STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS

ADDENDUM NO. 1
FOR
SAND ISLAND ACCESS ROAD TRUCK WEIGH STATION
DISTRICT OF HONOLULU, ISLAND OF OAHU
FEDERAL-AID PROJECT NO. NH-064-1(010)R

January 27, 2026

This Addendum shall make the following amendment(s) to the Solicitation:

A. SPECIAL PROVISIONS

1. Delete **SECTION 679 WEIGH IN MOTION SYSTEM**, dated 07/23/25, in its entirety and replace it with attached **SECTION 679 WEIGH IN MOTION SYSTEM** dated r01/27/26.

2. Delete **Federal Wage Rates**, dated 12/12/2025, in its entirety and replace it with attached **Federal Wage Rates**, dated 01/16/2026

The following is provided for information.

B. PRE-BID MEETING MINUTES

1. The attached **PRE-BID MEETING MINUTES** are provided for information.

C. RESPONSES TO REQUESTS FOR INFORMATION (RFI'S/QUESTIONS)

1. The attached **RESPONSES TO REQUESTS FOR INFORMATION** are provided for information.

Please acknowledge receipt of this **ADDENDUM NO. 1** by recording the date of its receipt in the space provided on the **PAGE P-4** of the Proposal.

Henry Kennedy

Henry Kennedy
Engineering Program Manager

Make the following section a part of the Standard Specifications:

SECTION 679 – WEIGH-IN-MOTION SYSTEM

679.01 Description. This work includes furnishing labor, materials, tools, machinery and equipment necessary to install and construct an operating Weigh-In-Motion system complete in place according to the contract. The Weigh-In-Motion system includes:

(A) Trenching, structural excavating, backfilling, restoring work and installing pullboxes.

(B) Weigh-In-Motion system equipment.

(C) Concrete foundations, ductlines, cables, wiring, painting and restoration work.

(D) Coordinating work and arranging for inspection of work with the Engineer and other agencies as required.

(E) Turning over to the Department a complete and operating Weigh-In-Motion system according to the contract.

(F) Furnish and install the incidental parts that the contract does not show and that are necessary to complete the Weigh-In-Motion system as though such parts were in the contract.

(G) Electrical equipment shall conform to the NEMA standards and this contract. Material and workmanship shall conform to the National Electric Code (NEC); National Electrical Safety Code (NESC); General Order Nos. 6 and 10 of the Hawaii Public Utilities Commission; the standards of ASTM, ANSI; Electronics Industries Associates (EIA); local power company rules, and local ordinances that may apply.

679.02 Materials.

(A) Concrete shall conform to Section 601 – Structural Concrete.

(B) Reinforcing steel shall conform to Section 602 – Reinforcing Steel.

(C) Steel plate covers and anchor bolts shall conform to ASTM A 36 and A 307, respectively. The Contractor shall zinc-coat the anchor bolts if exposed.

(D) Other materials shall conform to the following:

Dark Green Enamel Paint	708.03
Paint Thinner	708.04
Concrete Pull Box	712.06(B)
Conduits	712.27

Materials will be subject to inspection after delivery to the work site and during installation. Failure of the Engineer to note faulty material or workmanship during construction will not relieve the Contractor of the responsibility for removing or replacing materials at no cost to the State.

The Fiber Optic Contractor shall be a locally based installer who shall have at least three (3) years' experience, in installing fiber optic cables over $100,000, specifically for outdoor overhead joint-pole and underground applications. The firm shall also track and document the installation data and tension measurements when installing the fiber optic cables. Any tension measurements, which exceed the manufacturer's recommendation, will be considered means for the cable rejection. The Fiber Optic Contractor shall be fully responsible for the quality and integrity of the installed cable and the operability of the final fiber optic cable product.

The Engineer may make inspection or sampling of certain materials at the factory or warehouse before delivery to the work site, when required.

679.03 Weigh-In-Motion System.

(A) System Introduction.

(1) The Mainline Sorting System will sort commercial vehicles on the mainline highway upstream from a Department weight enforcement station. Vehicles are sorted as they pass over the Sorter System sensors; vehicles that are potentially in violation of weight regulations will be signaled to exit to the inspection station; vehicles that are in compliance with the regulations will be signaled to bypass the station.

(2) The objective of the Department is to have a fully operational Mainline Sorting System capable of accurately and automatically pre-screening vehicles in motion for enforcement purposes. Based on the weights obtained from the WIM screening, the system shall automatically direct the selected vehicles to the enforcement scales, as illustrated in the contract plans and these specifications.

(3) The Weigh-In-Motion (WIM) system is to be modular for ease of service and upgradeability. Changing or upgrading the functionality at a site shall require only the addition of the electronics modules and

peripheral devices needed for that functionality; existing equipment shall be usable in the upgraded system.

(4) The scope of work is to supply and install the following:

(a) Weigh-In-Motion (WIM) Scales, axle sensors, inductive loops, controller electronics and cabinet.

(b) Industrial Computing Platform (ICP) Web Server and Graphic User Interface (GUI) to allow Weigh Station operators to connect to and operate the Weigh-in-Motion system through internet connectivity on the Operator Workstation Computer.

(c) Operator Workstation Computer

(d) Lane Control Signals (LCS)_ including support structures and sensing loops.

(e) Overview Video Camera (OVC) installation.

(f) Inductive loops only for a Tire Anomaly and Classification System (TACS). The Tire Anomaly and Classification System (TACS) will be installed an integrated into the system at a later date under a separate contract.

(g) Inductive loops, conduits, pole, and pole foundation only for a License Plate Reader (LPR). The License Plate Reader (LPR) will be installed and integrated into the system at a later date and under a separate contract.

(h) Inductive loops, conduits, pole, and pole foundation only for a USDOT Number Reader. The USDOT Number Reader will be installed and integrated into the system at a later date and under a separate contract.

(i) Inductive loops, conduits, pole, and pole foundation only for a Container Reader (CR). The Container Reader will be installed and integrated into the system at a later date and under a separate contract.

(j) ISINC Weigh-in-Motion System Electronics to allow integration to an Intelligent Roadside Operations Computer (iROC). The Intelligent Roadside Operations Computer (IROC) and local database for electronic screening of LPR, USDOT, and CR credentials will be installed and

integrated into the system at a later date under a separate contract.

(k) ISINC Weigh-in-Motion System Electronics to allow Interface to Static Scale for Mainline WIM calibration and Hold and Release functionality. The Static Scale will be installed and integrated into the system at a later date under a separate contract.

(l) Communications wiring and conduit for all equipment.

(m) Power wiring and conduit.

(n) Open/Closed Sign.

(o) Network communications at the Roadside Cabinet including three (3) year data service plan to accommodate Weigh-in-Motion system operations (300 monthly gigabyte allowance and 25Mbps service or equivalent for proper operation of the Weigh-in-Motion System).

(p) Three (3) Year Vendor full maintenance and warranty of the system immediately following project completion.

(5) The purpose of this project is not for the research and development of a mainline sorting system which might perform the objectives as described above. Therefore, the Contractor shall be required to furnish documentation which demonstrates to the satisfaction of the Department that all equipment proposed for use in the system is of standard manufacture; that the manufacturer has had similar equipment available for purchase for not less than ten (10) years and has at least three (3) successful Mainline Sorter System installations (which are not for research and development purposes); and that the manufacturer's WIM equipment has a proven acceptable performance history while in use under conditions similar to those for the intended use.

(6) As a minimum, the equipment documentation provided by the Contractor shall include the following for the Mainline Sorter:

(a) Detailed description of how the system requirements will be met.

(b) Drawings showing control and display panels with descriptions.

(c) Description and example screen images of the operator display on the workstation computer.

(d) Manufacturer's name and model number, supported by descriptive material for (but not limited to) the standard package components with all accessories identified under "Description." Submittals shall be supported by descriptive material, such as catalog cuts, diagrams, and other data published by the manufacturer, to show conformance to specifications and plan requirements; model numbers alone will not be acceptable.

(e) Document successful interface with TACS System. A list of three (3) references with names, addresses, and persons to contact for similar installations.

(f) At least three (3) Weigh-In-Motion references and at least three (3) Mainline Sorter System references which have had systems in regular use for a period of not less than five (5) years. The Department reserves the right to request the Owner's evaluation of in-service equipment. These must all be different references.

(B) Mainline WIM Sorting System.

(1) Mainline WIM Sorter Operational Overview.

(a) Commercial vehicles approaching the weigh station shall be directed into the right \hand lane by means of static signing as provided by the Department. A vehicle approaching the weigh station will pass over the Mainline Weigh-In-Motion (WIM) system, which is embedded in the highway approximately 200 feet (60 meters) prior to the weigh station exit ramp. The right lane will be equipped with double threshold Bending Plate WIM Scales that meet ASTM E 1318-09 Type III accuracy and reliability. WIM electronics will be located at the roadside adjacent to the WIM scales and sensors and will process the information collected by the in-road equipment.

(b) The WIM system shall collect axle weight and spacing, vehicle speed, classification, and other relevant data to create a vehicle record. The Overview Video Camera (OVC) imaging equipment will take a side image of the passing vehicle that will be combined with the vehicle record. Based on a comparison of the vehicle record to the parameters set by the station operator, the WIM system will make a sort decision and advise the driver to either exit or bypass the weigh station via the Lane Control

Signals (LCS) located on the side of the road. There shall be provision for an operator selectable percentage of non-violating vehicles to be randomly selected from the mainline for visual inspection at the scale station.

(2) Mainline WIM Sorter Functional Requirements.

