STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ADDENDUM NO. 2

FOR

Kahului Airport Access Road, Phase I
PROJECT NO. Federal- Aid NH-0380(10)
DISTRICT OF Wailuku
ISLAND OF Maui

FY 2013

The following amendments shall be made to the bid documents:

A. SPECIFICATIONS

1. Replace Table of Contents dated 12/14/12 with the attached Table of Contents dated r03/25/13.

2. Add Section 212, ARCHAEOLOGICAL MONITORING, Pages 212-1a-5a dated 03/25/13.

3. Replace Section 623, TRAFFIC SIGNAL SYSTEM dated 09/13/12, with the attached Section 623, TRAFFIC SIGNAL SYSTEM, Pages 623-1a-6a dated 4/1/13.

4. Add Section 698, TRAINING, Pages 698-1a-3a dated 03/25/13.

5. Add Section 721, TRIAXIAL GEOGRID, Pages 721-1a-4a dated 03/25/13.

6. Replace Section 770, TRAFFIC SIGNAL MATERIALS dated 09/13/12, with the attached Section 770, TRAFFIC SIGNAL MATERIALS, Pages 770-1a-10a dated 4/1/13.

7. Replace the Federal Wage Rates dated 2/15/13 with the attached Federal Wage Rates dated 4/5/13.

B. PROPOSAL

1. Replace Pages P-8 through P-21 dated 10/03/11 with the attached Pages P-8 to P-21 dated r04/8/13.

C. PLANS

1. Replace Plan Sheet Nos. 7, 16, 37, 38, 44, 49, 51, 52, 58, 85, 86, 88, 162, 163, 164, and 166 with the attached Plan Sheet Nos. ADD. 7, ADD. 16, ADD. 37, ADD. 38, ADD. 44, ADD. 49, ADD. 51, ADD. 52, ADD. 58, ADD. 85, ADD. 86, ADD. 88, ADD. 162, ADD. 163, ADD. 164, and ADD. 166.

D. PRE-BID MEETING

A pre-bid meeting was scheduled for 9:00 a.m., March 19, 2013 at the Maui District Office Conference Room.

1. Sign-in sheet (attached)

2. Pre-Bid Meeting minutes (attached)

Please acknowledge receipt of this Addendum No. 2 by recording the date of its receipt in the space provided on Page P-4 of the Proposal.

GLENN M. OKIMOTO, Ph.D
Director of Transportation

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The following Section shall be made part of the Standard Specifications:

"SECTION 212 - ARCHAEOLOGICAL MONITORING

212.01 Description. This work includes monitoring construction activity for archaeological items as specified herein or as directed by the Engineer.

The Contractor shall comply with the Archaeological Monitoring Plan approved by the State Historic Preservation Division (SHPD) as specified herein. The monitoring work may lead to the identification of prehistoric and historic structures, deposits, or burials. However it appears less likely that architecture and extensive surface remains would be present given the location's long time susceptibility to modern infrastructure. In keeping with the results of previous archaeological work within the general Kahului/Wailuku corridor, most cultural signatures dating to pre-Contact and historic times would likely be present in subsurface contexts. The monitoring area has been subject to much modern construction, therefore many of these deposits may be partially truncated and occur as remnants.

Based on previous archaeological work in the general Kahului area and the airport environs itself, both traditional and historical features and deposits may be identified during the monitoring work. Traditional deposits dating from the A.D. 1400s (or even earlier) could include signatures for habitation (hearths, possible living floors, postholes, subterranean alignments, and associated artifacts *(i.e.,* food preparation tools, debitage of tool manufacture, and fishing tool kits) and midden *(i.e.,* consumption products such as fish remains, shell, and terrestrial remains). There is also the possibility that human burials could be identified within subsurface strata. Historic use of the parcel could be indicated by burning episodes, the presence of historic artifacts (such as metals and glass), and historic burials, among others. Therefore, there appears to be a fair probability that Archaeological Monitoring may lead to the identification and documentation of continuous activity from traditional through historic times.

The Contractor shall be responsible for the Archaeological Monitoring Plan (AMP) and all incidental procedures and equipment required for full compliance with the requirements of the AMP as outlined below.

212.02 Monitoring Conventions and Methodology

The Archaeological Monitoring Plan has been devised in accordance with DLNR-SHPD rules governing standards for archaeological monitoring (DLNR-SHPD 2003). The monitors will adhere to the following guidelines during monitoring construction areas:

1. A qualified archaeologist intimately familiar with the project area and the results of previous archaeological work conducted within and near the Kahului Airport will monitor subsurface construction activities.

2. If features or cultural deposits are identified during Monitoring, the on-site archaeologist will have the authority to temporarily suspend construction activities at the significant location so that the cultural feature(s) or deposit(s) may be fully evaluated and appropriate treatment of the cultural deposit(s) is conducted. SHPD will be contacted to establish feature significance and potential mitigation procedures. Treatment activities primarily include documenting the feature/deposit through plotting its location on an overall site map, illustrating a plan view map of the feature/deposit, profiling the deposit in three dimensions, photographing the finds with the exception of human burials, artifact and soil sample collection, and triangulation of the finds. Construction work and/or back-filling of excavation pits or trenches will only continue in the sample location when all documentation has been completed.

3. Control stratigraphy in association with subsurface cultural deposits will be noted and photographed, particularly those containing significant quantities or qualities of cultural materials. If deemed significant by the SHPD and archaeologist, these deposits will be sampled.

4. In the event that human remains are encountered, all work in the immediate area of the find will cease; the area will be secured from further activity until burial protocol has been completed. The SHPD and History Branch-Maui and SHPD-Burial Sites Program will be immediately identified as to the inadvertent discovery of human remains on the property. Notification of the inadvertent discovery will also be made to the Maui/Lanai Islands Burial Council by SHPD. A determination of minimum number of individuals (MNI), age(s), and ethnicity of the burial(s) will be ascertained in the field by the archaeologist. Rules outlined in Chapter 6e, Section 43 shall be followed. Profiles, plan view maps, and illustrative documentation of skeletal parts will be recorded to document the burial(s). The burial location will be identified and marked. If a burial is disturbed during trench excavations, materials excavated from the vicinity of the burial(s) will be manually screened through 1/8" wire mesh screens to recover any displaced skeletal material. If the remains are to be removed, the work will be in compliance with HRS 6.E-43.6, Procedures Relating to Inadvertent Discoveries after approval from all parties (SHPD, Burial Council).

5. To ensure that contractors and the construction crew are aware of this Archaeological Monitoring Plan and possible site types to be encountered on the parcel, a brief coordination meeting will be held between the construction team and monitoring archaeologist prior to initiation of the

project. The construction crew will also be informed as to the possibility that human burials could be encountered and how they should proceed if they observe such remains.

6. The archaeologist will provide all coordination with the contract of, SHPD, and any other group involved in the project. The archaeologist will coordinate all Monitoring and sampling activities with the safety officers for the contractors to ensure that proper safety regulations and protective measures meet compliance. Close coordination will also be maintained with construction representatives in order to adequately informed personnel of the possibility that open archaeological units or trenches may occur in the project area.

7. As necessary, verbal reports will be made to SHPD and any other agencies as requested.

212.03 Materials, None Specified.

212.04 Construction Requirements. All excavation activity shall be monitored and lab analysis, curation, and reporting requirements are as follows:

1. Laboratory Analysis

   All samples collected during the project, except human remains, will undergo analysis at an approved SHPD laboratory. In the event that human remains are identified, and unless granted an extension by the landowner(s), the SHPD will have three days to decide whether to preserve the remains in place or relocate the remains. Photographs, illustrations, and all notes accumulated during the project will be curated at the laboratory. All retrieved artifacts and midden samples will be thoroughly cleaned, sorted, and analyzed. Significant artifacts will be photographed, sketched, and classified (qualitative analysis). All metric attributes and weights will be recorded (quantitative analysis). These data will be presented in tabular form within the final monitoring report. Midden samples will be minimally identified to a major 'class' *(e.g.,* bivalve, gastropod mollusk, echinoderm, fish, bird, mammal). All data will be clearly recorded on standard laboratory forms that also include number and weight (as appropriate) of each constituent category. These counts will also be included in the final report.

   Should any samples amenable to dating be collected from a significant cultural deposit, they will be prepared in the laboratory and submitted for specialized radiocarbon analysis. While primary emphasis for dating is

placed on charcoal samples, we do not preclude the use of other material such as marine shell or nonhuman bone materials. The archaeologist will consult with SHPD if radiocarbon dates are deemed necessary.

All stratigraphic profiles will be drafted for presentation in the final report. Representative plan view sketches showing the location and morphology of identified sites/features/deposits will be compiled and illustrated.

2. Curation

The archaeologist will curate all recovered materials in Honolulu (except human remains, which would remain on-island at either the archaeological office in Kahului or at SHPD in Wailuku) until a permanent, more suitable curation center is identified.

3. Reporting

An Archaeological Monitoring Report documenting the project findings and interpretation, following SHPD guidelines for Archaeological Monitoring reports, will be prepared and submitted 180 days after the completion of fieldwork.

If cultural features or deposits are identified during fieldwork, the sites will be evaluated for historical significance and assessed under State and Federal Significance Criteria. The Archaeological Monitoring report will be drafted until accepted by SHPD and will be submitted to the SHPD and another other organizations deemed necessary by the archaeologist.

212.05 Method of Measurement. The Engineer will measure Archaeological Monitoring on a force account basis according to Subsection 109.04 – Force Account Provisions and Compensation and as ordered by the Engineer.

212.06 Basis of Payment. The Engineer will pay for the accepted Archaeological Monitoring on a force account basis according to Subsection 109.04 Force Account Provisions and Compensation. Payment will be full compensation for the work prescribed in this Section, by the Engineer and Subsection 109.02 - Full Compensation; Changes.

The Engineer will make pay for the following item when included in the proposal schedule:

Pay Item	**Pay Unit**
Archaeological Monitoring	Force Account

An estimated amount for the force account is allocated in the proposal schedule under Archaeological Monitoring. The actual amount to be paid will be the sum shown on the accepted force account records whether this sum be more or less than the estimated amount allocated in the proposal schedule.

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

END OF SECTION 212"

SECTION 623 - TRAFFIC SIGNAL SYSTEM

Make the following amendments to said Section:

(I) Amend **623.01 Description** from lines 4 to 95 to read as follows:

"623.01 Description. This work includes furnishing labor, materials, tools, machinery, and equipment necessary to modify or install and construct an operating traffic signal system complete in place according to the contract.

The traffic signal system includes:

(1) trenching, structural excavating, backfilling, restoring work, and installing pullboxes;

(2) providing a complete and operating traffic signal system with controller, cabinet, auxiliary and support equipment, vehicle detectors, signal standards, traffic signals and appurtenances, signal head mounting, back plates for all mastarm mounted traffic signal heads, emergency vehicle preemption optical receivers, concrete foundations, cables, wiring, cleaning and adjusting signal heads, painting and restoration work.

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

(4) turning over to the County a complete and operating traffic signal system according to the contract.

Furnish and install the incidental parts that the contract does not show and that are necessary to complete the traffic signal system as though such parts were in the contract.

Electrical equipment shall conform to the NEMA Standards and this contract. Material and workmanship shall conform to the "National Electric Code", (the Code); General Order Nos. 6 and 10 of the Hawaii Public Utilities Commission; the standards of the ASTM; the ANSI; Local Joint Pole Agreement; local power company rules; and local ordinances that may apply.

Definitions.

(1) Actuation - Operation of any type of detector.

(2) Clearance Interval - Length of time of display of signal indication following right-of-way interval.

(3) Detector for Traffic Actuation - Device that pedestrians or vehicles can register their presence with traffic-actuated controller.

(4) Extendible Portion - That part of green interval that follows initial portion.

(5) Extension Limit - Maximum time that traffic phase may retain right-of-way after actuation on another traffic phase, after timimg out initial portion.

(6) Flashing Feature - Feature incorporated to stop normal signal operation and cause flashing of predetermined combination of signal lights.

(7) Initial Portion - Part of green interval that is timed-out or separately controlled by traffic-actuated controller before extendible portion of interval takes effect.

(8) Interval - Several divisions of time cycle during which signal indications do not change.

(9) Interval Sequence - Order of appearance of signal indications during successive intervals of time cycle.

(10) Magnetic Vehicle Detector - Detector actuated by movement of vehicle passing through magnetic field.

