otherwise prefer to self-perform these work items).
4. Explain your GFE if any, to make available or provide interested DBEs with adequate information about the plans, specifications, and requirements of the project in a timely manner, and assist them in responding to your solicitation.
5. Explain your GFE if any, to negotiate in good faith with interested DBEs. Evidence of such negotiations includes documenting: a) the names, addresses and telephone numbers of DBEs that were contacted; b) a description of the information that was provided to DBEs regarding the plans and specifications; and c) detailed explanation for not utilizing individual DBEs on the project.
6. Did you solely rely on price in determining whether to use a DBE? If yes please explain. The fact that there may be additional or higher costs associated with finding and utilizing DBEs are not, by themselves, sufficient reasons for your refusal to utilize a DBE or failure to meet the DBE goal, provided that such additional costs are not unreasonable. Also, the ability or desire to perform a portion of the work with your own forces, that could have been undertaken by an available DBE, does not relieve you of the responsibility to make good faith efforts to meet the DBE goal, and to make available and solicit DBE participation in other areas of the project to meet the DBE goal.
7. Did you reject DBEs as being unqualified without sound reasons based on a thorough investigation of their capabilities? If yes, please explain. The DBEs standing within the industry, membership in specific groups, organizations or associates, and political or social affiliation are not legitimate basis for the rejection or non-solicitation of bids from particular DBEs.

8. Explain your GFE to assist interested DBEs in obtaining bonding, lines of credit, or insurance.
  
9. Explain your GFE if any, to assist interested DBEs in obtaining necessary equipment, supplies, materials or related assistance or services.
  
10. If you selected a non-DBE over a DBE subcontractor, please provide the quotes of each DBE and non-DBE subcontractor submitted to you for work on the contract; and for each DBE that was contacted but not utilized for a contract, provide a detailed written explanation for each DBE detailing the reasons for not utilizing or allowing the DBE to participate in the contract.
  
11. Explain your GFE if any, to effectively use the services of available minority/women community organizations, minority/women business groups, contractors' groups, and local, state and federal minority/women business assistance offices or other organizations to provide assistance in recruitment and placement of DBEs.



**Disadvantaged Business Enterprise (DBE)  
Contract Goal Verification and Good Faith Efforts (GFE)  
Documentation  
For Construction  
INSTRUCTIONS**

|   |   |
|---|---|
| Project #   | Self-explanatory  |
| County  | County where project is located   |
| DBE Project Goal  | Indicate DBE goal listed in the proposal on P-1   |
| Prime Contractor  | Name of prime contractor  |
| Name of Subcontractor, Supplier, Manufacturer, and Trucking Company   | Company name of subcontractor, supplier, manufacturer, or trucking firm                       |
| DBE (Y/N)   | Y for yes and N for no  |
| Bid Item Number and Description   | Pay item and description  |
| Approx. Quantity/ Hours   | Self-explanatory  |
| Unit  | Unit of measure   |
| Unit Price/ Rate  | Self-explanatory  |
| Dollar Amount   | Total dollar amount committed to subcontractor, supplier, manufacturer, or trucking firm      |
| A. Dollar amount of the work to be performed by DBE subcontractors, manufacturers, and trucking companies, plus 60% of the dollar amount of DBE suppliers | Total amount of DBE participation   |
| B. Sum of all work items less mobilization, force account items, allowance items  | Total of work items minus mobilization, force accounts and allowances                         |
| A/B = DBE contract goal   | Self-explanatory  |
| Name and Signature of Authorized Representative of Prime Contractor   | Self-explanatory  |
| Date  | Date form is signed   |
| Summary of Good Faith Efforts (GFE)   | Complete by answering each question in detail and providing documentation to support your GFE |

# SURETY BID BOND

Bond No. \_\_\_\_\_

KNOW ALL BY THESE PRESENTS:

That we, \_\_\_\_\_  
(Full name or legal title of offeror)

as Offeror, hereinafter called the Principal, and

\_\_\_\_\_  
(Name of bonding company)

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

\_\_\_\_\_  
(State/county entity)

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

\_\_\_\_\_  
(Required amount of bid security)

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

## WHEREAS:

The Principal has submitted an offer for \_\_\_\_\_

\_\_\_\_\_  
(Project by number and brief description)

## NOW, THEREFORE:

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

Signed this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_

(Seal) \_\_\_\_\_  
Name of Principal (Offeror)

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Title

(Seal) \_\_\_\_\_  
Name of Surety

\_\_\_\_\_  
Signature

\_\_\_\_\_  
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 \_\_\_\_\_ 20\_\_\_\_\_, by and between the STATE OF HAWAII, by its Director of Transportation, hereinafter referred to as "STATE," and \_\_\_\_\_ whose business and/or post office address is \_\_\_\_\_

\_\_\_\_\_ hereafter 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

or such a part thereof as shall be required by the STATE, the total amount of which labor, material 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 \_\_\_\_\_ DOLLARS (\$ \_\_\_\_\_) as follows:

which sum shall be provided from the following fund(s):

all in accordance with the specifications, the special provisions, if any, the notice to bidders, the instructions to bidders, the proposal, and plans for \_\_\_\_\_, 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, undertaking 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 \_\_\_\_\_ DOLLARS (\$ \_\_\_\_\_ ) 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. In any event, extras shall not exceed \_\_\_\_\_ DOLLARS (\$ \_\_\_\_\_ ) in lawful money and shall be provided from the following fund(s):

Where Federal funds are involved, it is covenanted and agreed by and between the parties hereto that the sums of

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.

