# STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION

#### ADDENDUM NO. 1

FOR

# TRAFFIC OPERATIONAL IMPROVEMENTS AT VARIOUS LOCATIONS

PUUNENE AVENUE
KAAHUMANU AVENUE TO KUIHELANI HIGHWAY

KAAHUMANU AVENUE AT LUNALILO STREET

KAHULUI BEACH ROAD
AT SMALL BOAT HARBOR ROAD AND KAIHEE PLACE

HONOAPIILANI HIGHWAY AT WAIKO ROAD

PROJECT NO. HWY-M-04-00

DISTRICT OF WAILUKU ISLAND OF MAUI

FY 2002

Amend the bid documents as follows:

#### 1. TABLE OF CONTENTS

Replace Table of Contents page 1 dated r04/22/02 with attached Table of Contents page 1 dated r06/14/02.

## 2. NOTICE TO BIDDERS

Add the following:

"Each bidder shall list an ARCHAEOLOGICAL MONITOR from the Hawaii State Historic Preservation Division (SHPD) approved list, appearing in Section 211 of the Special Provisions. The archaeological monitor will be

required to coordinate and adhere to an Archaeological Monitoring Plan, approved by SHPD, during the course of the excavation activities."

# 3. INSTRUCTIONS TO BIDDERS

Add the following:

"ARCHAEOLOGICAL MONITOR. Each bidder shall list an archaeological monitor from the Hawaii State Historic Preservation Division (SHPD) approved list, appearing in Section 211 of the Special Provisions. Failure to list an approved archaeological monitor on Proposal Page P-4 shall be grounds for rejection of bid."

#### 4. SPECIAL PROVISIONS

- a. Replace Pages 622-1a through 622-5a dated r4/22/02 with the attached Pages 622-1a through 622-5a dated r6/12/02.
- b. Add the attached Special Provision Section 211 Archaeological Monitoring, Pages 211-1a through 211-4a dated 6/14/02.

# 5. PLANS

Replace Plan Sheet Nos. 10, 15, 22, 25, 53, 54, 55, and 56 with the attached Plan Sheet Nos. ADD.10, ADD.15, ADD.22, ADD.25, ADD.53, ADD.54, ADD.55, and ADD.56.

#### 6. PROPOSAL SCHEDULE

Replace proposal schedule page P-10 dated r05/08/02 with the attached proposal schedule page P-10 dated r06/14/02.

Please acknowledge receipt of this Addendum No. 1 by recording the date of its receipt in the space provided on Page P-4 of the Proposal.

BRIAN K. MINAAI

Director of Transportation

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**Notice To Bidders** 

Instructions To Bidders

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**Special Provisions** 

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# Amend Section 622 - Roadway Lighting System to read as follows:

# **"SECTION 622 - ROADWAY LIGHTING SYSTEM**

**622.01 Description.** This work includes furnishing labor, materials and equipment and installing complete and in operating condition roadway lighting system in accordance with the requirements of the contract.

This work includes furnishing and installing of conduits, handholes, fittings, concrete bases, coordination with the Maui Electric Company for furnishing and installing highway light standards; luminaire arms; luminaires; lamps; and electrical cables, and other materials necessary for operating and controlling the roadway lighting systems, according to the contract.

Furnish and install the incidental parts necessary to complete the roadway lighting systems as though the contract showed such parts.

Electrical equipment shall conform to the NEMA Standards. Material and workmanship shall conform to the latest requirements of the "National Electrical Code," herein referred as 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.

# 622.02 Materials. Materials shall conform to the following:

Precast Concrete Pullboxes	712.06(B)	
Conduits	712.27	
Electrical Appurtenances	712.48	

Concrete shall conform to Section 601 - Structural Concrete.

Highway lighting wood and metal poles, anchor bolts for metal poles, bracket arms (except on type III traffic signal standards), luminaires, and cables shall be furnished by Maui Electric Company, coordinate work accordingly. Highway lighting bracket arms on the type III traffic signal standard shall be furnished by the Contractor.

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

## 622.03 Construction Requirements.

(A) Equipment List and Drawings. Within 10 days following the award of the contract, the Contractor shall submit to the Engineer for acceptance 6 copies of a list of materials and equipment that the Contractor will incorporate in the work. The list shall include the name of the manufacturer, size and catalog number of the unit, detailed scale drawings and wiring diagrams of special equipment, and proposed deviations from the contract. If required, submit for acceptance samples of the material that the Contractor will use at no cost to the State.