(11) Major Street - Roadway approach or approaches at intersection normally carrying greater volume of vehicular traffic.

(12) Manual Operation - Operation of signal controller by hand-operated switch.

(13) Minimum Period - In semi-traffic-actuated controllers, shortest time for which right-of-way will be given to approaches not having detectors.

(14) Minor Movement Interval - Auxiliary phase added to controller phase (parent phase) and modified by auxiliary movement controller.

(15) Minor Street - Roadway approach or approaches at intersection normally carrying smaller volume of vehicular traffic.

(16) Non-Parent Phase - Controller phase not modified by auxiliary controlunit.

(17) Parent Phase - Controller phase modified by auxiliary control unit.

(18) Passage Period - Time allowed for vehicle to travel at selected speed from detector to nearest point of conflicting traffic.

(19) Pedestrian Detector - Detector, usually of push-button type, installed near roadway and operated by hand.

(20) Pressure-Sensitive Vehicle Detector - Detector installed in roadway, actuated by pressure of vehicle passing over its surface.

(21) Pre-Timed Controller - Automatic control device for supervising operation of traffic control signals in accordance with pre-timed cycle and divisions.

(22) Recall Switch - Manually operated switch in actuated controller to provide for automatic return of right-of-way to street.

(23) Right-of-Way - Privilege of immediate use of highway.

(24) Signal Indication - Illumination of traffic signal lens or equivalent device, or of combination of several lenses or equivalent devices.

(25) Time Cycle - Number of seconds required for one complete revolution of timing dial or complete sequence of signal indications.

(26) Traffic-Actuated Controller - Digital control device for supervising operation of traffic control signals in accordance with varying demands of traffic as registered with controller by loop detectors or pedestrian push buttons.

(27) Traffic Phase - Part of cycle allocated to traffic movements receiving right-of-way or to combinations of traffic movements receiving right-of-way simultaneously during one or more intervals.

(28) Unit Extension - Minimum time, during extendible portion, for which right-of-way must remain on traffic phases following actuation on that phase, subject to extension limit."

(II) Amend **623.02 Materials** by adding the following after line 132:

"Pedestrian Signal Push Button with Integral Sign 770.12"

(III) Amend **Subsection 623.03(C)(7)** from lines 255 to 258 to read as follows:

"(7) Conduits. Lay polyvinyl chloride (PVC) conduits carefully in trenches prepared to receive conduits. Concrete encase PVC Schedule 40 conduits."

(IV) Amend Section **623.04 Measurement** and **623.05 Payment** from lines 578 to 594 to read as follows:

"623.04 Measurement. The Engineer will not measure software for controller, interconnect, or electrical risers for payment.

(A) The Engineer will measure the controller assembly, foundation for traffic signal controller, traffic signal standard, foundation for traffic signal standard, pedestrian or traffic signal assembly, pedestrian pushbutton, pullbox, loop detector sensing unit, and emergency vehicle preemption optical receiver.

(B) The Engineer will measure traffic signal ductline and cables per linear foot in accordance with the contract documents.

623.05 Payment. The Engineer will pay for the accepted controller assembly at the contract unit price per each complete in place. The price includes full compensation for submitting the equipment list and drawing; furnishing and mounting the controller cabinet; furnishing, assembling, wiring, and housing the controller and auxiliary equipment; painting the controller cabinet; testing; providing turn-on service; submitting warranty; and furnishing equipments, tools, labor, materials and other incidentals necessary to complete the work.

The Engineer will pay for the accepted traffic signal standard at the contract unit price per each complete in place. The price includes full compensation for submitting the equipment list and drawing; furnishing and installing the traffic signal standard; wiring; bonding and grounding; testing; providing turn-on service; submitting warranty; and furnishing equipments, tools, labor, materials, and other incidentals necessary to complete the work.

The Engineer will pay for the accepted foundation for controller cabinet and traffic signal standard at the contract unit price per each complete in place. The price includes full compensation for excavating and backfilling; forming; furnishing and placing the reinforcing steel; mixing, placing, and curing the concrete; furnishing and setting the anchor bolts; restoring the pavement; and furnishing equipments, tools, labor, materials and other incidentals necessary to complete the work.

The Engineer will pay for the accepted pedestrian and traffic signal assembly at the contract unit price per each complete in place. The price includes full compensation for submitting the equipment list and drawing; assembling the signal heads; back plates for mast arm mounted signal heads; wiring; bonding and grounding; painting the signal head mounting; testing; providing turn-on service; submitting warranty; and furnishing equipments, tools, labor, materials and other incidentals necessary to complete the work.

The Engineer will pay for the accepted pedestrian piezo electric pushbutton with instruction sign at the contract unit price per each complete in place. The price includes full compensation for submitting the equipment list and drawing; furnishing and installing the pedestrian pushbutton with the instruction sign; wiring; bonding and grounding; testing; providing turn-on service; submitting warranty; and furnishing equipments, tools, labor, materials and other incidentals necessary to complete the work.

The Engineer will pay for the accepted pullbox at the contract unit price per each complete in place. The price includes full compensation for submitting the equipment list and drawing; furnishing and installing the pullbox at the designated locations; coating the frames and covers; and furnishing equipments, tools, labor, materials and other incidentals necessary to complete the work.

The Engineer will pay for the accepted loop detector sensing unit at the contract unit price per each complete in place. The price includes full compensation for saw cutting; cleaning and blowing the saw cut area; furnishing and inserting the loop cable; splicing in the pullbox; filling the saw cut groove with epoxy sealer or hot applied rubberized sealant; and furnishing equipments, tools, labor, materials and other incidentals necessary to complete the work.

The Engineer will pay for the accepted emergency vehicle preemption (EVP) optical receiver at the contract unit price per each complete in place. The price includes full compensation for submitting the equipment list and drawing; assembling the EVP; wiring; bonding and grounding; testing; providing turn-on service; submitting warranty; and furnishing equipments, tools, labor, materials and other incidentals necessary to complete the work.

The Engineer will pay for the accepted EVP cable at the contract unit price per linear foot complete in place. The price includes full compensation for furnishing and installing the preemption detector cable from the detector to the cabinet; and furnishing equipments, tools, labor, materials and other incidentals necessary to complete the work.

The Engineer will pay for the accepted traffic signal ductline at the contract unit price per linear foot complete in place. The price includes full compensation for saw cutting; excavating and backfilling; furnishing, installing, bonding, grounding the conduits; and furnishing equipments, tools, labor, materials and other incidentals necessary to complete the work.

The Engineer will pay for the accepted traffic signal cables at the contract unit price per linear foot complete in place. The price includes full compensation for furnishing, installing, splicing, and taping the cable; making the connections; providing turn-on service; and furnishing equipments, tools, labor, materials and other incidentals necessary to complete the work.

The Engineer will consider full compensation for additional materials and labor not specifically shown or called for that are necessary to complete the work incidental to the various contract items in the proposal.

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

Pay Item	Pay Unit
_____Controller Assembly _____	Each
Type _____ Traffic Signal Standard _____	Each
Foundation for _____	Each
_____ Signal Assembly _____	Each
Pedestrian Pushbutton with Instruction Sign	Each
Type _____ Pullbox	Each
Loop Detector Sensing Unit (6 Ft. x 6 Ft.) _____ Loops	Each
EVP Optical Receiver with _____	Each
Traffic Signal Ductline _____	Lin. Ft.
EVP Cable	Lin. Ft.
No. _____, _____ Cable _____	Lin. Ft.

Payment shall be full compensation for the work prescribed in this section and the contract documents. The Engineer shall consider additional materials and labor not specifically shown or called for that are necessary to complete the work as incidental to the various contract item in the proposal schedule."

END OF SECTION 623

SECTION 698 – TRAINING

Make the following amendments to said Section:

(I) Amend **Section 698,** from line 4 to 130 as follows:

"698.01 Description. This section describes Just-In-Time Training (JITT) and to what items of work or procedures it will apply to.

698.02 Materials. Not applicable.

698.03 Construction. Just-In-Time Training (JITT). JITT shall be mandatory, and consist of a Pre-Operational Conference and a formal joint training class on the work the Engineer considers "new technology"; areas that workmanship on other projects indicates a need for improvement or areas of work where the work needs to be discussed openly between the Contractor and the State or an area of work that the Engineer may feel needs to be included. For bidding purposes, assume two JITT meetings on two separate days. The Engineer may include other areas of work after the bid but the Contractor will only be required to have the JITT for the added training as soon as possible and the additional training is not mandatory for the Contractor to attend and is only required to have it before the work the JITT covers unless the Engineer requires mandatory attendance. The Contractor is encouraged to attend with personnel who will be involved in the work being covered. However, the JITT shall be no later than 30 days after the request for a JITT is given to the Contractor or later if the Engineer allows it. Construction operations for the work listed at bid time shall not begin until the Contractor's and the Engineer's personnel have completed the mandatory JITT. Contractor's list of participants for the JITT along with the Engineer's representatives shall attend the JITT.

When the Engineer has determined that the Contractor's work would benefit from a JITT the Engineer may require one to be held, and make attendance mandatory.

The JITT session will be conducted between 4 hours to 8 hours, unless changed by the Engineer for the Pre-Operational Conference portion. JITT training class if deemed as necessary by the Engineer may be an extension of the Pre-Operational Conference. The amount of time training will take will be dependent on the subject of the training. Both of these events shall be conducted at a location convenient for both the Contractor's and Engineer's project staff. Scheduling and completion of the JITT session shall be completed at least 10 working days prior to the start of construction of the activity. The classes in general will be held during normal working hours. However, the Engineer at its option may choose to schedule the classes outside normal working hours.

The JITT instructor shall be experienced in the construction methods, materials, and test methods associated with the listed work. The JITT instructor should be able to facilitate the discussion and direct the conversation toward key points that may be encountered during the discussed work. The JITT instructor shall not be an employee of the Contractor; unless the Engineer allows it. The Engineer may specify the JITT instructor. In general, the Contractor and Engineer should work together to obtain a speaker who will add the most to the JITT. The Contractor shall submit all requested documents to the Engineer and JITT instructor 30 days before training. A list of participants for the JITT, copy of the syllabus, handouts, and presentations materials shall be submitted to the Engineer at least 14 days before the day of the training for review and acceptance.

The instructor shall issue a certificate of completion to the participants upon completion of the class. The certificate shall include the course title, date and location of the class, the name of the participant, instructor's name, location and phone number.

Selection of the course instructor, the course content and training site will be solely by the Engineer. The Engineer will solely make the final decision on all things related to the JITT.

The Contractor's or Engineer's personnel involved with the type of work to be covered if they have completed similar training within the previous 12 months of the date of the JITT may not be required to attend, although it is recommended that they do for this project. The Contractor shall provide a certificate of class completion as described above for each staff member to be excluded from the JITT session as evidence of JITT. The final determination for exclusion of any staff member's participation will be determined by the Engineer.

The Contractor shall make every effort possible to have the key workers, subcontractors, vendors and suppliers attended the JITT for the work they will be performing.

It is expressly understood that Just-In-Time Training shall not relieve the Contractor of any responsibility under the contract for the successful completion of the work in conformity with the requirements of the plans and specifications. JITT shall also not be used as the Contractor's sole source of training or used as an excuse to hire inexperience or unqualified workers. The discussion, during the JITT shall not be considered a modification of the contract documents. If the Contractor feels that what was discussed was a change in the contract documents; procedures in Section 104 of the Standard Specifications shall be followed. The Contractor shall not consider the need to change the means and methods to meet the contract documents' requirements as a change.

698.04 Measurement The Engineer will measure JITT on a force account basis in accordance with Subsection 109.06 – Force Account Provisions and compensation and as ordered by the Engineer. However, in the calculation of the force account amounts; no overhead or profit as stated 109.05 shall be added. No Contractor personnel shall be included in labor costs, e.g., workers, subcontractors, vendors, suppliers, etc.. All vehicle or transportation costs, lodging, per diem costs, etc., for the Contractor shall not be included except for the JITT instructor. The cost of the JITT shall be reimbursed in a similar manner as are costs incurred by a subcontractor are reimbursed. The Contractor shall add an additional 10% to the total cost of all allowed items. Excise tax may be added to that total. No bond amount shall be added to the force account unless the total force amount for this item is increased.