(a) WIM Scales.

i. For WIM operation, the sensor configuration for the mainline drive lane that enters into the weigh station shall be: *"loop -WIM scale – WIM scale – WIM scale - WIM scale – loop". The WIM Scales are to be installed in a PCC WIM slab approximately 224 feet in length. The WIM Scales are to be installed approximately 128 feet from the leading edge of the WIM slab and 96 feet from the trailing edge of the WIM Slab.*

ii. There shall be four (4) scale frames which are permanently embedded into the roadway structure on the mainline drive line that enters into the Weigh Station. The four (4) scale weighpad platforms must be mounted and secured within the frames and must be removable for service requirements or replacement. The instrumentation for the weighpad shall be strain gauge load cells mounted directly on the underside of, and integral to the weighpad. The scale frames shall measure 69.63 inch x 25.3 inch x 1.65 inch (1769 mm x 643 mm x 42 mm). The WIM scale shall be installed flush with the road surface. The depth of the scale frame excavation shall not exceed 4 inches in the drain area, 2.5 inches in the load bearing area.

iii. The stationary weighpad platform shall be constructed of high strength steel. The weighpad shall operate at high or low speed (from 5 to 200 KPH or 3 to 125 MPH). There shall be two (2) 68.9 inch x 20 inch x 0.96 inch (1750 mm x 508 mm x 24.5 mm) independent weighpad platforms used per lane of traffic, giving a total weighing surface of approximately 11.5 feet x 20 inches (3.5 m x 0.5 m). The bending plates shall determine individual weights for both the left and right tires of each axle on a vehicle.

iv. The bending plate shall be no more than 1 inch (25 mm) thick and shall be constructed from a single piece of metal with no welding or bolting. The individual

weight of the bending plate or frame shall not exceed 265 pounds nor shall the combined weight of a single bending plate and its frame exceed 505 pounds.

v. The WIM scales shall operate properly in a temperature range of -40°F to +176°F (-40°C to +80°C). The WIM scales and their frames shall be rust proofed. All installation hardware shall be either stainless steel or rust proofed. All surface mounting bolt and service holes shall be sealed.

vi. Construction and total lane closure time shall not exceed eight (8) hours duration (consecutive closure time), including the time required for grinding and scale installation.

vii. Replacement of a weighpad shall be less than one (1) hour (not including traffic control).

viii. The WIM scales and frames shall be grounded with ground rods. The signal processing electronic components/modules shall be protected against transient over-voltages such as lightning. The signal cable shall be a 24 AWG 4 conductor shielded cable and sealed to the scale to prevent water intrusion into the measuring channels.

ix. The accuracy of the Bending Plate weighpads shall be in conformance with the ASTM E 1318 “Standard Specifications for Highway Weigh-In-Motion (WIM) Systems with User Requirements and Test Method” performance requirements for a Type III system on the for double threshold configuration (four (4) weighpads per lane).

x. Prior to installation of the weighpad platform, the Contractor shall ensure the roadway meets the requirements of Section 6 of ASTM E 1318-09. If necessary, to meet the requirements, the Contractor shall grind the concrete roadway beginning 200 feet (60 meters) prior to the scale location and ending 100 feet (30 meters) after the scale location, for a total of 300 feet (90 meters), with a minimum 36 inch (90 cm) blanket grinder.

(3) Detector Loops.

(a) The Sorter system shall use inductive loops to detect the presence, entry or exit of a vehicle in support of WIM and AVC operations.

(b) The loops located on the mainline in the PCC WIM Slab will be preformed loops that are placed on the road base prior to pouring the concrete

(c) loops that are located on the Asphalt sections of roadway will be sawcut and sealed with approved sealants

(d) Sizes of the loops and loop materials for this project are to be provided by the Weigh-in-Motion vendor to ensure compatibility with the system.

(e) Loop wire must be one (1) conductor, 14 AWG, IMSA 51-5. Loop leads must be two (2) conductor, 14 gauge, IMSA 50-2 cable.

(f) All saw-cut loops shall be sealed with HDOT approved loop sealant.

(g) For each CMS there shall be a detector loop. The Mainline WIM system shall use the signals from these detector loops to control the timing of the message displayed by each LCS such that the correct message is displayed to each vehicle.

(4) iSINC Mainline Sorter Electronics.

(a) The Mainline Sorter System Electronics shall be located next to the WIM scales in a roadside cabinet. The System Electronics shall be responsible for creating vehicle records and formatting the truck data to enable a user to remotely view the vehicle records. The WIM interface electronics will be a stand-alone system with the capability to collect and interpret the signals from the WIM Scale.

(b) All material necessary for setup and operation of the system must be provided including all wiring and cabling.

(c) The system must be provided with the required software pre-loaded. The software must automatically execute when the system is powered up.

(d) The electronics must be modular to facilitate easy maintenance, troubleshooting and in-field servicing. For ease of maintenance, each type of input and output device shall interface to a system electronics printed circuit board interface module. All interface modules shall feature self-testing and built-in fault diagnosis. All sensor modules shall be field replaceable and slot mounted in a system electronics sub-chassis.

(e) The system electronics shall be available in optional CE compliant configurations. These configurations shall satisfy the following European Union directives:

i. Low Voltage 2006/95/EC

ii. Electromagnetic Capability Directive 2004/108/EC

iii. Restriction of Hazardous Substances Directive 2002/95/EC

iv. Waste Electronic and Electrical Equipment Directive 2002/96/EC

(f) The system shall be of a durable, industrial design and construction, and enable continuous operation, with automated start-up in the event of a power outage. For reliability, modularity and ease of communication with any additional system components that may be added at a future date, system electronics modules shall communicate over a rugged CAN Bus system (Controller Area Network protocol).

(g) The electronics shall include interfaces to the following components:

i. WIM Sensors including Piezo, Bending Plate, Single Load Cell, Kistler Lineas Quartz

ii. Axle Sensors including Piezo and DYNAX

iii. Safety and Credentialing Systems including OVC, LPR, USDOT, CR, and TACS

iv. Loops

v. Offscale Detectors

vi. Communications System

(h) The roadside electronics shall provide a facility for viewing vehicle records and sensor diagnostics over either a direct computer connection or a telecommunications link.

a. All components of the electronic system, including inductive loop detectors, will contain electrical over-voltage protection to prevent damage from electrical surges, spikes and lightning.

(i) The System Electronics shall provide the following functions:

i. Insert sequence numbers for vehicle records for tracking purposes.

ii. Perform WIM operation.

iii. Weigh all vehicles traveling over WIM scales.

iv. Classify all vehicles traveling on all instrumented lanes of the highway.

v. Perform weight compliance analysis on vehicles in accordance with department of agency regulations.

vi. Perform sorter operation in accordance with decisions based on weight compliance analysis or other weight specific errors or warnings (straddling lane, improper maneuver, sudden speed change, etc.).

vii. Capture images for all vehicles.

viii. Filter out all non-interesting images

ix. Format images and data for ICP Web server.

x. Perform data collection, data storage, file management and report generation functions for collected vehicle information.

(j) The system shall include a data downloading system to allow collected vehicle data to be retrieved either remotely or on site.

(k) The Mainline WIM Sorting System shall be provided with a secure, weather resistive roadside enclosure to house the System Electronics, the WIM computer and its peripherals and the side image camera equipment.

(l) All wires from scales, offscale sensors, axle sensors, loops, etc. shall be terminated on terminal strips. The terminal strips shall be identified by terminal strip number and screw connection number. These terminal strips shall be readily accessible. All cables shall be long enough to easily reach these terminal strips. Terminal strips, splices, or other type of connections prior to these standard terminal strips shall not be allowed except for splicing of a loop to a shielded twisted loop lead.

(m) All AC power connections shall be shielded to prevent electrical shock.

(n) The System Electronics shall meet the following requirements:

System	Low Temperature: -40 degrees C Cold start
	High Temperature: +75 degrees C
	Humidity: 95% relative humidity, non-condensing
	Processor: 32-bit RISC architecture
	Memory: 32 MB RAM, up to 4 GB Storage
	CAN Bus environment for sensor and control configuration
	Non-volatile storage for vehicle information to prevent data loss during power outages and to retain sensor module configuration
Communications	Industry standard CAN Bus environment
	USB interface
	Ethernet interface
	Remote administration via Telnet Secure Shell (SSH)
	Remote file download via Secure FTP
Software	Sensor inputs include Single Load Cell, Bending Plate, Intercomp Slow Speed WIM, Kistler Lineas Quartz, DYNAX, Piezo, Loops and Serial and Digital Devices
	Sensor inputs from WIM Scale, loop and piezo sensors
	Vehicle Classification performed by means of user-defined classification scheme
	Weight Compliance performed by means of user-defined weight compliance scheme
	Records data logs on operational status, power supply condition and system activity
Maintenance	
	Telnet over an Ethernet Interface
	Interface cards shall be hot-swappable (i.e., cards can be safely removed or replaced while the system is operating and powered)
	System configuration and fault diagnosis operations
Axle Sensor Interface Axle Sensor Interface (WIM and Piezo)	Adjustable threshold for detecting axles
	Capable of automatic temperature compensation
	Capable of autocalibration
Digital I/O Interface	Report on rising edge, falling edge or both
	Adjustable input debounce
	Control output state, single pulse, or square wave
	Adjustable timeout on inputs

(5) Lane Control (LCS).

(a) The Lane Control System (LCS) shall consist of a “Red X and Green Arrow” display and inductive detector loops as required for LCS control. The LCS shall be installed along the side of the roadway approximately 200’ downstream from the Mainline WIM Sorter System. The LCS system shall be controlled by the roadside WIM electronics. The LCS shall direct vehicles to enter the weigh station or bypass the station, based on the results of the mainline sort decision. The LCS system shall be controlled such that it ensures that the message display is synchronized according to the detection and tracking of a vehicle passing over the LCS loops. In this way, only the vehicle for which the message is intended will see the message on the LCS.

(6) Overview Camera.

(a) The System shall include an Overview Camera imaging system to record images of vehicles for identification purposes. The imaging system shall consist of camera capable of taking pictures in all lighting conditions and the image processing electronics to record the image of each vehicle that passes through the system. The overview image camera shall be mounted alongside the roadway on the mainline positioned to obtain the best possible images, detailing their cab and side. The images shall be linked with the vehicle records of commercial vehicles; non-commercial images shall be discarded. The camera shall be capable of full color images during daytime operation, and monochrome (black & white) near-infrared images during nighttime and low light operation. The imaging system electronics shall be located in the roadside System Electronics enclosure.