The CONTRACTOR further agrees to execute the attached non-gratuity affidavit form prior to payment of the final estimate by the STATE.

All words used herein in the singular number shall extend to and include the plural. All words used in the plural number shall extend to and include the singular. The use of any gender shall extend to and include all genders.

IN WITNESS WHEREOF, the parties hereto have caused this instrument to be duly executed the day and year first above written.

STATE OF HAWAII

By \_\_\_\_\_  
Director of Transportation

By \_\_\_\_\_

By \_\_\_\_\_

APPROVED AS TO FORM

\_\_\_\_\_  
Deputy Attorney General

**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 Oblige 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 Oblige 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 Oblige, hereinafter called Oblige, in the amount

\_\_\_\_\_ DOLLARS  
(\$ \_\_\_\_\_),  
*(Dollar amount of Contract)*

lawful money of the United States of America, for the payment of which to the said Oblige, 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:<br><input type="checkbox"/> a. contract<br><input type="checkbox"/> b. grant<br><input type="checkbox"/> c. cooperative agreement<br><input type="checkbox"/> d. loan<br><input type="checkbox"/> e. loan guarantee<br><input type="checkbox"/> f. loan insurance   | 2. Status of Federal Action:<br><input type="checkbox"/> a. bid/offer/application<br><input type="checkbox"/> b. initial award<br><input type="checkbox"/> c. post-award  | 3. Report Type:<br><input type="checkbox"/> a. initial filing<br><input type="checkbox"/> b. material change<br>For Material Change Only:<br>year _____ quarter _____<br>date of last report _____ |
| 4. Name and Address of Reporting Entity:<br><input type="checkbox"/> Prime <input type="checkbox"/> Subawardee<br>Tier _____, <i>if known</i> :<br><br>Congressional District, <i>if known</i> :   |   | 5. If Reporting Entity in No. 4 is Subawardee,<br>Enter Name and Address of Prime<br><br>Congressional District, <i>if known</i> :   |
| 6. Federal Department/Agency:  | 7. Federal Program Name/Destination:<br><br>CFDA Number, <i>if applicable</i> :   |  |
| 8. Federal Action Number, <i>if known</i> :  | 9. Award Amount, <i>if known</i> :<br>\$ _____  |  |
| 10. a. Name and address of Lobbying Entity<br>(if individual, last name, first name, MI):  |   | b. Individuals Performing Services (including<br>address if different from No. 10a)<br>(last name, first name, MI):  |
| (attach Continuation Sheet(s) SF-LLL-A, if necessary)  |   |  |
| 11. Amount of Payment ( <i>check all that apply</i> ):<br>\$ _____ <input type="checkbox"/> actual <input type="checkbox"/> planned  | 13. Type of Payment ( <i>check all that apply</i> ):<br><input type="checkbox"/> a. retainer<br><input type="checkbox"/> b. one-time fee<br><input type="checkbox"/> c. commission<br><input type="checkbox"/> d. contingent fee<br><input type="checkbox"/> e. deferred<br><input type="checkbox"/> f. other; specify: _____ |  |
| 12. Form of Payment ( <i>check all that apply</i> ):<br><input type="checkbox"/> a. cash<br><input type="checkbox"/> b. in-kind; specify: nature _____<br>value _____  |   |  |
| 14. Brief Description of Services Performed or to be Performed and Date(s) of Service, including<br>officer(s), employees(s) or Member(s) contacted, for Payment Indicated in Item 11:<br><br><br>(attach Continuation Sheet(s) SF-LLL-A, if necessary)  |   |  |
| 15. Continuation Sheet(s) SF-LLL-A attached: <input type="checkbox"/> Yes <input type="checkbox"/> 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: _____<br>Print Name: _____<br>Title: _____<br>Telephone No.: _____ Date: _____   |  |
| Federal Use Only:  |   | Authorized for Local Reproduction<br>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 \_\_\_\_\_

STATEMENT OF COMPLIANCE

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. 2760), 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 from 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 \_\_\_\_\_.

\_\_\_\_\_  
Name of Corporation, Partnership, or Individual

\_\_\_\_\_  
Signature and Title of Signer

Subscribed and sworn before me this \_\_\_\_\_ day of \_\_\_\_\_.

\_\_\_\_\_  
Notary Public, \_\_\_\_\_ Judicial Circuit,  
State of Hawaii  
My Commission Expires: \_\_\_\_\_

Doc. Date: \_\_\_\_\_ # Pages: \_\_\_\_\_.

Notary Name: \_\_\_\_\_ Circuit  
Doc. Description: \_\_\_\_\_

\_\_\_\_\_  
Notary Signature Date  
NOTARY CERTIFICATION