698.05 Payment The Engineer will pay for the accepted JITT costs. Payment will be full compensation for the work prescribed in this section and the contract documents.

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

Pay Item	**Pay Unit**
Just-In-Time-Training	Force Account

An estimated amount for the force account may be allocated in the proposal schedule under Just-In-Time-Training but the actual amount to be paid will be the sum shown on the accepted force account records, whether this sum be more or less than the estimated amount allocated in the proposal schedule."

SECTION 721 – TRIAXIAL GEOGRID

721.01 General Requirements.

(A) Materials. Unless otherwise indicated in the contract documents, geogrid shall be manufactured from a punched and drawn polypropylene material that has been formed by regular network of integrally connected, multi-directional tensile elements of appropriate orientation, size, and shape with apertures of appropriate size and shape to allow interlocking with the unbound aggregate or base course materials. The combination of the two materials creates an improved mechanically stabilized layer (MSL) with significantly improved properties and performance capabilities that quantifiably allows a designer to modify aggregate and/or asphalt pavement sections.

(B) Geogrid Acceptance. The manufacturer's certificate of compliance and certified test results on the product, tested within six months of the submittal date shall be submitted for approval. Additionally, the following shall be included in the submittal:

(1) Manufacturer's name, current address, and telephone number

(2) Manufacturer's current Quality Assurance / Quality Control Manual.

(3) Full product name by trademark and product number.

(4) Geogrid polymer type(s).

(5) Recommended overlap.

(6) Six square yards of geogrid sample. Geogrid sample shall conform to requirements of Subsection 721.01(C) - Sampling.

(C) Sampling. Sampling shall be in accordance with ASTM D4354.

(D) Physical Properties. Physical property values in these specifications represent minimum average roll values (MARV) and are included for Quality Assurance purposes only. Average test results for any individual roll tested within a lot sampled, shall meet or exceed specified values.

(E) Packaging. Geogrids shall be provided in roll form of length and width to meet requirements.

(F) Identification. Unless otherwise indicated 48 in the contract documents, geogrid shall be identified in accordance with ASTM D 4873

and this subsection. Include the following information:

(1) Unique roll number serially designated.

(2) Manufacturer's lot number or control numbers.

(3) Name of geogrid manufacturer

(4) Date of manufacture.

(5) Product brand name.

(6) Manufacturer's style or catalog designation of the geogrid.

(7) Roll width, in feet.

(8) Roll length, in feet.

(9) Net weight of geogrid.

(G) Storage and Handling. Geogrids shall be stored and handled in accordance with ASTM D 4873 and this subsection. During shipment and storage, material shall not be exposed to sunlight or other forms of light that contain ultraviolet rays, for more than 6 months.

721.02 Geogrids For Flexible Pavement Asphalt and Aggregate Base Section Modification Applications. Material shall conform to Subsection 721.01 – General Requirements

(A) Geogrid material shall meet Table 721.02 – 1 – Material Requirements.

TABLE 721.02-1 - MATERIAL REQUIREMENTS[1]				
Physical Property	Test Procedure	Longitudinal	Diagonal	General
Rib pitch, mm (in.)	Callipered	40+/-3 (1.6+/-0.1)	40+/-3 (1.6+/-0.1)	
Aperture shape	Observation			Triangular
Radial stiffness ratio[2]	ASTM D6637			≥0.60
Radial Stiffness @ 0.5% strain lbs/ft (kN/m), Min.[3]	ASTM D6637			20,580 (300)
Junction Efficiency[4]	ASTM D7737			93

1 All material properties listed are for Quality Assurance purposes only and are not indicative of performance. Section 721.02(B)(1) discusses performance requirements in detail.

2 Ratio of the minimum value to the maximum value of radial stiffness at 0.5% strain.

3 Radial stiffness is measured on both the rib directions and the "mid-rib" directions, i.e. directions that bisect the angles between ribs.

4 Load transfer capability determined in accordance with ASTM D7737 and ASTM D6637 and expressed as a percentage

(B) Performance Requirements for Geogrid Material not conforming to Table 721.02 – 1 – Material Requirements.

(1) For section modification through aggregate base and asphalt concrete reduction, the stiffness enhancement of the geogrid shall be calibrated and validated with results of Accelerated Pavement Testing (APT) at a facility in the United States, in compliance with NCHRP Report 512 and Synthesis 325 and AASHTO R-50. Testing shall utilize the specific branded product proposed for use. Test results are only valid if total ESALs trafficked on each section tested falls within range of ESALs predicted in the design of those sections. Testing must be performed on paved structures comparing geogrid sections to thicker asphalt concrete control sections, with a minimum trafficking requirement of 75,000 ESALs at less than ½ rut depth.

(2) No proposed equal geogrid will be accepted based on material index properties or explanations of performance based on testing of geogrid index properties. Geotextile materials shall not be considered as an alternate to geogrid materials for subgrade improvement or base/subbase reinforcement applications.

(3) Any submittal for an alternate MSL must be submitted at least 2 weeks in advance of the bid date and must be accompanied with the following:

(a) A written statement from the alternative pavement design engineer of record that the proper calibration and validation testing has been performed for the geogrid reinforcement utilized in the MSL in accordance with these specifications

(b) A submittal package that includes performance studies referenced in section 721.02 (B) (1) above and documented evidence of calibration and validation testing.

(c) Any other information as requested by the Engineer.

721.03 Construction. The surface preparation and installation of triaxial geogrid shall be per manufacturer recommendations.

721.04 Measurement. The Engineer will not measure triaxial geogrid for payment.

721.05 Payment. The Engineer will not pay for triaxial geogrid separately and will consider the cost of labor, materials, and installation of triaxial geogrid as included in the contract prices for various contract pay items.

END OF SECTION 721

SECTION 770 – TRAFFIC SIGNAL MATERIALS

Make the following amendments to said Section:

(I) Amend Subsection 770.01(C) – Standard Specifications from line 128 to 131 to read:

> **"(C) Standard Specification.** Design of the traffic signal standards and appurtenances shall conform to the latest edition of AASHTO publication, Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals."

(II) Amend **Subsection 770.02(A)(1)(b) – Traffic Signal Heads** by revising the first paragraph from line 211 to 216 to read:

> "(b) To ensure quality and performance, LED head shall have prior history of testing and use by CALTRANS and shall exceed ITE standards. Failure on one LED shall not affect other LED's. LED head shall have fully-encapsulated electronic circuitry and configuration for 12-inch ball."

(III) Amend Subsection 770.02(A)(4) – Back Plates from line 285 to 290 to read:

> **"(4) Back Plates.** Louvered back plates shall be furnished and installed on mast arm mounted signal heads. Back plates shall be constructed of aluminum alloy 3003-H14 sheet having minimum thickness of 0.058 inch and minimum dimensions equal to signal head size plus five-inch border, with a two inch retro-reflective border around the outside edge of the front surface. Back plates shall be dull black in color."

(IV) Amend **Subsection 770.04 – Pedestrian Signal** from line 444 to 600 to read:

> **"(A) Purpose.**
>
> The purpose of this specification is to provide the minimum requirements for the LED "walking person" and "hand" icon pedestrian signal modules with countdown. This specification is only for the nominal overall message-bearing surface of 16 x 18 in. This specification is not intended to impose restrictions upon specific designs and materials that conform to the purpose and the intent of this specification. This specification refers to definitions and practices described in "Pedestrian Traffic Control Signal Indications" published in the *Equipment and Materials Standards of the Institute of Transportation Engineers*, (referred to in this document as

"PTCSI") and in the Applicable Sections of Manual on Uniform Traffic Control Devices (MUTCD) 2009 Section 4E.

(B) Physical and Mechanical Requirements.

The modules shall fit into existing pedestrian signal housings built for the PTCSI sizes stated in Section 1 of the "walking person" and "hand" icon pedestrian signal indication Standard without modification to the housing and shall not require special tools for installation.

Installation of a retrofit replacement module into existing pedestrian signal housing shall only require the removal of the existing optical unit components, shall be weather tight and fit securely in the housing; and shall connect directly to existing electrical wiring. The LED module shall have a visual appearance similar to that of an incandescent lamp (ie: Smooth and non-pixilated). Screwed on lenses are not allowed. Only modules with internal mask shall be utilized. No external silk-screen shall be permitted.

When not illuminated, the WALKING PERSON, UPRAISED HAND, and COUNTDOWN DIGITS shall not be readily visible. The countdown digits of the pedestrian signal module shall be located to the right of the associated UPRAISED HAND. The display of the number of remaining seconds shall begin only at the beginning of the pedestrian change interval. After the countdown displays zero, the display shall remain dark until the beginning of the next countdown. The walking person, hand icons and countdown digits shall be incandescent looking.

The units shall not have any external attachments, dip switches, toggle switches or options that will allow the mode to be changed from counting the clearance cycle, to the full walk/don't walk cycle or any other modification to the icons or digits.

For each nominal module, use the corresponding minimum H (height) and W (width) measurements:

Module Size	Icon Height	Icon Width	Countdown Height	Countdown Width	Countdown Segment Width
(16 x 18 in)	11 in	7 in	9 in	7 in	0.7 in

All exposed components of a module shall be suitable for prolonged exposure to the environment. As a minimum, the module

shall be rated for use in the ambient operating temperature range, measured at the exposed rear of the module, of -40°C to +74°C (-40°F to +165°F).

The module shall be a single, self-contained device, not requiring on-site assembly for installation into an existing pedestrian signal housing. The power supply shall be located inside the pedestrian signal module. The assembly and manufacturing process for the module shall be designed to assure all internal LED and electronic components are adequately supported to withstand mechanical shock and vibration from high winds and other sources.

The front window shall be a transparent polycarbonate material with internal masking to prevent the icons and digits from being visible when not in operation. External masking or silk-screen technology shall not be permitted.

Each module shall be identified on the backside with the manufacturer's name, model, serial number and operating characteristics. The operating characteristics shall include the nominal operating voltage and stabilized power consumption, in watts and/or Volt-Amperes.

(C) Photometric Requirements

For a minimum period of 60 months, the maintained minimum luminance values for the modules under operating conditions, when measured normal to the plane of the icon surface, shall not be less than:

- Walking person: 2,200 cd/m^2;
- Hand: 1,400 cd/m^2.
- Countdown digits: 1,400 cd/m^2;

The luminance of the emitting surface, measured at angles from the normal of the surface, may decrease linearly to a value of 50% of the values listed above at an angle of 15 degrees. The LED module shall have a visual appearance similar to that of an incandescent lamp (ie: Smooth and non-pixilated).

Maximum permissible luminance: When operated within the temperature range, the actual luminance for a module shall not exceed three times the required peak value of the minimum maintained luminance. Luminance uniformity: The uniformity of the signal output across the emitting section of the module lens (i.e. the hand, person or countdown icon) shall not exceed a ratio of 5 to 1 between the maximum and minimum luminance values (cd/m^2).

The standard colors for the LED Pedestrian Signal Module shall be White for the walking person and Portland Orange for the hand icon and the countdown digits.

(D) Electrical Requirements

All wiring and terminal blocks shall meet the requirements of Section 13.02 of the VTCSH Standard. Maximum of three secured, color coded, 1 meter (39 in) long 600 V, 16 AWG minimum, jacketed wires, conforming to the National Electrical Code, rated for service at +105°C, are to be provided for electrical connection. The conductors shall be color coded with orange for the hand, blue for the walking person and white as the common lead.

LED modules shall operate from a 60 ± 3 Hertz ac line power over a voltage range from 80 to 135 VAC RMS. Nominal operating voltage for all measurements shall be 120 ± 3 VAC RMS. Fluctuations in line voltage over the range of 80 to 135 VAC RMS shall not affect luminous intensity by more than ± 10 %. To prevent the appearance of flicker, the module circuitry shall drive the LEDs at frequencies greater than 100 Hz when modulated, or at DC, over the voltage range specified.

Low Voltage Turn Off: There should be no illumination of the module when the applied voltage is less than 35 VAC RMS. To test for this condition, each icon must first be fully illuminated at the nominal operating voltage. The applied voltage shall then be reduced to the point where there is no illumination. This point must be greater than 35 VAC RMS.

Turn-ON and Turn-OFF Time: A module shall reach 90% of full illumination (turn-ON) within 75 msec of the application of the nominal operating voltage. The signal shall cease emitting visible illumination (turn-OFF) within 75 msec of the removal of the nominal operating voltage.