Upon completion of the work, submit an 'As Built' plan showing in detail construction changes.

- **(B)** Excavation and Backfill. Excavation and backfill shall conform to Section 206 Excavation and Backfill for Conduits and Structures.
- (C) Installation.
  - (1) **Foundations.** Foundations for highway light standards shall be as shown in the contract.

Locations of the highway lighting standards shown in the contract are approximate only. The Engineer will decide the exact location in the field.

Forms shall be true to the lines and grades as accepted. Forms shall be rigid and securely braced in place. Place the conduit ends and anchor bolts in proper position, placed in proper height, and held in place by a template until the concrete sets. Cure the concrete for not less than 72 hours.

- (2) Highway Lighting Standards. Installation of the highway lighting standards shall be by Maui Electric Company. Coordinate work accordingly.
- (3) Wood Poles. Installation of the wood poles shall be by Maui Electric Company. Coordinate work accordingly.
- (4) Guy Anchors and Wires. Installation of the guy anchors and wires shall be by Maui Electric Company. Coordinate work accordingly.
- (5) Luminaire Arms. Installation of the luminaire arms (except for arms on type III traffic signal standards) shall be by Maui Electric Company. Coordinate work accordingly. Luminaire arms on type III traffic signal standards shall be by Contractor.

- (6) Luminaires. Installation of the luminaires (except on type III traffic signal standards) shall be by Maui Electric Company. Coordinate work accordingly. Luminaires on type III traffic signal standards shall be by Contractor.
- (7) Cables. Cables for the roadway lighting system (except for cables between pullboxes and luminaires mounted on type III traffic signal standards) shall be by Maui Electric Company. Coordinate work accordingly. Cables between pullboxes and luminaires mounted on type III traffic signal standards shall be by Contractor.
- (8) Conduits. Lay the polyvinyl chloride (PVC) conduits carefully in trenches prepared to receive the conduits.

Lay the conduit that will be placed in concrete structure or encased in concrete to the required lines and grades. Support the conduit rigidly in place by masonry material, manufactured conduit spacers, or other accepted means. Wire the conduit so that it will not dislodge the conduit during the placing and tamping of the concrete. The thickness of the concrete around the conduits shall be shown in the contract. Use only hand shovels in compacting the concrete. Cure the concrete jackets for at least 72 hours before permitting vehicular traffic.

Install rigid PVC conduit according to Article 347 of the Code. PVC conduit connections shall be of the solvent-weld type. Make solvent-weld joints according to the conduit manufacturer's recommendations and as accepted by the Engineer. The Engineer will permit pre-assemblying sections of conduit.

Make directional changes in non-metallic conduit runs such as bends and changes to clear obstructions with curved segments using accepted deflection couplings or with short lengths of straight ducts and couplings. The deflection angle between two adjacent lengths of duct shall not exceed 6° and the bends shall not have a radius of less than 12 times the nominal size of the conduit unless using factory-made ells.

Thread the fittings for connecting non-metallic conduits to rigid metal conduits on the side that will be connected to the metal conduit. Metal conduits entering pullboxes shall end in insulating grounding bushings. Non-metallic conduits shall end in end bells.

Cap or plug and mark the ends of conduits shown or specified. Provide each conduit run with a No. 10 gage flexible zinc-coated pull wire or one-eight inch polyolefin line extending uninterrupted through handholes for the entire length of run. Double an additional two feet

of wire or polyolefin line back into the conduit at both ends of the run.

Ends of conduit runs shall extend at least 24 inches past the face of curb or edge of pavement, unless the ends end in pullboxes. Locate the ends accurately by special markers, markings on curbs or as specified by the Engineer.

Keep the interior of conduits clean during the construction. Plug the ends of conduits temporarily to keep the ends clear during construction. Install the conduits to drain toward a pullbox. Consider a single run to drain toward both ends.

- (9) Bonding and Grounding. All metal, non-current carrying portions of the electrical installation shall be grounded as specified in the latest edition of the National Electrical Code. All electrical installations shall be made in accordance with Section 250 of the National Electrical Code.
- (10) Pullboxes. Install pullboxes at the locations shown in the contract. Install pullboxes so that the covers are level with the curb or sidewalk grade or one inch above the existing ground.
- **(D) Electric Service.** Apply for electric service at each location shown in the contract and shall comply with the power company's requirements. The Engineer will unmeter the service according to Schedule F for multiple service.