(b) The Imaging System shall consist of the following system components:

i. Color and low light monochrome (black & white) video camera.

ii. Illuminator system.

iii. Video capture system.

(7) Operator Display. The Vendor shall supply a workstation computer and software capable of showing a real-time listing of vehicle records via a network connection.

(a) Vehicle Display.

i. The workstation shall receive the vehicle records from the Mainline WIM electronics and display vehicle records in a Vehicle Display Window. The Display shall be a listing of the records for each vehicle which will include:

(i) thumbnail image of the vehicle

(ii) The Vehicle record number.

(iii) Time and date.

(iv) Vehicle class.

(v) Gross vehicle weight.

(vi) Vehicle length.

(vii) Speed.

(viii) Maximum allowed GVW for the vehicle class.

(ix) Individual axle weights.

(x) Axle spacing.

(xi) Axle groupings

(xii) Axle group weights.

(xiii) The sort decision.

(xiv) OVC image.

(xv) A color indicator for whether the vehicle is compliant (green) or in violation (red)

(xvi) If the vehicle is in violation an error in measurement has occurred, a message indicating the violation or error.

ii. The operator shall be able to select any vehicle record displayed to obtain a more detailed display which contains all the information that the system has stored in the vehicle record, which will include the information above in table form, plus individual wheel weights, maximum allowed weights for each axle, all violations and error messages and all images associated with the vehicle record displayed at full size.

(b) Sorting Controls.

i. The workstation display shall have controls to allow the operator to be able to set the sorting threshold used at the Mainline WIM Sorter. The sorting threshold determines at what percentage of legal weight a vehicle must be measured to be required to report. In this way, the operator may set the Mainline WIM Sorter to bring in

the maximum number of trucks that the station can process, without exceeding the station capacity.

ii. The workstation display shall have controls to allow the operator to select a percentage of non-violating vehicles to be randomly selected from the mainline for visual inspection at the scale station. This allows enforcement officials to perform random safety checks on otherwise compliant trucks.

(c) LCS Controls. The workstation display shall have controls to allow the operator to manually select the "Red X Green Arrow" displayed on the LCS.

(8) Virtual Weigh Station.

(a) The Mainline Sorter System shall be able to function as a Virtual Weigh Station, transmitting the resulting vehicle record data over a network connection for display to one (1) or more authorized users at any location.

(b) The display for a single user connected to the Virtual Weigh Station via a network connection shall show a list of vehicle records. Each vehicle record shall contain the following information:

i. A thumbnail image of the vehicle.

ii. The vehicle record number.

iii. Data and time.

iv. The vehicle class.

v. Speed.

vi. Length of the vehicle.

vii. Gross Vehicle Weight.

viii. Individual axle weights.

ix. Axle spacing.

x. Axle groupings.

xi. Axle group weights.

xii. OVC image.

xiii. A color indicator for whether the vehicle is compliant (green) or in violation (red)

xiv. If the vehicle is in violation an error in measurement has occurred, a message indicating the violation or error.

(c) The user shall be able to select any vehicle record in the listing and open a detailed display which shows all data recorded for that vehicle, including all the data above plus individual wheel weights, maximum allowed weights for each axle, all violations, and the full-size image in the vehicle record.

(d) When viewing a detailed vehicle record, user shall be able to step forward or back to the next record in the system memory.

(9) Data Collection. The Mainline System shall also perform all functions of a Data Collection System, collecting Vehicle Record Data from the site in a format that may be used for analysis of system operation and traffic patterns. The data shall be available for collection over a telecommunications connection. All vehicle shall be stored as individual vehicle records in REV 10 Binary File Format.

(C) Conduits and Pull Boxes.

(1) All cables shall be in conduits unless specifically approved by the Engineer. All pull boxes are to meet Department specifications.

(2) All materials shall comply with the "National Electrical Code" and the current Department Standard Specifications for Highway Construction, "Highway Division Standard Drawings for Design and Construction", and special requirements by Department weigh in motion and automatic vehicle identification system specifications. Duct seal shall be used to seal all conduits in the cabinets and in all junction boxes. All conduits shall have a polyethylene pull string with at least 210 pounds break strength left in place at completion of construction.

(3) Separate conduits shall be used for AC/DC power and low voltage signal cables. Low voltage signal cables shall include video, digital communication, sensor signal cable, and sensor excitation

cables where voltage is under +/- 20 volts DC. Conduits for video and RF cables shall be of a large enough size to accommodate the maximum bend radius using factory 90 degree “bends”.

(4) All cables shall be in conduits unless specifically approved by the Department.

(D) WIM Standards.

(1) Each standard shall be furnished with anchor base; uniform continuously tapered steel shaft; anchor bolts and nuts; grounding lug; cast pole top cap, mast arms and mounting flange plate where indicated, handhole and handhole cover; and other associated hardware necessary to make each WIM standard complete. Each assembly shall have no rough edges or surfaces, depressions or other defects.

(2) Standards shall be designed to support the equipment mounted on the pole shafts and mast arms. Equipment mounting heights shall be as indicated on the contract documents and in accordance with WIM system manufacturer recommendations.

(3) Shaft shall be constructed of No. 10 gage minimum, hot-rolled sheet steel conforming to ASTM a 1011 or ASTM A 595. Silicon content shall be kept to less than 0.06 percent, and boron shall not be added. Transverse seams shall be perpendicular to shaft axis. Reinforce transverse seams with internal sleeves welded in place. Shaft shall have reinforced opening for a handhole located approximately 9 inches above the bottom surface of anchor base plate. Reinforced opening shall be furnished with a gasket, cover plate and non-slip fastener. Handhole frame shall be tapped for cap screws to secure cover plate.

(4) Provide J-hook wire support, welded at top of shaft. Top of shaft shall be capped with cast pole top, secured in place with set screws.

(5) Anchor Base. Single-piece steel anchor base of sufficient size, shape, and strength to support standard shall be secured to lower end of shaft by two (2) continuous electric arc welds. Shaft shall telescope with base. One (1) weld shall be on inner portion of base at end of shaft and another weld shall be on outside at top of base. An approximately 2-inch separation shall be provided between the two (2) welds. Base shall have four (4) holes sized to accommodate anchor bolts.

(6) Tapered Mast Arm. Mast arm shall be made from material from single length of No. 10 gage minimum hot rolled sheet steel conforming

to ASTM A 1011 or ASTM A 595. Silicon content shall be kept to less than 0.06 percent, and boron shall not be added. Large end of mast arm shall telescope with flange plate of thickness recommended by manufacturer. Flange plate shall be welded to mast arm by two (2) continuous electric arc welds. One (1) weld shall be on outer portion of plate next to shaft and another weld shall be on inner portion at end of tubular cross section. Four (4) holes in flange plate shall match four 94) tapped holes in mounting plate on pole.

(7) Anchor Bolts. Each pole shall have a minimum of four 94) steel anchor bolts, with each bolt fitted with two (2) hex or heavy hex nuts. Each anchor bolt shall have "L" bend or plate washer welded to bottom. Anchor bolts shall be threaded at top end. Bolts shall be of strength, size, and length recommended by manufacturer and as specified in Subsection 718.01 – Standard Fasteners, to support pole shaft, mast arm, and WIM equipment.

(8) Zinc-Coating. Steel and iron parts of base, shaft, and mast arm shall be zinc-coated in accordance with AASHTO 232. Washers and nuts may be hot-dip zinc-coated or electro-zinc-coated.

(9) Standard Specifications. Design of WIM standards and appurtenances shall conform to *AASHTO LFRD Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals,* 1st Edition, with 2017 Interim Revisions.

(10) 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:

i. Description of each part.

ii. Materials manufacturing location (including ASTM number where applicable.

iii. Certificate of compliance.

(b) Shop drawings accompanied by complete and detailed engineering computations that justify selection of dimensions and material. Hawaii Licensed Professional Structural Engineer shall certify computations.

(c) Copy of mill test report for structural members (posts and beams), including physical and chemical descriptions of material incorporated.

(E) Conductors.

(1) Conductors. All conductors shall be copper, No. 12 AWG minimum. No. 8 AWG and larger diameter shall be stranded; No. 10 AWG and smaller shall be solid. Do not provide wires and cables manufactured more than twelve (12) months prior to the date of delivery to the site. Aluminum conductors shall not be provided.

(2) Color Coding. Provide for feeder and branch circuit conductors. Color shall be green for grounding conductors and white for neutral conductor. Color of ungrounded conductors shall be as follows:

(a) 120/240 volt, single phase.

i. Phase A – black

ii. Phase B – red

(3) Insulation. Type XHHW or RHW-2 unless otherwise specified.

(4) Bonding Conductors. Solid bare copper wire for sizes No. 8 AWG and smaller diameter; Class B, stranded bare copper wire for sizes No. 6 AWG and larger diameter.

(5) Splices. Any splices necessary shall be compression type, mechanically firm and made only in wireway, pull boxes or handholes. Splices shall be sufficiently taped and coated to provide a completely waterproof permanent joint. An approved plastic electrical tape and waterproof coating shall be used. A minimum of two (2) layers of tape shall be applied.

(6) Electrical Tapes.

(a) Insulating Tape. UL 510, plastic insulating tape, capable of performing in a continuous temperature environment of 80 degrees C (80°C).

(b) Other Tapes. Tapes shall be UL listed for electrical insulation and other purposes in wire and cable splices. Terminations, repairs, and miscellaneous purposes, electrical tapes shall comply with UL 510.

(F) Fiber Optic Cable. The fiber optic cables will consist of multi-mode fibers. Furnish and install fiber optic cable suitable, and meeting standards, for

underground installations. The fiber optic cables shall meet the following specifications:

(1) Stranded Loose Tube Cables. General Considerations. The cable shall meet the requirements of the United States Department of Agriculture Rural Utilities Service (RUS) 7 CFR 1755.900 and the ANSI/ICEA Standard for Fiber Optic Outside Plant Communications Cable, ANSI/ICEA S-87-640-1992.