Default Condition: For abnormal conditions when nominal voltage is applied to the unit across the two-phase wires (rather than being applied to the phase wire and the neutral wire) the pedestrian signal unit shall default to the hand symbol. The on-board circuitry of a module shall include voltage surge protection:

- To withstand high-repetition noise transients and low-repetition high-energy transients as specified in NEMA Standard TS-2 2003; Section 2.1.8
- Section 8.2 IEC 1000-4-5 & Section 6.1.2 ANSI/IEEE C62.41.2-2002, 3kV, 2 ohm
- Section 8.0 IEC 1000-4-12 & Section 6.1.1 ANSI/IEEE C62.41.2-2002, 6kV, 30 ohm

The LED signal and associated on-board circuitry shall meet the requirements of the Federal Communications Commission (FCC) Title 47, Subpart B, Section 15 regulations concerning the emission of electronic noise by Class A digital devices. The modules shall provide a power factor of 0.90 or greater when operated at nominal operating voltage, and 25°C (77°F). Total harmonic distortion induced into an AC power line by the module, operated at nominal operating voltage, and at 25°C (77°F) shall not exceed 20%.

The current draw shall be sufficient to ensure compatibility and proper triggering and operation of load current switches and conflict monitors in signal controller units. Off State Voltage Decay: When the module is switched from the On state to the Off state the terminal voltage shall decay to a value less than 10 VAC RMS in less than 100 milliseconds when driven by a maximum allowed load switch leakage current of 10 milliamps peak (7.1 milliamps AC).

(E) Module Functions

The module shall operate in one mode: *Clearance Cycle Countdown Mode Only.* The module shall start counting when the flashing don't walk turns on and will countdown to "0" and turn off when the steady "Don't Walk" signal turns on. The m*odule shall not have user accessible switches or controls for the purpose of modifying the cycle, icons or digits.* At power on, the module enters a single automatic learning cycle. During the automatic learning cycle, the countdown display shall remain dark. The unit shall re-program itself if it detects any increase or decrease of Pedestrian Timing. The digits shall go blank once a change is detected and then take one complete pedestrian cycle (with no counter during this cycle) to adjust its buffer timer.

The module shall allow for consecutive cycles without displaying the steady Hand icon ("Don't Walk"). The module shall recognize preemption events and temporarily modify the crossing cycle accordingly. If the controller preempts during the walking man, the countdown shall follow the controller's directions and shall adjust

from walking man to flashing hand. It shall start to count down during the flashing hand. If the controller preempts during the flashing hand, the countdown shall continue to count down without interruption. The next cycle, following the preemption event, shall use the correct, initially programmed values. This specification is worded such that the flashing don't walk time is not modified.

If the controller output displays Don't Walk steady condition or if both the hand /person go dark and the unit has not arrived to zero, the unit suspends any timing and the digits shall go dark.

(F) Warranty

Manufacturers will provide the following warranty provisions. Replacement or repair of an LED signal module that fails to function as intended due to workmanship or material defects within the first 5 years (60 months) from the date of delivery."

(V) Amend **Subsection 770.05(A)- Controller Equipment, Controller Assembly** from line 617 to 625 to read:

"**(1)** Model 170E controller assembly and Model 332A controller cabinet refers to latest Model 170E controller assembly and Model 332A controller cabinet listed on CALTRANS QPL.

(2) Each controller assembly listed in Table 770.05-1 – Controller Assembly Requirements contains sufficient equipment for full 8-vehicle, 4-pedestrian, and 4-preemption phase intersection, even though the contract documents may not require it.

TABLE 770.05-1 – CONTROLLER ASSEMBLY REQUIREMENTS	
Item	Quantity
Model 170E Controller	1
Model 412C Prom Module	1
Model 400 Modem	1
332A Aluminum Cabinet	1
Model 200 Load Switches	12
Model 204 Flasher	All
Model 242 Isolators	2
Model FS/ST Isolator	All
Flash Transfer Relays	All
Model 210 Conflict Monitor (Crimp and Poke Type, such as Molex Dualcon TM Straight/on Edge Dual	1

Position Connectors, or approved equal)	
Model 262C Detector Amplifiers (Rotary Sw Type)	8
Model M762 Preempt. Car (Non-QPL)	2
Model GPS Time Source (Non-QPL)	1

(VI) Amend **Subsection 770.05(B)- Controller Equipment, Model 170E Controller** by deleting line 643.

(VII) Amend **Subsection 770.05(C)(5)- Controller Equipment, Cabinet** by deleting lines 660 to 665.

(VIII) Amend **Subsection 770.05(D)- Controller Equipment, Auxiliary Equipment** from line 697 to 741 to read:

(1) Model M762 Optical Preemption Module. M762 shall be card-type and shall interface with Model 170 cabinet preemption slots of input file. Each M762 Module shall have two channels of preemption. M762 shall include firmware to discriminate between two valid priority signals, to prioritize valid same priority signals on a first come, first served basis, and to override low priority signal if high priority is received. M762 Module shall receive input signals (9.639 and 14.035 Hz) to permit priority preemption operation within 170 local intersection program. M762 shall optically isolate output signals and shall trigger active low signal to controller for high priority and pulsed active low signal for low priority. The State's preemption systems employ the 3M/Global Traffic Technologies Opticom System. New preemption equipment shall be 3M/Global Traffic Technologies Opticom or accepted equal that is fully compatible with 3M/Global Traffic Technologies Opticom.

(2) Security Tumbler for Signal Cabinet. The signal control cabinet door locks (2 locks for each cabinet) are keyed to take Best Lock Series tumblers. The contractor shall furnish and install 2 lock cylinders that will fit in the current locks on the signal cabinet. The lock cylinders keys shall be one of a kind, licensed to HDOT, and each cylinder shall have 1 set of keys with "do not duplicate" stamped on each key.

(3) GPS Time Source. The GPS time source unit shall be a precision Time Standard for use on 170 Traffic Signal Controllers. It utilizes time signals broadcast from the GPS satellite network and is traceable to the National Institute of Standards (NIST). The unit incorporates a precision GPS receiver and a microprocessor to decode the time signals and interface to the traffic control equipment.

The standard features of the GSP unit shall include, but not limited to, Time and date information includes Year, Month, Day, Hour, Minute, and Second, All functions are automatic, no jumpers or switches to set, Time zone, baud rate, and Daylight savings operation set with dumb terminal, User set parameters stored in non-volatile EEPROM, 24 hour backup for time keeping, Standard 3 wire RS232 interface, Automatic daylight savings and leap second time corrections, LED status indicator, operates on controller +5 Volts from communications port, antenna mounts to top of cabinet, and no external wires to run."

(IX) Amend **Subsection 770.06(G) – Preemption Detectors** from line 788 to 798 to read:

"**(G) Type 7 - Preemption Detector (Opticom) Cables.** Preemption detector (Opticom) cables are specific cables that run continuously from optical detectors mounted on traffic signal standards to terminal blocks for M762 phase module located in controller cabinet. Each detector shall be furnished with its own cable running back to controller cabinet. 3M/Global Traffic Technologies' M138 Optical Detector Cable shall be furnished for detector cable because it is compatible and consistent with requirements for Opticom Preemption System. M138 cable shall be furnished that is BerkTek Type B, shield jacket, three - insulated conductor cable, 20 AWG, one - 20 AWG bare stranded ground, 600 Volts, orange-blue-yellow color coded and 5/16 inch diameter."

(X) Amend **Subsection 770.11(A) – Preemption Detectors** from line 997 to 1009 to read:

"**(A) Description.** Preemption Detectors shall be located on traffic signal standards to convert optical signals emitted from an emergency vehicle to electrical pulses for emergency preemption of traffic signals. Electrical signals from optical detector shall be transmitted by 4-conductor cable to preemption module M762 located in input slot of controller cabinet. M762 preemption module shall direct and hold controller in preemption mode until signal disappears. Preprogrammed selection of phases and signal displays shall be controlled by Local Intersection Program. The State's preemption system employ 3M/Global Traffic Technologies Opticom System. New preemption equipment shall be by 3M/Global Traffic Technologies Opticom or equal accepted by the Engineer, that is fully compatible with 3M/Global Traffic Technologies Opticom. Astro-mini brackets or similar device for attaching preemption detector to poles shall be included."

(XI) Amend **Subsection 770.11(B)(1) – Preemption Detectors** from line 1012 to 1021 to read:

"**(1) Type 7 Cable.** Type 7 preemption detector (Opticom) cables shall be specific cables that run continuously from optical detectors mounted on traffic signal standards to terminal blocks for M762 phase module in controller cabinet. Type 7 preemption detector cable shall be compatible with 3M/Global Traffic Technologies' M138 Optical Detector cable and shall be consistent with requirements for Opticom Preemption System. M138 cable shall be BerkTek Type B, shield jacket, 3-insulated conductor, 20AWG stranded copper, 1-20AWG bare stranded ground, 600 volts, orange-blue-yellow color coded, and 5/16-inch diameter."

(XII) Add **Subsection 770.12 – Pedestrian Signal Push Button With Integral Sign** to read:

"**(A) Description.** The pedestrian push button unit shall consist of an assembly that can be secured to traffic poles with standard screws, be tamper proof, weatherproof, and constructed so that electrical shocks are impossible to receive.

(B) Materials.

(1) The housing for the push button assembly shall be of cast and/or machined aluminum. The push button assembly shall be weatherproof with a water diverting groove set in the outside diameter of the actuator button receptor. The housing shall be designed to reduce vandalism and shall mount on the side or top of a pole with a minimum 2-inch diameter button. The push button housing shall be capable of mounting in an 'up button' or 'down button' configuration. All wire connections shall be accessible from the back of the assembly.

(2) An ADA acceptable raised directional sign shall be installed with stainless steel fasteners to the housing. The sign shall consist of a raised walking person and a raised arrow indication. Paint the unit black and paint the raised walking person and arrow white. The sign shall be capable of mounting in an 'up button' or 'down button' configuration. The raised walking person and arrows shall be directional and match the indication as shown in the plans.

(3) The pushbutton shall extend from the sign faceplate approximately three inches. The pushbutton actuator shall be convex in design having a flat area on the face for uses of a stylus, ADA acceptable, two inches in diameter, and have a tension of less than five pounds when pressed. The button shall be manufactured in a way that it cannot be stuck in a closed (constant call) position.

(4) The pedestrian push button shall be a piezo electric type and be UL listed. The button shall have a stainless steel actuator and shall be mounted within the housing with stainless steel, non-corrosive, tamper proof fasteners. The unit shall operate between 12-24V DC or AC, 3 inch round mounts with 4 mounting bolts. The pedestrian button shall give an audio and visual signal each time the pedestrian button is activated."

END OF SECTION 770

General Decision Number: HI130001 04/05/2013 HI1

Superseded General Decision Number: HI20120001

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	01/04/2013
1	01/11/2013
2	02/15/2013
3	03/15/2013
4	03/29/2013
5	04/05/2013

ASBE0132-001 08/29/2010

	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	$ 36.65	22.24

BOIL0627-005 01/01/2013

	Rates	Fringes
BOILERMAKER	$ 35.20	27.35

BRHI0001-001 09/03/2012

	Rates	Fringes
BRICKLAYER		
Bricklayers and Stonemasons	$ 35.35	22.92
Pointers, Caulkers and Weatherproofers	$ 35.60	22.92

BRHI0001-002 09/03/2012

	Rates	Fringes

Tile, Marble & Terrazzo Worker		
Terrazzo Base Grinders	$ 33.79	22.92
Terrazzo Floor Grinders and Tenders	$ 30.74	22.92
Tile, Marble and Terrazzo Workers	$ 35.60	22.92

CARP0745-001 09/03/2012

	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	$ 39.25	19.92
Millwrights and Machine Erectors	$ 39.50	19.92
Power Saw Operators (2 h.p. and over)	$ 39.40	19.92

CARP0745-002 09/03/2012

	Rates	Fringes
Drywall and Acoustical Workers and Lathers	$ 39.50	19.92

ELEC1186-001 02/17/2013

	Rates	Fringes
Electricians:		
Cable Splicers	$ 45.27	26.40
Electricians	$ 41.15	25.14
Telecommunication worker	$ 23.20	17%+6.35

ELEC1186-002 02/17/2013

	Rates	Fringes
Line Construction:		
Cable Splicers	$ 45.27	26.40
Groundmen/Truck Drivers	$ 30.86	21.99
Heavy Equipment Operators	$ 37.04	23.88
Linemen	$ 41.15	25.14
Telecommunication worker	$ 23.20	17%+$6.35

* ELEV0126-001 01/01/2013

	Rates	Fringes
ELEVATOR MECHANIC	$ 51.21	25.185+a+b

a. VACATION: Employer contributes 8% of basic hourly rate for 5 years service and 6% of basic hourly rate for 6 months to 5 years service as vacation pay credit.

b. PAID HOLIDAYS: New Year's Day, Memorial Day, Independence

Day, Labor Day, Veterans' Day, Thanksgiving Day, the Friday after Thanksgiving Day and Christmas Day.