Coordinate work with the Maui Electric Company to provide the secondary circuit extensions to the power company's service. The Engineer shall pay for permanent service connections made by the power company.

During relocation, reconstruction or other improvements of existing roadway lighting facilities, keep the existing roadway lighting system operational in its entirety during hours of darkness. Schedule the work accordingly and provide a temporary lighting system if necessary, to keep the project area illuminated during the hours of darkness.

- **(E) Utility Work.** Coordinate work by the Maui Electric Company pertaining to this contract. Payment to Maui Electric Company for their work will be made by the State .
- **(F)** Field Test. Before acceptance of the work, make the following tests on the lighting systems, in the presence of the Engineer.
  - (1) A functional test to show that each part of the system functions according to the contract.

Correct the faults in the material or the installation revealed by

these tests at no cost to the State. Repeat the tests until no fault appears.

- **(G) Salvaging Electrical Equipment.** The existing roadway lighting system is the property of the Maui Electric Company. Coordinate removal work accordingly.
- **622.04 Method of Measurement.** The Engineer will measure the pullbox per each complete and in place.

The Engineer will not measure the highway lighting ductline and highway lighting service and equipment for payment.

**622.05 Basis of Payment.** The Engineer will pay for the accepted highway lighting ductline on a contract lump sum basis complete in place. The price includes full compensation for furnishing and laying the conduits into the trench; furnishing conduit spacers, and concrete encasement where required; restoring finish grade to match adjacent; 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 excavating and backfilling; furnishing and installing the pullboxes 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 not pay for trench excavation and backfill, sawcutting and repairing of existing pavement or other improvements, conduits between pullboxes and highway lighting standards and type III traffic signal standards, conduit risers, cables between pullboxes and highway light luminaires mounted on the type III traffic signal standards, and duct sealing of conduits separately and will consider these items incidental to the various contract items.

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 make payment under:

Pay Item	Pay Unit
Highway Lighting Ductline, Inch Conduit ( L.F.)	Lump Sum
2'x4' Pullbox	Each"

end of Section

Make the following Section part of the Standard Specifications:

### "SECTION 211 - ARCHAEOLOGICAL MONITORING

**211.01 Description.** The State Department of Land and Natural Resources (DLNR), Historic Preservation Division (SHPD), has determined that an archaeological inventory survey has not been conducted for the land parcels within the project limits. The USDA Soil Survey indicates that the proposed project locations are located within the Pu'uone Sand Dune deposits, which are known to contain both isolated and clusters of pre-Contact human burials. This suggests the possibility that this type of historic site may be present in the proposed project locations. As the project area has been previously disturbed during the initial highway construction, SHPD has indicated the possibility that disturbed remnants of these types of historic sites may be present in portions of the project.

In order to address the possibility that historic sites may be encountered during construction, the Contractor shall retain an Archaeological Monitor from SHPD approved list, who shall be present during all ground-disturbing activities located within the Pu'uone Sand Deposits. The Archaeological Monitor's services shall include implementing all incidental procedures and providing all equipment necessary for compliance with the requirements of the archaeological monitoring plan.

**211.02 Materials.** None specified.

# 211.03 Construction Requirements.

(A) Archaeological Monitoring. The Archaeological Monitor shall submit a monitoring plan to SHPD and the Engineer for review and approval prior to any ground-disturbing activities located within the Pu'uone Sand Deposits. The Archaeological Monitor shall: (1) implement and adhere to the approved monitoring plan; (2) identify, document, record and provide appropriate mitigation measures, as necessary, for any significant historic sites that may be encountered; and (3) ensure that all construction activities are performed in accordance with applicable State regulations. The Archaeological Monitor shall be responsible for the incidental procedures and equipment required for full compliance with all requirements of the provisions for archaeological monitoring as outlined in the monitoring plan.

The Archaeological Monitor shall establish the limits of any significant historical site encountered, and shall determine with the Engineer the best means for protecting the site from further disturbance, as well as the best means for implementing further investigation or salvage as required by SHPD. Protection measures may include barricades, roping off, temporary

fencing or other means.