(2) Multi-Mode Cables. The multi-mode fiber utilized in the cable specified herein shall meet EIA/TIA-492AAA-1989, "Detail Specification for 62.5 um core diameter 125 um cladding diameter Class 1a multi-mode, graded index optical waveguide fibers."

(a) Core Diameter: 62.5 $\pm$ 3.0 um

(b) Cladding Diameter: 125 $\pm$ 2.0 um

(c) Core to Cladding Offset: $\leq$ 3.0 um

(d) Cladding Non-Circularity: $\leq$ 2.0 percent

(e) Core Non-Circularity: $\leq$ 5 percent

(f) Coating Diameter: 245 $\pm$ 10 um

(g) Colored Fiber Diameter: nominal 250 um

(h) Attenuation Uniformity: No point discontinuity greater than .020 dB at either 850 um or 1300 nm.

(i) Refractive Index Profile: Graded index

(j) Numerical Aperture: 0.275 $\pm$ 0.015

(k) The coating shall be a dual layered, UV cured acrylate applied by the fiber manufacturer. The coating shall be mechanically strippable.

(3) Fiber Specification Parameters.

(a) Required Fiber Grade. Maximum individual fiber attenuation.

(b) Multi-Mode. The minimum normalized bandwidth of multi-mode optical fibers shall be $\geq$ 160 MHz-km at 850 nm and $\geq$ 500 MHz-km at 1300 nm.

(c) All optical fibers shall be proof tested by the fiber manufacturer to a minimum load of 0.7 GN/m^2 (100 kpsi).

(4) Optical fibers shall be inside a loose buffer tube. The nominal outer diameter of the buffer tube shall be 3.0 nm.

(a) Each buffer tube shall contain up twelve (12) fibers.

(b) The fibers shall not adhere to the inside of the buffer tube.

(c) Each fiber shall be distinguishable by means of color coding in accordance with TIA/EIA-598-A, “Optical Fiber Cable Color Coding”.

(d) The fiber shall be colored with ultraviolet (UV) curable links.

(e) Buffer tubes containing fibers shall be color coded with distinct and recognizable colors in accordance with TIA/EIA-598-A, “Optical Fiber Cable Color Coding”.

(f) Buffer tube colored stripes shall be inlaid in the tube by means of co-extrusion required. The nominal stripe width shall be one (1) mm.

(g) In buffer tubes containing multiple fibers, the colors shall be stable across the specified storage and operating temperature range and not subject to fading or smearing onto each other or into the gel filling material, colors shall not cause fiber to stick together. The buffer tubes shall be resistant to external forces and shall meet the buffer tube cold end and shrink back requirements of 7 CFR 1755.900.

(h) Fillers may be included in the cable core to lend symmetry to the cable cross section where needed. Fillers shall be placed so that they do not interrupt the consecutive positioning of the buffer tubes. In dual layer cables, any filler shall be placed in the inner layers. Fillers shall be nominally 3.0 mm in outer diameter.

(i) The central anti-buckling member shall consist of a dielectric, Glass Reinforced Plastic (GRP) rod. The purpose of

the central member is to prevent buckling of the cable. The GRP rod shall be over coated with a black colored thermoplastic when required to achieve dimensional sizing to accommodate buffer tubes/fillers.

(j) Each buffer tube shall be filled with a non-hygroscopic, non-nutritive electrically non-conductive, homogenous gel. The gel shall be free from dirt and foreign matter. The gel shall be readily removable with conventional nontoxic solvents.

(k) Buffer tubes shall be stranded around the dielectric central member. Water blocking yarns shall be applied longitudinally along the central member during stranding.

(l) Two (2) polyester yearn binders shall be applied contra helically with sufficient tension to secure each buffer tube layer to the dielectric central member without crushing the buffer tubes. The binders shall be non-hygroscopic, non-wicking and dielectric with low shrinkage.

(m) For single layer cables, a water blocking tape shall be applied longitudinally outside of the stranded tubes/fillers. The tape shall be held in place by a single polyester binder yarn. The water blocking tape shall be non-nutritive to fungus, electrically conductive and homogenous. It shall also be free from dirt and foreign matter.

(n) The cable shall contain at least one (1) ripcord under the sheath for easy sheath removal of all-dielectric cable. The cable shall contain at least one (1) ripcord under the inner sheath and under the steel armor for armored cable. The ripcord color shall be orange for non-armored sheaths.

(o) Tensile strength shall be provided by dielectric yarns. The high tensile strength dielectric yarns shall be helically stranded evenly around the cable core.

(p) All dielectric cables shall be sheathed with Medium Density Polyethylene (MDPE). The minimum nominal jacket thickness shall be 1.4 mm. Jacketing material shall be applied directly over the tensile strength members and water blocking tape. The polyethylene shall contain carbon black to provide ultraviolet light protection and shall not promote the growth of fungus.

(q) The MDPE jacket material shall be as defined by ASTM D 1248, Type II, Class C and Grade J4, E7, and E8. The jacket or sheath shall be free of holes, splits, and blisters. The cable jacket shall contain no metal elements and shall be of a consistent thickness.

(r) Cable jackets shall be marked with manufacturer's name, sequential meter or foot marking month and year of manufacture, and a telecommunication handset symbol, as required by the National Electrical Safety Code (NESC). The actual length of the cable shall be with the exception 0/+1 percent of the length markings. The print color shall be white, with the exception that cable jackets containing one (1) or more coextruded white stripes shall be printed in light blue. The height of the markings shall be approximately 2.5 mm.

(s) The maximum pulling tension shall be 2700 N (608 Lbft) during installation (short term) and 890 N (200 Lbft) long term installed.

(t) The shipping, storage, and operating temperature range of the cable shall be -40°C to +70°C.

(5) Quality Assurance Provision.

(a) All cabled optical fibers > 1000 meters in length shall be one hundred percent (100%) attenuation tested. Attenuation of each fiber shall be provided with each cable reel.

(b) The cable manufacturer shall be ISO 9001 registered.

(6) Packaging.

(a) Top and bottom ends of the cable shall be available for testing.

(b) 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.

(c) The reel tag shall include the following information:

i. Cable Number.

ii. Gross Weight.

iii. Shipped Length in Meters.

iv. Job Order Number.

v. Product Number.

vi. Date Cable Tested.

(d) 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.

(G) Warning Tape. Pre-printed polyethylene tape marked with "CAUTION BURIED ELECTRICAL LINE BELOW," 4 mil thick, detectable foil backed, 3" minimum width.

(H) Duct Seal. Pliable, non-toxic material used for application around and in conduits and to minimize moisture and rodent/insect infiltration. Must be re-enterable material allowing form removal/reapplication after initial installation. Non-drying, non-cracking, non-corrosive material that will not adversely affect raceways and conductors. Provide duct seal at all duct entries in handholes, apparatus, and risers.

(I) Ground Rods. Copper clad steel, 3/4" x 10' long minimum.

(J) Construction Requirements.

(1) Equipment List and Drawings. The bidder shall submit the equipment list according to Subsection 106.13 – Substitution of Materials and Equipment After Bid Opening.

(2) Upon completion of the work, submit an 'As-Built' or corrected plan showing in detail the construction changes.

(3) Excavation and Backfill. Excavation and backfill shall conform to Section 204 – Excavation and Backfill for Miscellaneous Facilities.

(4) Installation.

(a) Standards. Install each WIM standard with its shaft precisely vertical on a concrete foundation. Locations of standards shown in the contract are approximate. The Engineer will decide the exact locations in the field.

(b) Pole Mounted Equipment. Assemble the equipment to give the arrangement shown in the contract and in accordance

with manufacturer recommendations. Plumb or level the members, arrange the members symmetrically, and assemble the members securely. Installation shall be such that the Contractor conceals the conductors within the standards and mounting assemblies as much as possible.

(c) Roadside Enclosure. Mount the cabinet according to the contract. Assemble, wire, and house the controller and auxiliary equipment specified in the cabinet and in accordance with manufacturer recommendations.

(d) Vehicle Detectors. Vehicle detectors shall be inductive loop detectors installed according to details shown in the contract. The saw cut groove shall be air blown to remove debris before inserting the loop cable. The loop cable shall be continuous within the roadway. Splice in the pullbox. Fill the saw cut groove with epoxy sealer or hot applied rubberized sealant. As accepted by the Engineer, the Contractor may use a sealant designed for use as a protective seal for traffic inductive loop detectors installed in asphalt concrete or concrete pavements.

(e) Foundations and Pullboxes. Construct the foundations and boxes required carefully at the locations designated. Pour the foundations and boxes in areas that the Contractor has carefully excavated to receive the foundations and boxes. Construct each unit as detailed in the contract and connect each unit properly with the facilities of which each unit is a component part.

Mix, place, and cure the concrete according to Section 601 – Structural Concrete, and Section 503 – Concrete Structures. The Engineer will allow hand mixing.

Set the anchor bolts or the foundations to fit the bases of the standards to be installed.

Give the pullbox frames and covers two (2) coats of asphaltic base paint after installation.

(f) Conduits. Conduits shall be concrete encased, PVC Schedule 80.

Install the ducts to drain towards either one (1) or both pullboxes, manholes, or WIM standard foundation.

Make directional changes in the conduits, such as bends and changes to clear obstructions with curved segments using accepted deflection couplings or with short lengths of straight ducts and couplings. The deflection angle between two (2) adjacent lengths of ducts shall not exceed 6°. The bends shall not have a radius of less than twelve (12) times the nominal size of the conduit. The Contractor may use factory-made ells.

Cut the rigid PVC conduits with a hacksaw. Square and trim the ends after cutting to remove rough edges. The connections shall be of the solvent weld type. Make the solvent weld joints according to the conduit manufacturer's recommendations and as accepted.

Use the rigid PVC conduit for drilling or jacking.

Thread the PVC fittings for connecting PVC conduit to rigid metal conduit on the metal conduit side.

Seal the ends of the duct with plugs at the end of each day of work, whenever problems interrupt the duct installation work and whenever ducts are subject to submergence in water.

Keep the conduits clean during construction.