ENGI0003-002 09/03/2012

	Rates	Fringes
Diver (Aqua Lung) (Scuba))		
Diver (Aqua Lung) (Scuba) (over a depth of 30 feet)	$ 60.00	26.76
Diver (Aqua Lung) (Scuba) (up to a depth of 30 feet)	$ 50.63	26.76
Stand-by Diver (Aqua Lung) (Scuba)	$ 41.25	26.76
Diver (Other than Aqua Lung)		
Diver (Other than Aqua Lung)	$ 60.00	26.76
Diver Tender (Other than Aqua Lung)	$ 38.22	26.76
Stand-by Diver (Other than Aqua Lung)	$ 41.25	26.76
Helicopter Work		
Airborne Hoist Operator for Helicopter	$ 39.80	26.76
Co-Pilot of Helicopter	$ 39.94	26.76
Pilot of Helicopter	$ 40.11	26.76
Power equipment operator - tunnel work		
GROUP 1	$ 36.24	26.76
GROUP 2	$ 36.35	26.76
GROUP 3	$ 36.52	26.76
GROUP 4	$ 36.79	26.76
GROUP 5	$ 37.10	26.76
GROUP 6	$ 37.75	26.76
GROUP 7	$ 38.07	26.76
GROUP 8	$ 38.18	26.76
GROUP 9	$ 38.29	26.76
GROUP 9A	$ 38.52	26.76
GROUP 10	$ 38.58	26.76
GROUP 10A	$ 38.73	26.76
GROUP 11	$ 38.88	26.76
GROUP 12	$ 39.24	26.76
GROUP 12A	$ 39.60	26.76
Power equipment operators:		
GROUP 1	$ 35.94	26.76
GROUP 2	$ 36.05	26.76
GROUP 3	$ 36.22	26.76
GROUP 4	$ 36.49	26.76
GROUP 5	$ 36.80	26.76
GROUP 6	$ 37.45	26.76
GROUP 7	$ 37.77	26.76
GROUP 8	$ 37.88	26.76
GROUP 9	$ 37.99	26.76
GROUP 9A	$ 38.22	26.76
GROUP 10	$ 38.28	26.76
GROUP 10A	$ 38.43	26.76
GROUP 11	$ 38.58	26.76
GROUP 12	$ 38.94	26.76
GROUP 12A	$ 39.30	26.76
GROUP 13	$ 36.22	26.76
GROUP 13A	$ 36.49	26.76
GROUP 13B	$ 36.80	26.76
GROUP 13C	$ 37.45	26.76

GROUP 13D	$ 37.77	26.76
GROUP 13E	$ 37.88	26.76

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 09/03/2012

	Rates	Fringes
Dredging: (Boat Operators)		
Boat Deckhand	$ 36.22	26.76
Boat Operator	$ 38.43	26.76
Master Boat Operator	$ 38.58	26.76
Dredging: (Clamshell or Dipper Dredging)		
GROUP 1	$ 38.94	26.76
GROUP 2	$ 38.28	26.76
GROUP 3	$ 37.88	26.76
GROUP 4	$ 36.22	26.76
Dredging: (Derricks)		
GROUP 1	$ 38.94	26.76
GROUP 2	$ 38.28	26.76
GROUP 3	$ 37.88	26.76
GROUP 4	$ 36.22	26.76
Dredging: (Hydraulic Suction Dredges)		
GROUP 1	$ 38.58	26.76
GROUP 2	$ 38.43	26.76
GROUP 3	$ 38.28	26.76
GROUP 4	$ 38.22	26.76
Group 5	$ 36.63	23.94
GROUP 5	$ 37.88	26.76
Group 6	$ 36.52	23.94
GROUP 6	$ 37.77	26.76
Group 7	$ 34.97	23.94
GROUP 7	$ 36.22	26.76

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 09/03/2012

	Rates	Fringes
Power Equipment Operators (PAVING)		
(10) Cold Planer	$ 37.75	26.23
(10)Loader (2 1/2 cu. yds. and under)	$ 36.92	26.23
(10)Soil Stabilizer	$ 37.75	26.23
(11)Loader (over 2 1/2 cu. yds. to and including 5 cu. yds.)	$ 37.24	26.23
(3)Roller Operator (five tons and under)	$ 35.69	26.23
(5)Screed Person	$ 36.92	26.23
(6)Combination Loader/Backhoe (up to 3/4 cu.yd.)	$ 34.98	26.23
(6)Concrete Saws and/or Grinder (self-propelled unit on streets, highways, airports and canals)	$ 36.92	26.23
(6)Roller Operator (over five tons)	$ 37.12	26.23
(7)Combination Loader/Backhoe (over 3/4 cu.yd.)	$ 35.96	26.23
(8) Asphalt Plant Operator	$ 37.35	26.23
Asphalt Concrete Material Transfer	$ 36.92	26.23
Asphalt Raker	$ 35.96	26.23
Asphalt Spreader Operator	$ 37.44	26.23
Grader	$ 37.75	26.23
Laborer, Hand Roller	$ 33.19	26.23

IRON0625-001 09/01/2012

	Rates	Fringes
Ironworkers:	$ 34.75	28.41

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 09/03/2012

	Rates	Fringes
Laborers:		
Driller	$ 32.30	15.96
Final Clean Up	$ 22.70	11.67
Gunite Operator & High Scaler	$ 31.80	15.96
Laborer I	$ 31.30	15.96
Laborer II	$ 28.70	15.96
Powderman	$ 32.30	15.96
Window Washer (bosun chair)	$ 30.80	15.96

LABORERS CLASSIFICATIONS

Laborer I: Asbestos Removal Worker (EPA certified workers); 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, Welding, Signalling, Choke Setting, and Rigging in connection with Laborers' work (except demolition); 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; 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; Falling, bucking, yarding, loading or burning of all trees or timber on construction site; Forklift (9 ft. and under); 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, or heat welding for sewer 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); Installation of lightweight backfill; Jackhammer Operator; Jacking of slip forms: All semi and unskilled work connected therewithin; Laying of all multi-cell conduit or multi-purpose pipe; Lead base paint abatement laborers (EPA certified workers); Magnesite and Mastic Workers (Wet or Dry)(including mixer operator); Mason Tender,Mortar Man; Mortar Mixer (Block, Brick, Masonry, and Plastering); Nozzleman (Sandblasting and/or Water Blasting): handling, placing and opertion 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, 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 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); 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; 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: Air Blasting; Appliance Handling (job site) (after delivery and unloading in storage area); Asphalt Plant Laborer; Backfilling, Grading and all other labor connected therewith; Boring Machine; Bridge Laborer; Burning of all debris (crates, boxes, packaging waste materials); Chainman, Rodmen, and Grade Markers; Cleaning and Clearing of all debris; 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; Cleanup of Grounds and Buildings (other than "Light Clean-Up") (Janitorial Laborer); Clean-up of right-of-way; Clearing and slashing of brush or trees by hand or mechanical cutting; 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); Cribbers, Shorer, Lagging, Sheeting, and Trench Jacking and Bracing, Hand-Guided Lagging Hammer Whaling Bracing; 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, burning or cutting, breaking away, cleaning and removal of all masonry, wood or metal fixtures for salvage or scrap, All hooking, unhooking, signaling of materials for salvage or scrap removed by crane or derrick; Digging under streets, roadways, aprons or other paved surfaces; Chuck Tender, Outside Nipper; Dry-packing of concrete (plugging and filling of she-bolt holes); Excavation, Preparation of street ways and bridges; 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; Garbage and Debris Handlers and Cleaners; Gas, Pneumatic, and Electric Tools, not listed Group 1 (except Rototiller); General Clean-up: sweeeping, cleaning, washdown, wiping of construction facility, and equipment (other than "Light Clean-up" [Janitorial] Laborer); General Excavation and Grading (all 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; General Laborer; Ground and Soil Treatment Work (Pest Control); Junk Yard Laborers (same as Salvage Yard); Landscape Nursery Laborers; 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 stockkpile to point of installation; hooking and signalling 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 (including Hod Carrier); 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; Removal of surplus material; 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 (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; 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); Tagging and Signaling of all building materials into high-rise units; 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 09/03/2012

	Rates	Fringes
Landscape & Irrigation		
Laborers		
GROUP 1	$ 22.15	8.99
GROUP 2	$ 22.65	8.99
GROUP 3	$ 18.65	8.99

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 09/03/2012

	Rates	Fringes
Underground Laborer		
GROUP 1	$ 31.90	15.96
GROUP 2	$ 33.40	15.96
GROUP 3	$ 33.90	15.96
GROUP 4	$ 34.90	15.96
GROUP 5	$ 35.25	15.96
GROUP 6	$ 35.50	15.96
GROUP 7	$ 35.95	15.96

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 07/01/2012

	Rates	Fringes
Painters:		
Brush	$ 34.10	25.35
Sandblaster; Spray	$ 34.10	25.35

PAIN1889-001 07/01/2012

	Rates	Fringes
Glaziers	$ 32.65	25.27

PAIN1926-001 02/26/2012

	Rates	Fringes
Soft Floor Layers	$ 28.89	21.46

PAIN1944-001 01/01/2013

	Rates	Fringes
Taper	$ 40.00	18.65

PLAS0630-001 08/29/2011

	Rates	Fringes
PLASTERER	$ 34.69	22.62

PLAS0630-002 08/29/2011

	Rates	Fringes
Cement Masons:		
Cement Masons	$ 33.85	22.62
Trowel Machine Operators	$ 34.00	22.62

PLUM0675-001 01/06/2013

	Rates	Fringes
Plumber, Pipefitter, Steamfitter & Sprinkler Fitter	$ 37.60	23.26

ROOF0221-001 11/04/2012

	Rates	Fringes
Roofers (Including Built Up, Composition and Single Ply)	$ 36.10	16.75

SHEE0293-001 09/02/2012

	Rates	Fringes
Sheet metal worker	$ 36.10	22.21

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

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is union or non-union.

Union Identifiers

An identifier enclosed in dotted lines beginning with characters other than "SU" denotes that the union

classification and rate have found to be prevailing for that classification. Example: PLUM0198-005 07/01/2011. The first four letters , PLUM, indicate the international union and the four-digit number, 0198, that follows 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, 07/01/2011, following these characters is the effective date of the most current negotiated rate/collective bargaining agreement which would be July 1, 2011 in the above example.

Union prevailing wage rates will be updated to reflect any changes in the collective bargaining agreements governing the rates.

0000/9999: weighted union wage rates will be published annually each January.

Non-Union Identifiers

Classifications listed under an "SU" identifier were derived from survey data by computing average rates and are not union rates; however, the data used in computing these rates may include both union and non-union data. Example: SULA2004-007 5/13/2010. SU indicates the rates are not union majority rates, LA indicates the State of Louisiana; 2004 is the year of the survey; and 007 is an internal number used in producing the wage determination. A 1993 or later date, 5/13/2010, indicates the classifications and rates under that identifier were issued as a General Wage Determination on that date.

Survey wage rates will remain in effect and will not change until a new survey is conducted.