The Archaeological Monitor shall also submit a report documenting the findings of the monitoring activities to SHPD for review within 180 calendar days of the completion of the project.

**(B)** Archaeological, Historical or Burial Site Findings. The Contractor shall be responsible for complying with the requirements of this section as well as the requirements for protection of archaeological, historical and burial sites as specified in Section 107 - Legal Relations and Responsibility to the Public, and as specified elsewhere in the plans and specifications.

Whenever the Contractor encounters possible archaeological, historical or burial site findings, the Contractor shall immediately suspend the operation and inform the Engineer verbally and in writing. The Engineer will contact the DLNR and other agencies to evaluate such findings and determine the appropriate course of action.

The Contractor shall not resume operations without the prior written approval of the Engineer. The Contractor shall not count delays resulting from the discovery, investigation and handling of such findings against the completion date. The Engineer will govern suspensions of work according to Subsection 108.06 - Temporary Suspension of Work. Also, the Contractor shall conform to the requirements of Chapter 6E, Hawaii Revised Statutes (HRS).

Failure or refusal to comply with the terms of this Section or Chapter 6E, Hawaii Revised Statutes, may subject the Contractor to the penalties described in Section 6E-11, Hawaii Revised Statutes:

- (1) a fine of not more than ten thousand (\$10,000) dollars for each separate offense,
- (2) seizure and disposition of equipment, and
- (3) if the Contractor knowingly fails or refuses to comply, a prohibition from participating in the construction of State or County projects for ten (10) years.

Construction work and equipment shall remain within the right-of-way limits of this project.

**211.04 Method of Measurement.** The Engineer will measure Archaeological Monitoring on a force account basis according to Subsection 109.04 - Extra and

Force Account Work and as ordered by the Engineer.

211.05 Basis of Payment. The Engineer will pay for accepted Archaeological Monitoring on a force account basis according to Subsection 109.04 - Extra and Force Account Work. An estimated amount for the force account is allocated in the proposal schedule under Archaeological Monitoring. The actual amount to be paid will 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.

Payment will be full compensation for the work prescribed in this Section, by the Engineer and Subsection 109.02 - Scope of Payment.

The Engineer will make payment under:

Pay Item Pay Unit

**Archaeological Monitoring** 

**Force Account** 

A listing of Individuals and Organizations Engaging in Archaeological Consultant Work in the State of Hawaii approved by SHPD dated rev. 4/02 is included in this Section.

# INDIVIDUALS AND ORGANIZATIONS ENGAGING IN ARCHAEOLOGICAL CONSULTANT WORK IN THE STATE OF HAWAIT

AKI SINOTO CONSULTING 2333 Kapiolani Blvd., #2704 Honolulu, HI 96826 Principal Archaeologist: Jeffrey Pantaleo, M.A. PHONE and FAX: 941-9538

AMEC 680 twilei Road, Suite 660 Honolulu, HI 96817 Office Manager: Stephen Clark

Senior Archaeologist: Jane Allen, Ph.D. PHONE: 545-2462 FAX: 528-5379

ARCHAEOLOGICAL CONSULTANTS
OF THE PACIFIC

59-624 Pupukea Road Haleiwa, Hl 96712 Archaeologist: Joseph Kennedy, M.A PHONE: 638-7442 FAX: 638-0703

ARCHAEOLOGICAL SERVICES HAWAII, LLC 16 South Market Street, G Walluku, HI 96793 Principal Investigator: Jeffrey Pantaleo, MA PHONE: 244-2012 FAX: 244-9592

BERNICE PAUAHI BISHOP MUSEUM

1525 Bernice Street Honolutu, HI 96817-0916 Archaeologist: Susan Lebo, Ph.D. PHONE: 847-8285 FAX: 848-4132

CULTURAL RESOURCES MGMT SERVICES 1142 Aughi Street, A7-1902 Honolulu, HJ 96814-4996

Archaeologist: Mike Carson, M.A. PHONE: 941-7672 or (800) 676-1630

EMAIL: nancy@crms WWW-URL: www.crms.com

**CULTURAL SURVEYS OF HAWAIT** 

733 North Kalaheo Avenue Kailua, Hi 96734

Principal Archaeologist: Hallett Hammatt. Ph.D.