Use only hand shovels in compacting concrete encasements. Cure the concrete for at least seventy-two (72) hours before permitting vehicular traffic to run over the concrete.

Provide each conduit run with a No. 10 gauge flexible, zinc-coated pull wire extending through its entire length. Double an addition two (2) feet back into the conduit at each end of the run. Conduits and sleeves entering pullboxes shall end flush in the wall with ends ground smooth. Plug the conduits and sleeves temporarily.

Ends of conduits runs shall extend at least twenty-four (24) inches past the face of curb or edge of pavement unless the ends end in the pullboxes. Locate the ends accurately by special markers, markings on curb, or as specified by the Engineer. Show these locations on the 'As-Built' plans.

The completed duct lines shall be subject to a field test. Pass a bullet-shaped test mandrel about eight (8) inches long with a diameter 0.5 inch less than the inside diameter of the ducts through the entire length of each duct run. The Engineer

will consider scouring found on the mandrel deeper than one thirty-secondth inch (1/32 inch) an indication of burrs and/or obstructions in the duct run. Normal abrasion between the duct line and bottom of mandrel is not an indication of burrs and/or obstructions in the duct run. Remove such burrs and/or obstructions. Pass the test mandrel through again. Repeat the process until the Contractor obtains a satisfactory result.

Use galvanized rigid steel or Schedule 80 PVC conduits for all exposed construction except risers for communications cables. Use only Schedule 80 PVC conduits for risers for communication cables.

(g) Wiring. Wiring shall conform to the appropriate articles of the NEC and NESC. Arrange the wiring within cabinets, WIM equipment, WIM standards and pullboxes neatly. Encase the wiring installed underground in conduits. Before installing the wires and cables in conduits, pull a wire brush, swab and mandrel through each conduit for the removal of extraneous matter and verification of the absence of obstructions and debris from the conduit system.

Pull the cables directly from their cores or reels into the conduits. Do not pull off and lay the cables on the ground before installation. Make the pulls in one (1) direction only. Lubricants used shall e as recommended by the cable manufacturer or accepted by the Engineer. Leave the wires or cables under tension nor tight against bushings or fittings.

Remove the damaged ends resulting from the use of pulling grips soon after pulling the cable. Maintain the cable end seals. Do not pull the open-ended cables through the conduits. Cables shall be continuous from pulling point to pulling point. The Engineer will not permit splices. Make the splices, taps, and terminations with pressure-indented connectors or lugs as appropriate or as specified herein. Tape or seal the ends of the spare conductors as accepted.

Join the conductors by a ‘western union’ type splice. Use the connectors for splicing conductors No. 8 AWG, or larger. Solder the splices by the pouring or dipping method.

Pencil the conductor insulation well, trim the conductor insulation to conical shape, and roughen the conductor insulation before applying splice insulation.

Splice insulation includes layers of thermoplastic electrical insulating tape not over 0.007inch thick applied to a thickness equal to and well lapped over the original insulation. The splice insulation shall conform to Federal Specifications MIL-I-7798. Leave at least two (2) feet of slack for each conductor at each splice.

Furnish the cables on reels and handle the cables with great care to avoid damage to the conductors or the jacket.

Install the communications cable, connect the communication cable to terminals, and wire the communication cable to terminals, and wire the communication cable to the proper equipment to produce a closed loop network suitable for operating within the WIM system. Able runs shall be continuous between equipment cabinets without splices.

Pull the cable in the conduit with a cable grip designed to provide a firm hold on the exterior covering of the cable. Pull the cable with a minimum dragging on the ground or pavement. Use powdered soapstone, talc, or other accepted lubricants to ease the pulling of the cable.

(h) Fiber Optic Cable. The qualified Fiber Optic Contractor, shall install the new fiber optic cable in conduits as shown on the plans.

Fiber optic splice locations are permitted only at splice points where splice cabinets are shown on the plans. Fiber optic fibers shall be spliced in every cabinet location, and it is the responsibility of the Fiber Optic Contractor to maintain a continuous run throughout the system.

Provide documented historical cable pulling data indicating tensile pressure exerted on the cable during the installation. All fibers shall be spliced at camera cabinets, hubs, and splice cabinets and shall have no more than .07 dB loss per splice based on the appropriate system operating wavelength. As part of the final testing and acceptance prior to final terminations to WIM equipment, submit OTDR readings to the Engineer for review.

All necessary equipment and plug-in, fiber optic pigtails, fittings, enclosures, and work to complete an operational system shall be furnished and installed by the Contractor, unless otherwise indicated, at no additional cost.

(i) Bonding and Grounding. Make the metallic cable sheaths, conduits, and standards mechanically and electrically secure to form a continuous system. Ground the system effectively. Bonding and grounding jumpers shall be No. 8 AWG copper wire or equivalent copper strap of the same cross-sectional area.

Bond the standards by the neutral wires at the service points as required under the Code, except that grounding conductors shall be No. 6 AWG or equal.

Install a copper-clad steel or pure copper ground rod 3/4 inch diameter by ten (10) feet long alongside each WIM standard and roadside enclosure concrete base.

The Contractor shall connect them with No. 6 AWG wire to the No. 8 AWG ground wire loop and power system neutral.

(K) 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.

(L) System Acceptance.

(1) The system shall be accepted subject to fulfilling the following conditions:

(a) System review.

(b) Acceptance tests (meeting WIM accuracy on a weekly basis).

(c) Training.

(2) System Review.

(a) The WIM Vendor shall submit three (3) copies of a system layout for each individual site. These layouts shall be submitted to the Department for review. Approval shall be either an official from the Department or a designate.

(b) A preliminary on-site meeting shall be held for each site to discuss contractors' plans for the routing of conduits, cables, and placement of equipment.

(3) Acceptance Tests. The system, all-inclusive as contracted, shall be designed, built and tested by the Vendor, and as proof of operation, the systems, overall and singularly, shall be tested at various times according to the test specifications. All field tests shall be performed by the WIM Vendor and observed by the Department with all reports submitted to the Department.

(4) Factory Acceptance Tests.

(a) Prior to shipment of any equipment, Factory Acceptance Tests shall be performed for each system to verify the equipment operating as described in the contract documents and in accordance with the test specifications approved by the Department. The Factory Acceptance Tests shall include at minimum the following:

i. A physical inspection to verify that the quality of material and workmanship satisfy specified requirements and standards and that the equipment and software under test are complete and ready for delivery.

ii. A functional test to verify that the equipment and software operate as described in the contract documents.

iii. A performance test to verify that the equipment satisfies performance and operation criteria

(b) For the purpose of these tests the equipment and software shall be configured as nearly as possible to the final configuration. Any field inputs not available at the factory test site shall be simulated to provide a close approximation to actual site conditions.

(5) Site Acceptance Test. After all the equipment and software have been installed at the site, the Vendor shall run tests to ensure that all equipment shall operate a specified in the contract documents. These tests shall be witnessed or conducted by the Department within one (1) week of the manufacturer notifying the Department that the system is ready for testing.

(6) Continuous Operating Test.

(a) Following successful completion of the Site Acceptance Test, a Continuous Operating Test shall be conducted for a period of thirty (30) calendar days. During this period the system shall operate under normal conditions and attain a Level of Service of 98.0% or better of the total station operating hours within any period of thirty (30) consecutive days.

(b) The Weight Sorter System shall be considered unavailable when:

i. A major system component completely fails which significantly degrades the performance or operation of the weigh station. This situation is said to have prevailed if either the WIM system or the communication system has failed.

ii. More than one (1) system component fails to operate or respond to operator commands and/or system automation for more than thirty (30) minutes.

iii. Weekly WIM accuracy is not met.

(c) During the continuous operating test, the entire system shall be fully operational under normal traffic conditions and operate trouble free for thirty (30) consecutive days.

(d) In the event that one (1) of the abovementioned conditions persists and the specified availability cannot be achieved, the WIM Vendor will be informed and problem(s) shall be corrected and the continuous operating test shall start over until thirty (30) continuous days of trouble free operation are experienced.

(e) The continuous operating test will be the basis for acceptance or rejection of the systems as a result of demonstrated performance.

(f) The Department shall issue a Certificate of Final Acceptance upon successful completion of the Continuous Operating Test and training program.

(g) This calibration/acceptance procedure follows ASTM E 1318 Standards. Calibration is to be performed by the running of one (1) calibration truck. The test vehicle should be a five (5) axle, tractor/trailer combination (3S2), with air ride suspension.

The truck will be in excellent mechanical condition. The truck will be loaded with solid, non-shifting material. The truck will bel loaded to with ninety percent (90%) to one hundred percent (100%) of allowable Gross Vehicle Weight for the road under test.

(h) The calibration procedure is as follows:

i. The vehicle will be weighed at a government certified static weigh scale. The weight information on the front (single axle), drive (tandem axle group), and trailer (tandem axle group), should be recorded. The Gross Vehicle Weight (GVW) of the vehicle will be calculated by adding the three (3) weights together.

ii. The distance between the five (5) individual axles on the truck will be measured and recorded.

iii. The test vehicle will make three (3) test passes over the system under test at a selected speed which is indicative of the truck traffic at the site. Adjustments will be made by vendor personnel on site during this time to fine tune the axle spacing, and weight output of the WIM system.

iv. Once all initial adjustments have been made, the test vehicle will make an additional two (2) test passes to confirm the accuracy of the adjustments. If all the readings fall within the ASTM ranges for the WIM Type under test, and vendor personnel do not feel that additional adjustments are required, the tests will continue. If this is not the case, additional adjustments will be performed and two (2) more confirming passes will be made by the test truck.

v. The test truck should then make an additional ten (10) passes at a selected speed that is indicative of the truck traffic at the test site.

vi. All of the data should be recorded and placed into a spreadsheet. The mean error and standard deviation for all recorded measurements will be calculated at the end of the ten (10) test passes. The calculations will be as follows:

(i) For weight measurements, the percent error for each test pass will be calculated using the following formula: [(WIM Weight – Static Weight)/Static Weight] x 100 = % error

(ii) The mean error for each weight type (single, group, GVW) will be calculated as follows: % errors for single, group or GVW/# of samples = Mean error. (Each weight type calculated individually)

(iii) The error for individual axle spacings will be calculated using the following formula: 10 of [(WIM Axle Spacings – Actual Axle Spacing)]/10 = Mean Axle Spacing Error. (Each of the four (4) axle spacings calculated individually)

(iv) All of the calculated errors will also be entered into the spreadsheet.

vii. A check will be made of the calculated result against the acceptable range for the ASTM WIM Type under test. There will be one (1) of two (2) results:

(i) If ninety-five percent (95%) of all recorded test results, (single axles, axle groups, GVW, axle spacing) fall within the specified tolerance for the ASTM WIM Type under test then the system will have passed the requirements.