WAGE DETERMINATION APPEALS PROCESS

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

* an existing published wage determination
* a survey underlying a wage determination
* a Wage and Hour Division letter setting forth a position on a wage determination matter
* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

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

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

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

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

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

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

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION

PROPOSAL SCHEDULE

ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
201.0100	Clearing and Grubbing	L.S.	L.S.	L.S.	$_____
203.0100	Roadway Excavation	67,050	C.Y.	$ _____	$_____
203.0200	Selected Material for Planting Soil	L.S.	L.S.	L.S.	$_____
205.0100	Structural Excavation for Retaining Walls and End Posts	L.S.	L.S.	L.S.	$_____
205.0200	Structural Backfill for Retaining Walls	L.S.	L.S.	L.S.	$_____
205.0300	Filter Material	L.S.	L.S.	L.S.	$_____
206.0100	Excavation for Drainage Systems	L.S.	L.S.	L.S.	$_____
206.0200	Excavation for Detention Basins	L.S.	L.S.	L.S.	$_____
209.0100	Installation, Maintenance, Monitoring, and Removal of BMP	L.S.	L.S.	L.S.	$_____
209.0200	Additional Water Pollution, Dust, and Erosion Control	F.A.	F.A.	F.A.	$ 25,000
212.0100	Archaeological Monitoring	F.A.	F.A.	F.A.	$ 150,000
301.0100	Hot Mix Asphalt Base Course	L.S.	L.S.	L.S.	$_____
304.0100	Aggregate Base Course	L.S.	L.S.	L.S.	$_____
305.0100	Aggregate Subbase	L.S.	L.S.	L.S.	$_____

PROPOSAL SCHEDULE					
ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
401.0100	HMA Pavement, Mix No. IV	L.S.	L.S.	L.S.	$_____
411.0100	Concrete Pavement	L.S.	L.S.	L.S.	$_____
415.0100	Cold Planing	L.S.	L.S.	L.S.	$_____
503.0100	Concrete for Retaining Walls	L.S.	L.S.	L.S.	$_____
503.0200	Concrete in Retaining Wall Foundation	L.S.	L.S.	L.S.	$_____
503.0300	Concrete Railing	L.S.	L.S.	L.S.	$_____
503.0400	Concrete End Post Railing	L.S.	L.S.	L.S.	$_____
503.0500	Concrete Inlet/Outlet Structure for 24-Inch Drain	L.S.	L.S.	L.S.	$_____
503.0600	Concrete Inlet/Outlet Structure for 36-Inch Drain	L.S.	L.S.	L.S.	$_____
503.0700	Concrete Inlet/Outlet Structure for 48-Inch Drain	L.S.	L.S.	L.S.	$_____
503.0800	Concrete Inlet/Outlet Structure for 66-Inch Drain	L.S.	L.S.	L.S.	$_____
507.0100	Pedestrian Railing	L.S.	L.S.	L.S.	$_____
602.0100	Reinforcing Steel for Retaining Walls	L.S.	L.S.	L.S.	$_____
602.0200	Reinforcing Steel for Retaining Wall Footings	L.S.	L.S.	L.S.	$_____

PROPOSAL SCHEDULE

ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
603.0100	24-Inch Reinforced Concrete Pipe, Class III or 24-Inch High Density Polyethylene Pipe, Type S	L.S.	L.S.	L.S.	$_____
603.0200	36-Inch Reinforced Concrete Pipe, Class III or 36-Inch High Density Polyethylene Pipe, Type S	L.S.	L.S.	L.S.	$_____
603.0300	48-Inch Reinforced Concrete Pipe, Class III or 48-Inch High Density Polyethylene Pipe, Type S	L.S.	L.S.	L.S.	$_____
603.0400	54-Inch Reinforced Concrete Pipe, Class III or 54-Inch High Density Polyethylene Pipe, Type S	L.S.	L.S.	L.S.	$_____
603.0500	66-Inch Reinforced Concrete Pipe, Class III	L.S.	L.S.	L.S.	$_____
604.0100	Type C Storm Drain Manhole, 4.00 feet to 4.99 feet	3	Each	$ _____	$_____
604.0200	Type C Storm Drain Manhole, 5.00 feet to 5.99 feet	3	Each	$ _____	$_____
604.0300	Type C Storm Drain Manhole, 7.00 feet to 7.99 feet	3	Each	$ _____	$_____
604.0400	Type C Storm Drain Manhole, 10.00 feet to 10.99 feet	1	Each	$ _____	$_____
604.0500	Type C Storm Drain Manhole, 13.00 feet to 13.99 feet	1	Each	$ _____	$_____
604.0600	Type 61614P Inlet, 3.00 feet to 3.99 feet	1	Each	$ _____	$_____
604.0700	Type 61614P Inlet, 4.00 feet to 4.99 feet	1	Each	$ _____	$_____
604.0800	Type 61614P Inlet, 5.00 feet to 5.99 feet	4	Each	$ _____	$_____
604.0900	Type 61614P Inlet, 6.00 feet to 6.99 feet	18	Each	$ _____	$_____

PROPOSAL SCHEDULE					
ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
604.1000	Type 61614P Inlet, 7.00 feet to 7.99 feet	10	Each	$ _____	$_____
604.1100	Type 61614P Inlet, 8.00 feet to 8.99 feet	6	Each	$ _____	$_____
604.1200	Type 61614P Inlet, 9.00 feet to 9.99 feet	7	Each	$ _____	$_____
604.1300	Type 61614P Inlet, 10.00 feet to 10.99 feet	1	Each	$ _____	$_____
604.1400	Type 61614P Inlet, 11.00 feet to 11.99 feet	1	Each	$ _____	$_____
604.1500	Type 61616P Inlet, 9.00 feet to 9.99 feet	4	Each	$ _____	$_____
604.1600	Type 61616P Inlet, 10.00 feet to 10.99 feet	2	Each	$ _____	$_____
604.1700	Type 61616P Inlet, 11.00 feet to 11.99 feet	3	Each	$ _____	$_____
604.1800	Type 61616P Inlet, 12.00 feet to 12.99 feet	1	Each	$ _____	$_____
604.1900	Type 61616P Inlet, 13.00 feet to 13.99 feet	2	Each	$ _____	$_____
604.2000	Type C1 Catch Basin, 6.00 feet to 6.99 feet	1	Each	$ _____	$_____
604.2100	Adjusting Drain Manhole Cast Iron Frame and Cover	1	Each	$ _____	$_____
605.0100	6-Inch Underdrain	L.S.	L.S.	L.S.	$_____
605.0200	Cleanout	L.S.	L.S.	L.S.	$_____

PROPOSAL SCHEDULE					
ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
605.0300	Underdrain Outlet Connection to Grated Drop Inlet	L.S.	L.S.	L.S.	$_____
605.0400	Underdrain Outlet Connection to Catch Basin	L.S.	L.S.	L.S.	$_____
605.0500	Underdrain Outlet to Daylight with GRP Outlet	L.S.	L.S.	L.S.	$_____
606.0100	Guardrail, Type 3-Single with Steel Post	L.S.	L.S.	L.S.	$_____
606.0200	Guardrail, Type 3-Modified Thrie Beam with Steel Post	L.S.	L.S.	L.S.	$_____
606.0300	Portable Concrete Barrier	L.S.	L.S.	L.S.	$_____
606.0400	Terminal Section, Type FLEAT-350 / ET Plus TL-3	L.S.	L.S.	L.S.	$_____
606.0500	Terminal Section, Type A End Post	L.S.	L.S.	L.S.	$_____
607.0100	6-Feet Chain Link Fence With Top Rail and Concrete Footings	L.S.	L.S.	L.S.	$_____
607.0200	Chain Link Gate, 6-Feet High and 14 Feet Wide	L.S.	L.S.	L.S.	$_____
612.0100	Grouted Rubble Paving for Underdrain Outlet to Daylight	L.S.	L.S.	L.S.	$_____
613.0100	Centerline and Reference Survey Monument	L.S.	L.S.	L.S.	$_____
616.0100	Temporary Irrigation	L.S.	L.S.	L.S.	$_____
619.0100	Cinder amendment, 2" depth for Ilima planting beds	L.S.	L.S.	L.S.	$_____

PROPOSAL SCHEDULE					
ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
619.0200	Soil preparation with organic amendments (ground cover and shrubs areas only.)	L.S.	L.S.	L.S.	$_____
619.0300	Kou tree, 45 gal.	L.S.	L.S.	L.S.	$_____
619.0400	Hala tree, field specimen	L.S.	L.S.	L.S.	$_____
619.0500	Monkeypod tree, field specimen	L.S.	L.S.	L.S.	$_____
619.0600	Milo tree, 45 gal.	L.S.	L.S.	L.S.	$_____
619.0700	Beach Naupaka, 1 gal.	L.S.	L.S.	L.S.	$_____
619.0800	Ilima papa, 4" pot at 12" o.c.	L.S.	L.S.	L.S.	$_____
619.0900	Pohinahina, 4" pot at 18" o.c.	L.S.	L.S.	L.S.	$_____
619.1000	Landscape edging (1x4 recycled plastic)	L.S.	L.S.	L.S.	$_____
619.1100	Organic Cover Mulch	L.S.	L.S.	L.S.	$_____
622.0100	LED Street Light Concrete Footing	L.S.	L.S.	L.S.	$_____
622.0200	LED Street Light and Pole	L.S.	L.S.	L.S.	$_____
622.0300	Handhole 2' x 4'	L.S.	L.S.	L.S.	$_____
622.0400	Concrete Encased Ductline for Street Lights	L.S.	L.S.	L.S.	$_____

PROPOSAL SCHEDULE					
ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
622.0500	Concrete Encased Ductline for Service	L.S.	L.S.	L.S.	$_____
622.0600	Wiring for Street Lights	L.S.	L.S.	L.S.	$_____
622.0700	Concrete Pad for MECO Transformer	L.S.	L.S.	L.S.	$_____
622.0800	Electrical Distribution Equipment	L.S.	L.S.	L.S.	$_____
622.0900	MECO Service Charge	F.A.	F.A.	F.A.	$ 50,000
622.1000	Hawaiian Telcom Service Charge	F.A.	F.A.	F.A.	$ 50,000
623.2000	Furnish And Install Controller Assembly (Model 170 Traffic Signal Controller Unit, Type 332A Cabinet And Auxiliary Equipment)	2	Each	$ _____	$_____
623.2012	Type I Traffic Signal Standard, H=10 Ft	13	Each	$ _____	$_____
623.2021	Type II Traffic Signal Standard With 41-Foot Mast Arm	1	Each	$ _____	$_____
623.2022	Type II Traffic Signal Standard With 47-Foot Mast Arm	1	Each	$ _____	$_____
623.2023	Type II Traffic Signal Standard With 53-Foot Mast Arm	1	Each	$ _____	$_____
623.2024	Type II Traffic Signal Standard With 55-Foot Mast Arm	1	Each	$ _____	$_____
623.2025	Type II Traffic Signal Standard With 56-Foot Mast Arm	1	Each	$ _____	$_____

PROPOSAL SCHEDULE					
ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
623.2026	Type II Traffic Signal Standard With 60-Foot Mast Arm	3	Each	$ _____	$_____
623.2040	Foundation For Type I Signal Standard	13	Each	$ _____	$_____
623.2050	Foundation For Type II Signal Standard	8	Each	$ _____	$_____
623.2070	Foundation For Controller Cabinet	2	Each	$ _____	$_____
623.3001	Traffic Signal Assembly, (1-Way, 12-Inch, 1-3 Section Vertical With Type TP-1W Mounting)	5	Each	$ _____	$_____
623.3002	Traffic Signal Assembly, (2-Way, 12-Inch, 2-3 Section Vertical Type TP-2W Mounting)	5	Each	$ _____	$_____
623.3003	Traffic Signal Assembly, (3-Way, 12-Inch, 3-3 Section Vertical With Type TP-3W Mounting)	3	Each	$ _____	$_____
623.3004	Traffic Signal Assembly, (1-Way, 12-Inch, 1-3 Section Vertical With Type B-1W Mounting)	1	Each	$ _____	$_____
623.3005	Traffic Signal Assembly with Backplate, (1-Way, 12-Inch, 1-3 Section Vertical With Type MA-1W(1) Mounting)	17	Each	$ _____	$_____
623.3006	Traffic Signal Assembly with Backplate, (1-Way, 12-Inch, 1-3 Section Vertical, Programmable Visibility Head With Type MA-1W(1) Mounting)	13	Each	$ _____	$_____
623.3007	Traffic Signal Assembly with Backplate, (1-Way, 12-Inch, 1-4 Section Vertical, Programmable Visibility Head With Type MA-1W(1) Mounting)	2	Each	$ _____	$_____
623.3080	EVP Optical Receiver With Mast Arm Mounting	8	Each	$ _____	$_____