PHONE: 262-9972 FAX: 262-4950

**GARCIA AND ASSOCIATES** 

146 Hekili Street, Suite 204 Kailua, Hl 96734

Principal Archaeologist: Alice Roberts, M.A. PHONE: 262-1387 FAX: 262-1384 e-mail: alicer@garciaandassociates.com web-site: www.garciaandassociates.com

HALIN & ASSOCIATES

HCR 1 Box 4730 Keaau, HI 96749

Principal Archaeologist: Alan Haun, Ph.D. PHONE: 982-7755 FAX: 982-6343

EMAIL: ahaun@flex.com

INTERNATIONAL ARCHAEOLOGICAL RESEARCH INSTITUTE, INC.

2081 Young Street Honolulu, HI 96826

Principal Archaeologist: Stephen Athens, Ph.D.

PHONE 946-2548 FAX: 943-0716

EMAIL: iarli@aloha.net

**PACIFIC LEGACY** 

332 Uluniu Street Kailua, HI 96734

Principal Archaeologist: Paul Cleghorn, Ph.D.

PHONE: 263-4800 FAX: 263-4300

PAUL H. ROSENDAHL, INC. (PHRI)

224 Wajanuenue Avenue

Hilo, HI 96720

Principal Archaeologist: Paul Rosendahl, Ph.D.

PHONE: 969-1763 FAX: 961-6998

**RECHTMAN CONSULTING** 

HC1 Box 4149 Kea'au, HI 96749

Principal Archaeologist: Robert Rechtman, Ph.D. PHONE: 966-7636 FAX: (\$00) 406-2665

EMAIL: brechtman@aol.com

SCIENTIFIC CONSULTANT SERVICES, INC.

711 Kapiolani Boulevard, Suite 1475

Honolulu, HI 96813

Principal Archaeologist: Robert Spear, Ph.D.

PHONE: 597-1182 FAX: 597-1193

EMAIL: scs@aloha.net

WWW-URL: www.aloha.net/-scs

T.S. DYE & COLLEAGUES, ARCHAEOLOGISTS, INC.

735 Bishop Street, Suite 315

Honolulu, HI 96813

Prin. Archaeologist & President: Thomas S. Dye. Ph.D.

PHONE: 529-0866 FAX: 529-0884

XAMANEK RESEARCHES

P.O. Box 880131 Pukalani, HI 96788

Archaeologist: Erik Fredericksen, MA

PHONE: 572-8900 & 572-6118

FAX: 572-6118

The organizations or individuals listed above are not directly associated with the State Historic Preservation Division nor is listing to be construed as any guarantee of the quality of work. Project cost may vary considerably between companies. It is recommended that more than one estimate be obtained. It is also recommended that any contract contain language that specifies that a report meeting DLNR minimal standards will be provided as a product. All of the above organizations have on their staff, and often hire on a part-time basis, persons meeting minimal National Park Service standards as archaeologist. All of the above have indicated to the State Historic Preservation Officer that they are engaged in contract archaeological work.

	PROPOSAL SCHEDULE						
ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT		
202.0410A	REMOVAL OF EXISTING TRAFFIC SIGNS (4 EACH)	L.S.	L.S.	L.S.	\$		
202.0410B	REMOVAL OF EXISTING TRAFFIC SIGNS (3 EACH)	L.S.	L.S.	L.S.	\$		
202.0430B	REMOVAL OF EXISTING A.C. PAVEMENT (965 SQ. YD.)	L.S.	L.S.	L.S.	\$		
202.0430C	REMOVAL OF EXISTING A.C. PAVEMENT (48 SQ. YD.)	L.S.	L.S.	L.S.	\$		
203.0100B	ROADWAY EXCAVATION	610	CU.YD.	\$	\$		
203.0100C	ROADWAY EXCAVATION	37	CU.YD.	\$	\$		
209.0100	WATER POLLUTION AND EROSION CONTROL	F.A.	F.A.	F.A.	\$ 15,000.00		
211.0100	ARCHAEOLOGICAL MONITORING	F.A.	F.A.	F.A.	\$ 10,000.00		
312.0100B	PLANT MIX GLASSPHALT CONCRETE BASE COURSE	697	TON	\$	\$		
312.0100C	PLANT MIX GLASSPHALT CONCRETE BASE COURSE	38	TON	\$	\$		