(ii) If less than ninety-five percent (95%) of the calculated differences fall within the specified tolerance for the ASTM WIM Type under test then the system will be readjusted and an additional ten (10) test passes will be required to retest the system.

(iii) The testing will continue until the system passes all criteria according to ASTM E 1318 Standards.

(M) Training.

(1) The Vendor shall set up and conduct formal training programs for Department personnel on the operation of the WIM systems. The training shall include the following:

(a) Two (2) half-day operator training sessions providing an introduction to the operation of the WIM Systems and to the functions performed by the major system components. A class size of up to eight (8) individuals per session can be expected.

(b) Two (2) one-day "hands-on" guidance sessions for operators in the operation of the systems. A class size of up to four (4) individuals per session can be expected. This training will occur during the first two (2) days of the Continuous Operating Test.

(2) The training program will be scheduled the week following the completion of the operations test.

(3) The cost for the first training sessions shall be included in the contract price. The Department shall, from time to time review any future training requirements. The WIM Vendor shall agree to provide future and additional training sessions upon receipt of requests from the Department. The Department shall reimburse the WIM Vendor the cost of providing additional training sessions on a per diem basis and at a rate agreed upon by Department at the time of the request. The Department shall provide classroom space for training session.

(N) Warranty.

(1) The WIM Vendor shall warrant all manufactured materials and equipment for a period of three (3) year from the date of acceptance of the system.

(2) The warranty shall cover the manufacture of the equipment, and includes manufacturer's workmanship, material defects, assembly and installation of system components, hardware and software. The warranty shall not cover damage to any in-road equipment as a result of pavement deterioration. The warranty shall not cover physical damage caused by accident, vandalism, lightning, flood, fire, acts of God, acts of war or terrorism, or improper installation or servicing by personnel not authorized by the Vendor.

(3) The Vendor shall not under any circumstances be liable for any special, incidental, indirect or consequential damage, including damages from the use or malfunction of the product, loss of profits or revenue or cost of replacement goods, whether the Vendor has been informed or not in advance of the possibility of such damages.

(4) Following the expiry of the warranty, the Vendor shall provide the option of a system maintenance service contract for a period to be negotiated between the Department and the Vendor.

(O) Scheduled Maintenance Service.

(1) The Vendor's routine maintenance on all major systems, system components and ancillary equipment shall be schedule at six (6) month intervals. A semi-annual maintenance report shall be submitted to the Department upon completion of the scheduled maintenance service. Scheduled maintenance, emergency maintenance and refresher training shall be included as part of the three (3) year warranty.

(2) The scheduled maintenance service shall include the following:

(a) Visual inspection, signal checks, and testing measures on all loops.

(b) Cleaning, repair, and testing measures on all WIM Scales.

(c) Visual inspection, testing measures, and signal checks on all road sensors.

(d) Visual inspection and cleaning of cabinet and system electronics.

(e) Maintenance of WIM cables, connectors, terminal strips, and back-up batteries.

(f) Electrical inspection.

(g) Cabinet mechanical condition inspection.

(h) Heating, ventilation, and air conditioning maintenance (if applicable).

(i) Interface card operation inspection, testing measures, and maintenance.

(j) Notification Lane Control Signal inspection, testing, and maintenance.

(k) Structural integrity check of all poles, and mast arms.

(l) Inspection and verification of computer communication systems.

(m) Camera and Video inspection, testing, and maintenance.

(n) A report shall accompany the scheduled maintenance service and shall be submitted to the Department. The report shall include:

(o) Pass/Fail grading of all sensors.

(p) A checklist of all components checked as listed above, as well as the location of the components and comments on their general state.

(q) A checklist and commentary detailing whether each component (as listed above) met standards or required repairs.

(3) Emergency Repair Services. Emergency repair services shall be completed on an as-required basis. The maximum response time will be two (2) business days for notice by email or other mutually agreed upon mode of communication. The Vendor shall initiate on-site repairs within seven (7) days of notification.

(4) Operator Refresher Courses. In conjunction with the scheduled maintenance services, the Vendor shall provide Operator Refresher Courses on the operation of the entire WIM System. The courses shall have a maximum duration of four (4) hours and shall be scheduled before or after the semi-annual maintenance service. The course attendees shall be decided by the Department.

(5) Network communications at the Roadside Cabinet. including three (3) year data service plan to accommodate Weigh-in-Motion system operations will be included as part of this project. (300 monthly gigabyte allowance and 25Mbps service or equivalent for proper operation of the Weigh-in-Motion System).

Note this network communications service plan is for the Roadside WIM Electronics Cabinet only. The communication link that HDOT will use to remotely connect to the WIM system from the Weigh Station location or other HDOT locations is not included within this project, and is the responsibility of others.

(P) Material. Material used in the construction of this equipment shall be of good commercial quality entirely suitable for the intended purpose. Material

shall be free from all defects and imperfections that might affect serviceability of the finished product.

(Q) Standard Products. The equipment shall be constructed of standard material, so that the prompt and continuing service and delivery of spare parts may be assured. The component parts need not be products of the same manufacturer.

(R) Lightning Protection.

(1) Ground rod(s) shall be provided and installed at all outdoor equipment cabinet locations, scale vault(s), and equipment mounting pole(s) and structure(s). All system components and equipment shall be properly grounded.

(2) Lightning protection devices shall be provided for signal input/output and power connections at any separately packaged electronic signal processing device/equipment.

(3) Lightning protection devices shall be either in the form of terminal boxes equipped with terminal blocks and lightning/transient suppressors or modular lightning protectors. Lightning protection shall be provided.

679.04 Measurement. The Weigh-In-Motion System and 3-year Wireless Data Plan will be paid on a lump sum basis. Measurement for payment will not apply. The 3-year wireless data plan shall be Business Internet 25Mbps with 300 monthly gigabyte allowance minimum to support the Weigh-in-Motion Operator Interface, Data Collection, and Reporting activities. This will be supplied by the Weigh-in-Motion vendor as part of their ongoing maintenance and service commitment. The cellular modem and SIM Card at roadside required for this wireless data plan and service will be provided by the Weigh-in-Motion vendor and will be installed in the roadside cabinet by the Weigh-in-Motion vendor.

679.05 Basis of Payment. The Engineer will pay for the accepted Weigh-In-Motion System and 3-year Wireless Data Plan on a contract lump sum basis. Payment will be for full compensation for the work prescribed in this section and the contract documents.

The Engineer will consider additional materials and labor, needed to complete the installation of the system and not shown in the contract included in the bid price of the various contract items.

The Engineer will pay for hauling and stockpiling of salvaged materials and equipment off the right-of-way as ordered by the Engineer in accordance with Subsection 104.02 – Changes.

The Engineer will pay for each of the pay items when included in the proposal schedule:

Pay Item	Pay Unit
Weigh-In-Motion System	L.S.
3-Year Wireless Data Plan	L.S.

END OF SECTION 679

"General Decision Number: HI20260001 01/16/2026

Superseded General Decision Number: HI20250001

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

Modification Number	Publication Date
0	01/02/2026
1	01/16/2026

ASBE0132-001 09/07/2025

	Rates	Fringes
Asbestos Workers/Insulator: Includes application of all insulating materials, protective coverings, coatings and finishes to all types of mechanical systems. Also the application of firestopping material for wall openings and penetrations in walls, floors, ceilings and curtain walls	$ 46.90	29.75

BOIL0627-005 01/01/2025

	Rates	Fringes
BOILERMAKER	$ 49.37	31.25

BRHI0001-001 09/05/2023

	Rates	Fringes
BRICKLAYER		
Bricklayers and Stonemasons	$ 48.03	32.23
Pointers, Caulkers and Weatherproofers	$ 48.28	32.23

BRHI0001-002 09/05/2023

	Rates	Fringes
Tile, Marble & Terrazzo Worker		
Terrazzo Base Grinders	$ 44.69	33.00
Terrazzo Floor Grinders and Tenders	$ 43.14	33.00
Tile, Marble and Terrazzo		

Workers.....$ 46.50 33.00

CARP0745-001 09/01/2025

	Rates	Fringes
Carpenters:		
Carpenters; Hardwood Floor Layers; Patent Scaffold Erectors (14 ft. and over); Piledrivers; Pneumatic Nailers; Wood Shinglers and Transit and/or Layout Man	$ 55.50	29.81
Millwrights and Machine Erectors	$ 55.75	29.81
Power Saw Operators (2 h.p. and over)	$ 55.65	29.81

CARP0745-002 09/01/2025

	Rates	Fringes
Drywall and Acoustical Workers and Lathers	$ 55.75	29.81

ELEC1186-001 08/24/2025

	Rates	Fringes
Electricians:		
Cable Splicers	$ 63.90	33.38
Electricians	$ 56.55	33.16
Telecommunication worker....	$ 41.00	16.28

ELEC1186-002 08/24/2025

	Rates	Fringes
Line Construction:		
Cable Splicers	$ 63.90	33.38
Groundmen/Truck Drivers	$ 42.41	27.14
Heavy Equipment Operators...	$ 50.90	30.75
Linemen	$ 56.55	33.16
Telecommunication worker....	$ 41.00	16.28

ELEV0126-001 01/01/2025

	Rates	Fringes
ELEVATOR MECHANIC	$ 73.85	38.435+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 09/01/2025