PROPOSAL SCHEDULE					
ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
623.4021	Pedestrian Signal Assembly, (1-Way, 12-Inch, One Vertical With Type B-1W Mounting)	2	Each	$ _____	$_____
623.4022	Pedestrian Signal Assembly, (1-Way, 12-Inch, One Vertical With Type C-1W Mounting)	12	Each	$ _____	$_____
623.4040	Pedestrian Push Button With Instruction Sign	14	Each	$ _____	$_____
623.5000	Traffic Signal Ductline, One 2-Inch Conduit, Sch 40 PVC, Concrete Encased	1650	Lin Ft	$ _____	$_____
623.5001	Traffic Signal Ductline, Two 2-Inch Conduit, Sch 40 PVC, Concrete Encased	6800	Lin Ft	$ _____	$_____
623.5002	Traffic Signal Ductline, Four 2-Inch Conduit, Sch 40 PVC, Concrete Encased	350	Lin Ft	$ _____	$_____
623.5003	Traffic Signal Ductline, Five 2-Inch Conduit, Sch 40 PVC, Concrete Encased	650	Lin Ft	$ _____	$_____
623.5004	Traffic Signal Ductline, Six 2-inch Conduit, Sch 40 PVC, concrete encased	350	Lin Ft	$ _____	$_____
623.5005	Traffic Signal Ductline, Seven 2-inch Conduit, Sch 40 PVC, concrete encased	175	Lin Ft	$ _____	$_____
623.5006	Traffic Signal Ductline, Two 3-inch Conduit and Four 2-inch Conduit, Sch 40 PVC, concrete encased	10	Lin Ft	$ _____	$_____
623.5007	Traffic Signal Ductline, Four 3-inch Conduit and Three 2-inch Conduit, Sch 40 PVC, concrete encased	10	Lin Ft	$ _____	$_____
623.6000	Type A Pullbox	9	Each	$ _____	$_____

PROPOSAL SCHEDULE

ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
623.6010	Type B Pullbox	45	Each	$ _____	$_____
623.6020	Type C Pullbox	2	Each	$ _____	$_____
623.7002	No. 14, 2-Conductor Loop Detector Lead-In Cable	9600	Lin Ft	$ _____	$_____
623.7026	No. 14, 26-Conductor Traffic Control Cable	3400	Lin Ft	$ _____	$_____
623.7028	No. 19, 24-Conductor (12-Pair) Traffic Control Interconnect Cable	7100	Lin Ft	$ _____	$_____
623.7029	No. 6, 3-Conductor Power Cable	100	Lin Ft	$ _____	$_____
623.7040	EVP Cable	2000	Lin Ft	$ _____	$_____
623.7042	Loop Detector Sensing Unit (6 Ft X 6 Ft) One Loops	15	Each	$ _____	$_____
623.7043	Loop Detector Sensing Unit (6 Ft X 6 Ft) Two Loops	10	Each	$ _____	$_____
623.7044	Loop Detector Sensing Unit (6 Ft X 6 Ft) Four Loops	5	Each	$ _____	$_____
623.7045	Loop Detector Sensing Unit (6 Ft X 6 Ft) Six Loops	17	Each	$ _____	$_____
624.0100	Water Systems	L.S.	L.S.	L.S.	$_____
626.0100	Adjusting Water Valve Box Frame and Cover	L.S.	L.S.	L.S.	$_____
626.0200	Adjusting Sewer Manhole Frame and Cover	L.S.	L.S.	L.S.	$_____

PROPOSAL SCHEDULE					
ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
626.0300	Adjusting Water Manhole Frame and Cover	L.S.	L.S.	L.S.	$_____
626.0400	Adjusting Sewer Cleanout Frame and Cover	L.S.	L.S.	L.S.	$_____
629.0100	4-Inch Pavement Striping (Tape-Type I or Thermoplastic Extrusion)	L.S.	L.S.	L.S.	$_____
629.0200	4-Inch Pavement Striping (Tape-Type II or Thermoplastic Extrusion)	L.S.	L.S.	L.S.	$_____
629.0300	4-Inch Pavement Striping (Tape-Type III or Thermoplastic Extrusion)	L.S.	L.S.	L.S.	$_____
629.0400	8-Inch Pavement Striping (Tape-Type I or Thermoplastic Extrusion)	L.S.	L.S.	L.S.	$_____
629.0500	8-Inch Pavement Striping (Tape-Type II or Thermoplastic Extrusion)	L.S.	L.S.	L.S.	$_____
629.0600	12-Inch Pavement Striping (Tape-Type II or Thermoplastic Extrusion)	L.S.	L.S.	L.S.	$_____
629.0700	12-Inch Pavement Striping (Tape-Type III or Thermoplastic Extrusion)	L.S.	L.S.	L.S.	$_____
629.0800	Crosswalk Marking (Tape, Type III or Thermoplastic Extrusion)	L.S.	L.S.	L.S.	$_____
629.0900	Pavement Arrows (Tape-Type III, or Thermoplastic Extrusion)	L.S.	L.S.	L.S.	$_____
629.1000	Pavement Words (Tape-Type III, or Thermoplastic Extrusion)	L.S.	L.S.	L.S.	$_____
629.1100	Type A Pavement Markers	L.S.	L.S.	L.S.	$_____

PROPOSAL SCHEDULE					
ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
629.1200	Type C Pavement Markers	L.S.	L.S.	L.S.	$_____
629.1300	Type D Pavement Markers	L.S.	L.S.	L.S.	$_____
629.1400	Type H Pavement Markers	L.S.	L.S.	L.S.	$_____
631.0100	Regulatory Signs (10 SQ FT or Less)	L.S.	L.S.	L.S.	$_____
631.0200	Regulatory Signs (Greater than 10 SQ FT)	L.S.	L.S.	L.S.	$_____
634.0100	Portland Cement Concrete Sidewalk	L.S.	L.S.	L.S.	$_____
638.0100	Gutter, Type 61614	L.S.	L.S.	L.S.	$_____
638.0200	Gutter, Type 61616	L.S.	L.S.	L.S.	$_____
638.0300	Curb, Type 2D	L.S.	L.S.	L.S.	$_____
638.0400	Curb and Gutter, Type 2DG	L.S.	L.S.	L.S.	$_____
641.0100	Hydro Mulch Seeding (Common Bermuda Grass)	L.S.	L.S.	L.S.	$_____
642.0100	Maintenance - Planting period	3	Month	$ _____	$_____
642.0200	Maintenance - Establishment period	9	Month	$ _____	$_____
645.0100	Traffic Control	L.S.	L.S.	L.S.	$_____

PROPOSAL SCHEDULE					
ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
645.0200	Additional Police Officers and/or Additional Traffic Control Devices and Advertisement	F.A.	F.A.	F.A.	$ 100,000
648.0100	Field-Posted Drawings	L.S.	L.S.	L.S.	$
650.0100	Curb Ramp, Type 1	L.S.	L.S.	L.S.	$
650.0200	Curb Ramp, Type 2A	L.S.	L.S.	L.S.	$
650.0300	Curb Ramp, Type 2B	L.S.	L.S.	L.S.	$
650.0400	Curb Ramp, Type 2C	L.S.	L.S.	L.S.	$
696.0100	Field Office Trailer (Not to Exceed $32,000)	L.S.	L.S.	L.S.	$
696.0200	Maintenance of Trailer	F.A.	F.A.	F.A.	$ 25,000
698.0100	Training	F.A.	F.A.	F.A.	$ 25,000
699.1000	Mobilization (Not to Exceed 6 Percent of the Sum of All Items Excluding the Bid Price of this Item)	L.S.	L.S.	L.S.	$

PROPOSAL SCHEDULE

ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT

a. Sum of All Items ..... $ _____

b. Either Furnish Foreign Steel Not to Exceed Minimal Amount (Fill in '0') or
Furnish Foreign Steel in Excess of Minimal Amount (Fill in 25% x a) ..... $ _____

c. Amount for Comparison of Bids (a + b) ..... $ _____

All bidders must fill in b and complete c

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

SIGN IN SHEET – PRE-BID MEETING

March 19, 2013 @ 9:00 A.M.
Maui District Office

Kuihelani and Honoapiilani Highway Pavement Preventive Maintenance
Puunene Avenue to Honoapiilani Highway and Kuihelani Highway to Kapoli Street
Federal-Aid Project No.NH-0900(080)

NAME	COMPANY	PH. NO./FAX	E-MAIL
1. Fred Gutierrez	DOT	873-3390/873-3544	fred,c,gutierrez@hawaii.gov
2. Ferdinand Cajigal	DOT	873-3553/873-3544	Ferdinand.cajigal@hawaii.gov
4. STEVE PAWLAK	GOODFELLOW BROS.	879-5205 / 879-6724	stevep@goodfellowbros.com
5. BILLY McCOSKEY	DELTA CONST.	808-348-3498	WMCCOSKEY@DELTACONSTCORP.COM
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April 8, 2013

Subject: Kahului Airport Access Road Phase I
Project No. NH-0380(10)

PRE-BID MEETING
March 19, 2013, DOT Maui Conference Room – 9:00 AM to 11:00 AM

PARTICIPANTS:

The attendance sheet has been attached to the meeting minutes. Abbreviations in the meeting minutes are as follows:

Fukunaga and Associates Incorporated (FAINC)
Department of Transportation Maui (DOT-M)

MINUTES OF THE MEETING:

Items of Discussion:

1. The meeting was opened by DOT-M with introductions of all attendees present at the meeting.

2. FAINC presented the general project scope of work consisting of construction of a new 4-lane road from Puunene to approximately 1,200 feet past Hana Highway with two new intersections at the Access Road / Dairy Road /Pakaula Road and the Access Road / Hana Highway.

3. FAINC and DOT-M announced several items to be aware of when preparing bids as follows:

    a. As required by the US Fish and Wildlife, no night work construction is allowed for this project, and contractor is made aware to keep access open to all businesses along the project limits.

    b. The Contractor shall schedule construction to begin at Baseline Station 58+48.10 of the Kahului Airport Access Road Phase I which is the connection point/match line to the future DOT Airports project. Construction shall begin at this connection point first and work towards Hana Highway. Work shall be completed at this connection point prior to beginning work in any other area of this project. The construction schedule for the future DOT Airports project is not definite at this time however funding for the project has been allocated and it is anticipated that construction will begin approximately 6 months after Phase I begins construction

    c. Construction is ongoing on current projects within our project limits. For certain areas of the topographic survey, existing grades and improvement are based on available design plans. Contractors are made aware to visit the site and evaluate/confirm existing site conditions.

d. The current bid opening date is April 4, 2013. Contractors shall prepare and submit bid questions by 3/26 to allow time for preparation of an addendum and respective bid adjustments.

e. Just in Time Training requirements for this project to train DOT personnel will be added to the upcoming project addendum.

4. Contractors had questions with responses as follows:

Contractor #1 Questions:

1. Please confirm that CLSM as illustrated on sheet C-69 is only intended in asphalt restoration areas over drain line trenches, and that CLSM is not required where new road construction takes place.

   Response: Confirming that CLSM is intended to be installed in asphalt restoration areas over drain line trenches and not required where new road construction takes place.

2. Please provide the locations of Borings #5, #11 and #13 as illustrated on C-92 and C-93. All of these borings indicate the presence of Basalt rock and need to be evaluated.

   Response: For clarification, all boring logs will be shown on the Pavement General Plan and included in Addendum No. 2. Contractors are made aware that as shown on the notes on sheet C-92 (sheet 105), the geotechnical reports are available for review which includes a soil probe holes report specifically for the detention basin excavation. Contractors are strongly recommended to review these available geotechnical reports with additional boring information to assist with their conclusions in preparing bid.

3. Please confirm that soils testing/monitoring are to be provided by the State.

   Response: Soils testing/monitoring is to be provided by the Contractor and cost is considered included in the various bid items in the proposal.

4. Please confirm that any Archaeological monitoring required will be provided by the State.

   Response: An Archaeological Monitoring Plan has been approved by the State Historic Preservation Division and the implementation of the plan and monitoring services is to be provided by the Contractor under a Force Account basis. Specification Section 212, Archaeological Monitoring, and Bid Item 212.0100 in the proposal will be included in Addendum No. 2.

5. General Note #1 on T-3 indicates a Two-Cell Culvert in the scope of work for the project. Please clarify this requirement and locations.

   Response: There is no Two-Cell Culvert in the scope of work.

6. Item #206.0200 "Excavation for Detention Basins" - We estimate the quantity of the basin to be significantly higher than what is stated on the plans. Is the large quantity of surplus material generated from the basin excavations the property of the contractor to dispose of off-site?"

   Response: The excavation for detention basins shall be clarified in Addendum No. 2 and the surplus material not able to used in the embankment is the property of the contractor to dispose of off-site.

7. Are we required to concrete jacket the existing sewer line at approximate station 8+10 where the new 36" culvert crosses underneath?

   Response: No. Profile shall be modified to reflect that sewer does not cross new drain line and included in Addendum No. 2.

8. Please confirm that the limits of Concrete Jacket as illustrated on Drainline N profile on Sheet C-73. This indicates only approximately 6 LF of Jacket required. Are there other locations required?

   Response: Limits of concrete jacket are as shown and there are no other locations required.

9. Please confirm the Type of GDI for #A-2. There are different callouts on C-40 & C-73.

   Response: #A-2 is type 61616p. The callout on Sheet C-73 shall be revised in Addendum No. 2.

10. Please confirm the Type of GDI for #A-3. There are different callouts on C-39 & C-72.

    Response: #A-3 is type 61616p. The callout on Sheet C-72 shall be revised in Addendum No. 2.

11. Please confirm the Type of GDI for #A-4. There are different callouts on C-39 & C-72.

    Response: #A-4 is type 61616p. The callout on Sheet C-72 shall be revised in Addendum No. 2.

12. Please confirm the Type of GDI for #A-5. There are different callouts on C-39 & C-72.

Response: #A-5 is type 61616p. The callout on Sheet C-72 shall be revised in Addendum No. 2.

13. Please confirm the Type of GDI for #A-6. There are different callouts on C-39 & C-72.

Response: #A-6 is type 61616p. The callout on Sheet C-72 shall be revised in Addendum No. 2.

14. Please confirm the Type of GDI for #A-7. There are different callouts on C-38 & C-72.

Response: #A-7 is type 61616p. The callout on Sheet C-72 shall be revised in Addendum No. 2.

15. Please confirm the Type of GDI for #A-8. There are different callouts on C-38 & C-72.

Response: #A-8 is type 61616p. The callout on Sheet C-72 shall be revised in Addendum No. 2.

16. Please confirm the Type of GDI for #A-9. There are different callouts on C-38 & C-72.

Response: #A-9 is type 61616p. The callout on Sheet C-72 shall be revised in Addendum No. 2.

17. Please confirm the Type of GDI for #A-10. There are different callouts on C-38 & C-72.

Response: #A-10 is type 61616p. The callout on Sheet C-72 shall be revised in Addendum No. 2.

18. Re: C.L. Fence at Retention Basins. Are there any other locations of 6' CL Fence other than what is shown on Sheet 44 (C-31)?

Response: Yes. Sheet 40 (C-27) also calls out removal and replacement of chain link fence as required. For installation of drain line into existing detention basin at North corner.

19. Are the Siltation Monitoring Station (2 EA) incidental to item 206.0200?

Response: Yes. Siltation Monitoring Stations will not be measured and paid for directly but will be considered incidental to various bid items in the proposal.

20. Is there a Pay Item for Trailer Relocations?

Response: No. Relocation of the trailers will not be measured and paid for directly but will be considered incidental to various bid items in the proposal.

21. Relocation of 6" Waterline noted on sheet 50 (C-37) says to relocate but this work is not shown on any other sheet. Please provide plan for this relocation.

Response: Plan shall be included in Addendum No. 2.

22. On Sheet 83 (C-70) the detail for the PVC Underdrain Connection to the CDI's show the pipe and fittings to be ductile iron from the 45 degree bend to the penetration into the inlet structure. Can we use PVC for this connection?

Response: PVC may be used however the pipe penetration into the inlet structure shall be ductile iron.

Contractor #2 Questions:

#1 - There are two bid items numbered 623.5002

Response: Bid items will be revised in the Proposal in Addendum No. 2.

#2 - There are two bid items numbered 623.5005

Response: Bid items will be revised in the Proposal in Addendum No. 2.

#3 - Will the state be providing the concrete barriers for temporary traffic control, and if so where is the pickup location for these barriers?

Response: No. The Contractor shall furnish and provide the concrete barriers for temporary traffic control.

Contractor #3 Questions:

Sheet C-14 is the Erosion Control Plan. This sheet does currently contain any erosion control measures to be installed for this project. Will there be a plan sheet provided in the upcoming addendum that indicates the location and quantity of erosion control measures intended for this project?

Response: No. The NPDES permit has been approved and utilizes the existing sand bag with rock filter erosion control at the downstream discharge point. The project site and drainage system all eventually sheet flow and discharge to this downstream point. Sheet T-13 calls out the required dust control and temporary vegetative cover requirements. The contractor is made aware that for bidding purposes, the silt fence and drain

inlet filters are optional however per notes on Sheet T-13, the contractor is responsible for removing accumulated sediment and debris from drainage system.

Contractor #4 Questions:

1. Locations of Boring 4, 5, & 13 are not shown on the grading plan.

   Response: For clarification, all boring logs will be shown on the Pavement General Plan and will be attached in Addendum No. 2. Contractors are made aware that as shown on the notes on sheet C-92 (sheet 105), the geotechnical reports are available for review which includes a soil probe holes report specifically for the detention basin excavation. Contractors are strongly recommended to review these available geotechnical reports with additional boring information to assist with their conclusions in preparing bid.

2. The 7% UDBE goal for the project seems high. Will it be possible to reduce the percentage?

   Response: No. Only two contractors have requested reduction of the UDBE percentage goal at this time and it will not be reduced to accommodate only two contractors.

3. Bid Item 203.0200 - Borrow Excavation has a quantity of 65,200 cy. Our take-off analysis has shown that this project has a surplus of excavated material. How should we bid this item?

   Response: The borrow excavation bid item shall be clarified in Addendum No. 2 as the roadway excavation and excavation for detention basin has enough select material to be used in the embankment. The surplus material not able to be installed in the embankment is the property of the contractor to dispose of off-site.

4. The drain line trench details on sheet C-69 require CLSM to be used for pipe backfill. Will engineered fill per the Standard Specifications be allowed for backfill instead of CLSM?

   Response: CLSM is required to be installed in asphalt restoration areas over drain line trenches however is not required where new road construction takes place, and engineered fill is acceptable in the drain line trench areas where there is new road construction.

5. Will the portable concrete barriers, steady burn amber lamps & inertial barrier systems required in the traffic control plans become the property of the State at the end of the project?

   Response: Yes.

6. The plan sheet C-16 shows three (3) Fifty Foot Trailers to be Re-Located. There is only One (1) Trailer presently in this location. Also, where will this trailer be re-located to?

   Response: The trailer will be relocated a location to be determined within the project limits and Highway ROW.

7. Sheet L-9 shows a large area to be grassed. This area is outside of the grading limits. Are we to clear & grub this site & grass it?

   Response: Clearing, grubbing, and grassing limits on sheet L-9 shall be clarified in Addendum No. 2.

Contractor #5 Questions:

1. Received another question from one of our subcontractor regarding items 622.0900 - MECO Service Charge and 622.1000 - HI Telcom Service Charge. Typically, these costs are usually by the owner and you list them as F.A.'s (Force Accounts)?

   Response: The bid items under Force Account shall be provided in the proposal in Addendum No. 2.

Contractor #6 Questions:

1. Since this pavement has an under drain system, do the various transverse and longitudinal joints need to be sealed? If so, are any of the three sealant types mentioned in Section 705.04 acceptable? Are any of the three sealant types mentioned in Section 705.04 acceptable for the conditions where Proposal Plans Sheet 139 (S3.11), Detail 1 or Standard Plans Sheet D-23 applies?

   Response: The contractor may use any of the three joint sealant types mentioned in Section 705.04.

2. There are several destination signs on this project. There are no bid items for these signs. Where are these signs priced in within the proposal?

   Response: The measurement and payment for destination signs shall be clarified in Addendum No. 3.

3. The destination sign details states that the post sizes are to be as noted on the plans. We cannot find anywhere on the plans where the post sizes are stated. Please provide this information.

   Response: The post sizes shall be clarified in Addendum No. 3.

4. The anchor bolts for the pedestrian railing shows headed studs imbedded into the new concrete, will drill and epoxy of the new anchors of the same size be acceptable?

   Response: The detail reflects anchor plates in which the bolts are welded to the bottom of the plate. Please clarify plan to drill and epoxy, i.e. are you asking to drill and epoxy the bolts in and then weld it to the plate in the field or drill holes in the plate, extend the bolts through the plate, and place a nut on top.

5. Sheet 107 indicates that the RM-5 is 1/8" thick steel. Can we use plastic RM-5's for this project?

   Response: Plastic RM-5's is allowed for this project. The latest guardrail details will be included in Addendum No. 3.

6. Sheet 108 indicates that backup plates for the guardrail is required. We were under the understanding that the backup plates were deleted from the standard guardrail details. Please clarify if backup plates are required for this project.

   Response: Backup plates are not required for this project. The latest guardrail details will be included in Addendum No. 3.

Contractor #7 Questions:

1) Regarding the street light bases. Seems to have a conflict between bases. On sheet E-8 (148) it shows the standard MECO bases, sheet E-10 (150) it shows the round bases. Could you verify which one you want us to use?

   Response: The base is a transformer base with a round concrete foundation as shown on E-8 and E-10. The "round base" is the concrete foundation below the transformer base.

2) UDBE goal. Is the State going to reduce this percentage?

   Response: No. Only two contractors have requested reduction of the UDBE percentage goal at this time and it will not be reduced to accommodate only two contractors.

3) Can we get a copy of the Soils Investigation Reports dated 11/29/89, April 12, 2001 and July 31, 2001?

Response: Yes, Contractors are made aware that as shown on the notes on sheet C-92 (sheet 105), the geotechnical reports are available for review at the DOT-Maui office which includes a soil probe holes report specifically for the detention basin excavation. Contractors are strongly recommended to review these available geotechnical reports to assist with their conclusions in preparing bid.

4) Is there a Soils Investigation Report that is more current?

Response: There is a geotechnical report dated March 28, 2008 however the same borings are utilized from the 1989 report.

5) Bid Item 606.0300 – Portable Concrete Barrier – 1 LS: There are 203 each (20') required per the largest phasing plan which is phase 1B. Does the State have any barriers for this project already? Are these concrete barriers to be the property of the State at the end of the project are property of the contractor?

Response: No, the DOT does not have any concrete barriers for this project as all are being utilized on other projects. The Contractor shall furnish and provide the concrete barriers for this project. The portable concrete barriers, steady burn amber lamps & inertial barrier systems required in the traffic control plans will become the property of the State at the project completion.

Contractor #8 Questions:

1. Will blasting be permitted to facilitate the rock excavation for this project?

   Response: No, please follow the specifications.

2. Boring #8 shows a surface elevation of 27 feet; the location in the grading plan shows it at 24 feet. Please clarify.

   Response: The boring surface elevation should be based on the topographic survey elevation of 24 feet however construction is ongoing on current projects within our project limits. Contractors are made aware to visit the site and evaluate/confirm existing site conditions, and that as shown on the notes on sheet C-92 (sheet 105), the geotechnical reports are available for review which includes a soil probe holes report specifically for the detention basin excavation. Contractors are strongly recommended to review these available geotechnical reports with additional boring information to assist with their conclusions in preparing bid.

3. Construction Phasing Plan 1b has only one lane available for Kahului bound traffic. Will this be sufficient to handle the traffic load?

   Response: Prepare bid for construction phasing plans as shown.

Contractor #9 Questions:

1. On drawings 79-81, the Destination Signs dimensions and details are provided. In the note 4, it says "Destination Sign Posts shall be as noted on the plans." I couldn't find the post designs on drawings 70-78, Signing and Striping Plans. Please have designer provide D-Sign post w/ footing design.

   Response: This will be clarified in Addendum No. 3.

2. Several signs do not have dimensions. For example, please see drawing 70, R3-8 Mod for the lane signs and drawing 71 Dairy Road and Pakauia Rd signs. Please have designer provide sizes for these signs.

   Response: This will be clarified in Addendum No. 3.

3. On drawing 69, the legend for pavement markings is provided. The same symbol is provided for both 4" or 8" White Edge Stripe w/ Type C Raised pavement markers @ 40'-0". Please have the designer indicate how to determine if we are to provide either 4" or 8".

   Response: This will be clarified in Addendum No. 3.