	Rates	Fringes

Diver (Aqua Lung) (Scuba))		
Diver (Aqua Lung) (Scuba) (over a depth of 30 feet)	$ 81.72	35.68
Diver (Aqua Lung) (Scuba) (up to a depth of 30 feet)	$ 72.35	35.68
Stand-by Diver (Aqua Lung) (Scuba)	$ 62.97	35.68
Diver (Other than Aqua Lung)		
Diver (Other than Aqua Lung)	$ 81.72	35.68
Diver Tender (Other than Aqua Lung)	$ 59.94	35.68
Stand-by Diver (Other than Aqua Lung)	$ 62.97	35.68
Helicopter Work		
Airborne Hoist Operator for Helicopter	$ 61.52	35.68
Co-Pilot of Helicopter	$ 61.66	35.68
Pilot of Helicopter	$ 62.83	35.68
Power equipment operator - tunnel work		
GROUP 1	$ 57.96	35.68
GROUP 2	$ 58.07	35.68
GROUP 3	$ 58.24	35.68
GROUP 4	$ 58.51	35.68
GROUP 5	$ 58.82	35.68
GROUP 6	$ 59.47	35.68
GROUP 7	$ 59.79	35.68
GROUP 8	$ 59.90	35.68
GROUP 9	$ 60.01	35.68
GROUP 9A	$ 60.24	35.68
GROUP 10	$ 60.30	35.68
GROUP 10A	$ 60.45	35.68
GROUP 11	$ 60.60	35.68
GROUP 12	$ 60.96	35.68
GROUP 12A	$ 61.32	35.68
Power equipment operators:		
GROUP 1	$ 57.66	35.68
GROUP 2	$ 57.77	35.68
GROUP 3	$ 57.94	35.68
GROUP 4	$ 58.21	35.68
GROUP 5	$ 58.52	35.68
GROUP 6	$ 59.17	35.68
GROUP 7	$ 59.49	35.68
GROUP 8	$ 59.60	35.68
GROUP 9	$ 59.71	35.68
GROUP 9A	$ 59.94	35.68
GROUP 10	$ 60.00	35.68
GROUP 10A	$ 60.15	35.68
GROUP 11	$ 60.30	35.68
GROUP 12	$ 60.66	35.68
GROUP 12A	$ 61.02	35.68
GROUP 13	$ 57.94	35.68
GROUP 13A	$ 58.21	35.68
GROUP 13B	$ 58.52	35.68
GROUP 13C	$ 59.17	35.68
GROUP 13D	$ 59.49	35.68
GROUP 13E	$ 59.60	35.68

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 Loaderand 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, Liebher, Linden, and similar types of Tower Cranes (in the erection, dismantling, and moving of equipment there shall be an additional Operating Engineer or Heavy Duty Repairman); Yo-Yo Cat or Dozer.

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

ENGI0003-004 09/01/2025

	Rates	Fringes
Dredging: (Boat Operators)		
Boat Deckhand	$ 57.94	35.68
Boat Operator	$ 60.15	35.68
Master Boat Operator	$ 60.30	35.68
Dredging: (Clamshell or Dipper Dredging)		
GROUP 1	$ 60.66	35.68
GROUP 2	$ 60.00	35.68
GROUP 3	$ 59.60	35.68
GROUP 4	$ 57.94	35.68
Dredging: (Derricks)		
GROUP 1	$ 60.66	35.68
GROUP 2	$ 60.00	35.68
GROUP 3	$ 59.60	35.68
GROUP 4	$ 57.94	35.68
Dredging: (Hydraulic Suction Dredges)		
GROUP 1	$ 60.30	35.68
GROUP 2	$ 60.15	35.68
GROUP 3	$ 60.00	35.68
GROUP 4	$ 59.94	35.68
GROUP 5	$ 37.88	26.76
Group 5	$ 59.60	35.68
GROUP 6	$ 37.77	26.76
Group 6	$ 59.49	35.68
GROUP 7	$ 36.22	26.76
Group 7	$ 57.94	35.68

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.

ENGI0003-044 09/01/2025

	Rates	Fringes
Power Equipment Operators (PAVING)		
Asphalt Concrete Material Transfer	$ 58.67	34.86
Asphalt Plant Operator	$ 59.07	34.86
Asphalt Raker	$ 57.68	34.86
Asphalt Spreader Operator	$ 59.16	34.86
Cold Planer	$ 59.47	34.86
Combination Loader/Backhoe (over 3/4 cu.yd.)	$ 57.68	34.86
Combination Loader/Backhoe (up to 3/4 cu.yd.)	$ 56.70	34.86
Concrete Saws and/or Grinder (self-propelled unit on streets, highways, airports and canals)	$ 58.64	34.86
Grader	$ 59.47	34.86
Laborer, Hand Roller	$ 57.18	34.86
Loader (2 1/2 cu. yds. and under)	$ 58.64	34.86
Loader (over 2 1/2 cu. yds. to and including 5 cu. yds.)	$ 58.96	34.86
Roller Operator (five tons and under)	$ 57.41	34.86
Roller Operator (over five tons)	$ 58.84	34.86
Screed Person	$ 58.64	34.86
Soil Stabilizer	$ 59.47	34.86

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* IRON0625-001 09/01/2025

	Rates	Fringes
Ironworkers:	$ 50.50	43.46

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.

LABO0368-001 09/02/2024

	Rates	Fringes
Laborers:		
Driller	$ 44.75	25.96
Final Clean Up	$ 31.40	21.37
Gunite/Shotcrete Operator and High Scaler	$ 42.25	25.96
Laborer I	$ 41.75	25.96
Laborer II	$ 39.15	25.96
Mason Tender/Hod Carrier	$ 42.25	25.96
Powderman	$ 42.75	25.96
Window Washer (bosun chair)	$ 41.25	25.96

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, Kettlemen, 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 unlading in storage area); Ground and Soil Treatment Work (Pest Control); Gunite/Shotcrete Operator Tender; Junk Yard Laborers (same as Salvage Yard); Laser Beam ""Target Man"" in connection with Laborers' work; Layout Person for Plastic (when work involves waterproofing for waterponds, artificial lakes 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; Sheeting 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; Striper (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.

LABO0368-002 09/03/2024

	Rates	Fringes
Landscape & Irrigation Laborers		
GROUP 1	$ 28.40	17.15
GROUP 2	$ 29.40	17.15
GROUP 3	$ 23.00	17.15

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 oflandscaping and irrigation systems. Operation of hand-held gas, air, electric, or self-powered tools and equipment used in the performance of Landscape and Irrigation work in connection with architectural horticulture; Choke-setting, signaling, and rigging for equipment operators on job-site in the performance of such Landscaping and Irrigation work; Concrete work (wet or dry) performed in connection with such Landscaping and Irrigation work. This work shall also include the setting of rock, stone, or riprap in connection with such Landscape, Waterscape, Rockscape, and Irrigation work; Grubbing, pick and shovel excavation, and hand rolling or tamping in connection with the performance of such Landscaping and Irrigation work; Sprigging, handseeding, and planting of trees, shrubs, ground covers, and other plantings and the performance of all types of gardening and horticultural work relating to said planting; Operation of flat bed trucks (up to and including 2 1/2 tons).:

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 peformance of other types of gardening, yardman, and horticultural-related work.

LABO0368-003 09/02/2024

	Rates	Fringes
Underground Laborer		
GROUP 1	$ 42.35	25.91
GROUP 2	$ 43.85	25.91
GROUP 3	$ 44.35	25.91
GROUP 4	$ 45.35	25.91
GROUP 5	$ 45.70	25.91
GROUP 6	$ 45.95	25.91
GROUP 7	$ 46.40	25.91

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 Cabletenders; 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 07/01/2025

	Rates	Fringes

Painters:
Brush.....$ 44.05 30.05
Sandblaster; Spray.....$ 44.05 30.05

PAIN1889-001 07/01/2025

	Rates	Fringes
Glaziers	$ 48.50	40.20

PAIN1926-001 03/02/2025

	Rates	Fringes
Soft Floor Layers	$ 43.27	35.18

PAIN1944-001 01/01/2025

	Rates	Fringes
Taper	$ 47.36	32.00

PLAS0630-001 09/04/2023

	Rates	Fringes
PLASTERER	$ 46.12	34.53

PLAS0630-002 09/04/2023

	Rates	Fringes
Cement Masons:		
Cement Masons	$ 44.12	33.63
Trowel Machine Operators	$ 44.27	33.63

PLUM0675-001 07/06/2025

	Rates	Fringes
Plumber, Pipefitter, Steamfitter & Sprinkler Fitter	$ 53.83	33.19

ROOF0221-001 11/06/2022

	Rates	Fringes
Roofers (Including Built Up, Composition and Single Ply)	$ 43.15	21.21

SHEE0293-001 03/02/2025

	Rates	Fringes
Sheet metal worker	$ 50.16	33.32

SUHI1997-002 09/15/1997

	Rates	Fringes
Drapery Installer	$ 13.60	1.20
FENCE ERECTOR (Chain Link Fence)	$ 9.33	1.65

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at https://www.dol.gov/agencies/whd/government-contracts.

Note: Executive Order 13658 generally applies to contracts subject to the Davis-Bacon Act that were awarded on or between January 1, 2015 and January 29, 2022, and that have not been renewed or extended on or after January 30, 2022. Executive Order 13658 does not apply to contracts subject only to the Davis-Bacon Related Acts regardless of when they were awarded. If a contract is subject to Executive Order 13658, the contractor must pay all covered workers at least $13.30 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 2025. The applicable Executive Order minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under Executive Order 13658 is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (iii)).

The body of each wage determination lists the classifications and wage rates that have been found to be prevailing for the type(s) of construction and geographic area covered by the wage determination. The classifications are listed in alphabetical order under rate identifiers indicating whether the particular rate is a union rate (current union negotiated rate), a survey rate, a weighted union average rate, a state adopted rate, or a supplemental classification rate.

Union Rate Identifiers

A four-letter identifier beginning with characters other than ""SU"", ""UAVG"", ?SA?, or ?SC? denotes that a union rate was prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2024. PLUM is an identifier of the union

whose collectively bargained rate prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. The date, 07/01/2024 in the example, is the effective date of the most current negotiated rate.

Union prevailing wage rates are updated to reflect all changes over time that are reported to WHD in the rates in the collective bargaining agreement (CBA) governing the classification.

Union Average Rate Identifiers

The UAVG identifier indicates that no single rate prevailed for those classifications, but that 100% of the data reported for the classifications reflected union rates. EXAMPLE: UAVG-OH-0010 01/01/2024. UAVG indicates that the rate is a weighted union average rate. OH indicates the State of Ohio. The next number, 0010 in the example, is an internal number used in producing the wage determination. The date, 01/01/2024 in the example, indicates the date the wage determination was updated to reflect the most current union average rate.

A UAVG rate will be updated once a year, usually in January, to reflect a weighted average of the current rates in the collective bargaining agreements on which the rate is based.

Survey Rate Identifiers

The ""SU"" identifier indicates that either a single non-union rate prevailed (as defined in 29 CFR 1.2) for this classification in the survey or that the rate was derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As a weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SUFL2022-007 6/27/2024. SU indicates the rate is a single non-union prevailing rate or a weighted average of survey data for that classification. FL indicates the State of Florida. 2022 is the year of the survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 6/27/2024 in the example, indicates the survey completion date for the classifications and rates under that identifier.

?SU? wage rates typically remain in effect until a new survey is conducted. However, the Wage and Hour Division (WHD) has the discretion to update such rates under 29 CFR 1.6(c)(1).

State Adopted Rate Identifiers

The ""SA"" identifier indicates that the classifications and prevailing wage rates set by a state (or local) government were adopted under 29 C.F.R 1.3(g)-(h). Example: SAME2023-007 01/03/2024. SA reflects that the rates are state adopted. ME refers to the State of Maine. 2023 is the year during which the state completed the survey on which the listed classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 01/03/2024 in the example, reflects the date on which the classifications and rates under the ?SA? identifier took effect under state law in the state from which the rates were

adopted.

WAGE DETERMINATION APPEALS PROCESS

1) Has there been an initial decision in the matter? This can be:

a) a survey underlying a wage determination
b) an existing published wage determination
c) an initial WHD letter setting forth a position on a wage determination matter
d) an initial conformance (additional classification and rate) determination

On survey related matters, initial contact, including requests for summaries of surveys, should be directed to the WHD Branch of Wage Surveys. Requests can be submitted via email to davisbaconinfo@dol.gov or by mail to:

Branch of Wage Surveys
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

Regarding any other wage determination matter such as conformance decisions, requests for initial decisions should be directed to the WHD Branch of Construction Wage Determinations. Requests can be submitted via email to BCWD-Office@dol.gov or by mail to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2) If an initial decision has been issued, then any interested party (those affected by the action) that disagrees with the decision can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Requests for review and reconsideration can be submitted via email to dba.reconsideration@dol.gov or by mail to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210.

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END OF GENERAL DECISION"

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION

PRE-BID MEETING ATTENDANCE AND MINUTES FOR

Project Title: Sand Island Access Road Truck Weigh Station

Federal-Aid Project No.: NH-064-1(010)R

Date, Time & Place: January 14, 2026 at 10:00 a.m. HST
Pre-bid meeting was held virtually on Microsoft Teams.

Attendees:

Name	Organization/Company	Contact Information
Amy Sunahara	HDOT HWY-DD	amy.my.sunahara@hawaii.gov
Justin Tadaki	HDOT HWY-DD	justin.t.tadaki@hawaii.gov
Daniel Williams	HDOT OCR	daniel.k.williams@hawaii.gov
Robert Hopper	HDOT OCR	robert.m.hopper@hawaii.gov
Justin Ching	HDOT HWY-O	justin.y.ching@hawaii.gov
Diane Kodama	AECOM	diane.kodama@aecom.com
Ryan Asari	AECOM	ryan.asari@aecom.com
Ian Sequeira	AECOM	ian.sequeira@aecom.com
Brayden Metoyer	AECOM	brayden.metoyer@aecom.com
Tyler Sato	Drayko Construction	info@draykohawaii.com
Alfred Cheng	Drayko Construction	info@draykohawaii.com
Keoni Wasano	Goldwings Supply Service, Inc.	keoni@goldwings-supply.com
Sam Peng Ho	Jas. W. Glover, Ltd.	samh@gloverltd.com
Siale Vete	Hawaii Works, Inc.	estimating@hawaiiworksinc.com

Items of Discussion:

A. Amy Sunahara (HDOT HWY-DD) called the meeting to order at 10:00 a.m. and noted the following:
    a. Anything said at the meeting was for clarification only. The bid documents shall govern over anything said in the meeting and discrepancies shall be clarified by addendum.

B. Robert Hopper (HDOT OCR) discussed the Disadvantaged Business Enterprise (DBE) Requirements and noted the following:
    a. The DBE Project Goal for this project is not specified, therefore there is no goal.
    b. Although there is no goal, HDOT encourages bidders to support Hawaii's small businesses and to consider using small businesses, subcontractors, suppliers, manufacturers, trucking companies, distributors and service providers when they are qualified.
    c. There are two directories for small businesses:
    HANDS Small Business Directory-
    https://hands.ehawaii.gov/hands/smallbusiness/search

HDOT SBE Directory- https://hdot.gob2g.com/

d. HDOT requests that all bidders or offerors bidding on the project submit the bidder registration form to HDOT-DBE@hawaii.gov. The bidder registration form can be found on the HDOT website at https://hidot.hawaii.gov/administration/files/2025/10/RBidRegistration-09.18.25-rev-DBE-IFR-10.15.25.pdf

C. Amy Sunahara noted the following:
   a. Summarized the scope of work as described in the Notice to Bidders.
   b. All requests for information (RFIs) must be submitted in writing through HIePRO by Friday, January 16, 2026 at 2:00 p.m. HST. The bid opening is scheduled for Wednesday, February 4, 2026 at 2:00 p.m. HST. Any questions received after the deadline will not be addressed and verbal RFIs will not receive a response.

D. Bidders were invited to ask questions:
   a. Sam Peng Ho (Jas. W. Glover, Ltd.) asked how this project is related to the previous truck weigh station project (Fed-Aid project no. NH-064-1(010)).
      i. Amy Sunahara (HDOT HWY-DD) clarified that it is the same project that is being re-advertised due to issues that occurred before construction. No percentage of the original project was completed. The current project has been redesigned by a different consultant designer so there are differences from the original design.
   b. Keoni Wasano (Goldwing Supply Service) asked if HDOT or design consultant would be willing to accept approved equals for the system solutions that is in the bid and how they would go about confirming if it would be an acceptable solution before the bid response due date.
      i. Amy Sunahara (HDOT HWY-DD) recommended submitting the question in HIePRO.

E. The meeting concluded at 10:09 a.m.

Questions for solicitation: B26001467 NH-064-1(010)R SAND ISLAND ACCESS ROAD TRUCK WEIGH STATION
01/16/2026

1. **Please confirm if the Weigh-In Motion System, Line Item 679.1001, has to comply with the Build America, Buy America requirement. If yes, has HDOT applied for an Exemption since to our knowledge, there is no Weigh-In Motion System (Electronics) that is BABA compliant.**

There are Weigh in Motion(WIM) Scales that are Build America, Buy America Compliant(BABA). Therefore the WIM scale shall comply with BABA compliance. HDOT Highways has not applied for an exemption.

2. **Does the DOT intend to allow the submission of alternate, functionally equivalent or superior weigh-in-motion (WIM) systems that are not explicitly listed in the RFP, provided they meet or exceed the stated performance, accuracy, and reliability requirements?**

Yes, HDOT does intend to allow for the submission of alternate WIM systems.

3. **Is the contractor expected to provide any operational services, monitoring, calibration, or maintenance support for the WIM equipment following system installation and project acceptance? If so, please specify the anticipated duration and scope of responsibility.**

Please refer to the revised Specification Section 679 in Addendum 1.

4. **1. Bid proposal indicates 120 calendar days from start work date for project completion time. HIePRO posting indicates contract start date of 4/6/26 and contract end date of 12/31/26. Please confirm the working time is 120 calendar days.**

Project working time is intended to be 120 Calendar Days. The HIePRO Contract dates show the estimated early start date and the estimated latest finish date.

5. **2. Will the weigh station facility be closed for the duration of the contractor's work? If not, for bidding purposes please specify operational schedule HDOT foresees during the project.**

The weigh station will not exist during construction.

6. **3. If procurement of the electrical materials specified take longer to procure due to supply chain issues than the timeframe for this bid proposal, please confirm the state will extend the project duration and/or the contract end date of 12/31/26.**

Contractor to Bid accordingly to meet the specified contract date.

7. **Please provide additional specifications and/or requirements for the 3-year wireless data plan. It is unclear on the minimum requirements in the specifications and bid proposal.**

Please refer to the revised Specification Section 679 in Addendum 1.

8. **For section 695.03 (A)(f), please specify if steady burn amber lamp is to be solar powered or battery powered.**

Means and Methods of the Contractor.

9. **If an alternate technical solution is proposed, will the DOT consider value engineering or best-value advantages (e.g., improved lifecycle cost, enhanced performance, data sharing, reduced maintenance, or operational efficiencies) as part of its evaluation, consistent with procurement regulations?**

HDOT may consider alternate technical solutions that would meet the specified contract time.

10. **As noted during the pre-bid meeting, this solicitation is being reissued following termination of the prior contract. Pursuant to applicable public records and Freedom of Information Act requirements, we respectfully request copies of the associated change order(s) and the contract termination documentation for reference.**

The Contract termination documentation and changes orders are not relevant as they are part of a separate contract from this solicitation.

11. **As it pertains to the termination of the prior contract, will the DOT be accepting bids from the previously awarded prime or any of their sub-contractors?**

HDOT will be accepting bids from the previously awarded prime and their sub-contractors.