

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

ADDENDUM NO. 2

FOR

**KUNIA ROAD IMPROVEMENTS**

**VICINITY OF SOUTH KUPUNA LOOP TO VICINITY OF HONOWAI STREET**

**PROJECT NO. HWY-O-01-04**

**DISTRICT OF EWA**

**ISLAND OF OAHU**

**2004**

Amend the Bid Documents as follows:

**A. SPECIAL PROVISIONS**

Replace pages 712.37-1a thru 712.37-4a dated 9/19/00 with the attached pages 712.37-1a thru 712.37-4a dated 2/19/04.

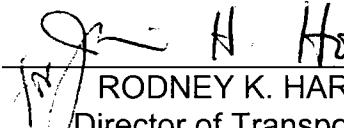
**B. PROPOSAL**

The attached Proposal Preferences pages P-5S-1 thru P-5S-7 dated 2/20/04 shall be inserted after Proposal page P-5 and shall be incorporated and made a part of the Proposal.

**C. ADDENDUM NO. 1**

This is to clarify Addendum No. 1; subsection C. Plans, paragraph no. 2 that there are no changes to the original Plan Sheet No. 34 as specified in Addendum No. 1 dated 2/11/04.

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.

  
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RODNEY K. HARAGA  
Director of Transportation

HWY-O-01-04

2/19/04

## SECTION 712 - MISCELLANEOUS

Make the following amendments to said Section:

(I) Amend **712.37 Controller Equipment** to read as follows:

### **"712.37 Controller Equipment.**

(A) **Controller Assembly.** Controller Assembly shall consist of a Model 170 Controller, Cabinet, and Auxiliary Equipment. Except where noted, only manufacturers and products listed on the current State of California, 'Qualified Products List (QPL) for Model 170 Controller Assembly', from the California Department of Transportation (CALTRANS) shall be acceptable. A copy of the latest QPL is available from the City & County of Honolulu, DTS, Phone (808) 527-6988.

The Contractor should review Section 623.03(G)(2)(a) concerning quality control and testing prior to field installation.

For this project, Controller Assemblies are described and supplied as follows:

(1) Type '170' Controller Assembly and Model 332 Controller Cabinet shall mean the latest Model 170 Controller Assembly and Model 332 Controller Cabinet on the most current CALTRANS Qualified Products List (QPL).

(2) Each Controller Assembly shall contain the sufficient amount of items listed below for a full 8 vehicle, 4 pedestrian and 4 preemption phase intersection, even though the plans does not reflect it.

<u>Item</u>	<u>Quantity</u>
Model 170 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	1
Model 262C Detector Amplifiers (Rotary Sw Type)	8
Model M752 Preempt. Car (Non-QPL)	2
Model UTS (Non-QPL)	1

**(B) Model 170 Controller.** Each Model 170 Controller shall meet the following additional requirements:

- (1) Model 412C Prom Module includes a 27256 EPROM Chip
- (2) A Supercap replaces the battery as the standby power supply to keep the DTA and RAM on the CPU board powered for at least 8 hours during ac power loss.
- (3) Dual ACIAs, C2 and C20, serial communication ports.
- (4) All Controller Boards mounted vertically.
- (5) One Manual with each controller.
- (6) Documented Validation Testing according to CALTRANS test specifications.

**(C) Cabinet.** Each 332A Cabinet shall meet the following additional requirements:

- (1) Minimum Wired for 8 vehicle phases, 4 pedestrian phases, and 4 preemption phases.
- (2) Cabinets fabricated from 0.125 anodized Aluminum.
- (3) Cabinet's Main Breakers shall be rated as 50 amps.
- (4) Entire Output File copper hard-wire of sufficient gauge to withstand current surges before circuit breakers or surge protectors trip.
- (5) A LED Display for Modem Transmit, Receive, and Carrier Detect status will be clearly visible after opening the cabinet's front door. Indicators mounted on a 0.75 Inch x 2 Inch aluminum assembly will be attached to the top center of the cabinet's rack. Indicators will derive their signals from the C2 ACIA and wiring will be bundled with a protective jacket.
- (6) C2 Terminal Blocks protected from current surges by EDCO PC642 or equal.
- (7) Input File and Field Terminal Blocks wired for 3M M752 Opticom Priority Module EVA, EVB, EVC, and EVD.
- (8) Front and back fluorescent lights activated upon opening any door.

- (9) Convenience GFI Receptacles.
- (10) Door locks of solid brass rim Best Lock Series 516RL3XA7559-606 and include 2 keys.
- (11) Labeling by Silk-Screening only.
- (12) Output File Terminal Blocks labeled in reference to its assigned phase and signal indications.
- (13) Attach One Each 24-Inch x 36-Inch Cabinet Print in a weatherproof plastic jacket to front and back cabinet doors.
- (14) Documented validation testing of cabinet and conflict monitor according to CALTRANS test specifications.

**(D) Auxiliary Equipment.** Deliver the controller unit supplied with the following auxiliary equipment:

Auxiliary equipment not on the QPL shall meet the following pertinent requirements:

- (1) **Model M752 Optical Preemption Module.** The M752 will be card-type and will interface with the Model 170 cabinet preemption slots of the input file. Each M752 Module will have 2 channels of preemption. The M752 will include firmware to discriminate between the two valid priority signals, to prioritize valid same priority signals on a first come basis, and to override the low priority signal if a high priority is received. The M752 Module will receive input signals (9.639 and 14.035 hz) to permit priority preemption operation within the 170 local intersection program. M752 will optically isolate output signals and will trigger an active low signal to the controller for high priority and a pulsed active low signal for low priority. Since Honolulu's preemption system already employs the 3M Opticom System, all new preemption equipment will be by this manufacturer.
- (2) **Universal Time Standard (UTS) Module.** The UTS Module will be a stand alone precision clock located in the Controller Cabinet which shall update the internal clock of the Model 170 controller by decoding Five Broadcast Frequencies (2.5, 5, 10, 15, 20 Mhz) transmitted by WWVH of the U.S. National Institute of Standards and Technology. All hardware and software of the UTS equipment will be compatible without any modification to the Model 170 Hardware or Software. The UTS Module shall have the following specifications:

1.5 ms Time Accuracy; 2 - 4 Minutes Time to Acquire; Minimum 5 - Frequency, AM, Crystal-Controller, Dual Conversion, Superheterodyne Receiver; Automatic Scan 5 Frequencies; Data Output RS-232C, 1200 & 2400 Baud rate, No Parity, 8 Data Bits, 1 Stop Bit; One Hour Selectable Time Zones: Daylight Saving Time Option; 24 Hour Time Format; Month, Day, and Year Date; DB25-RS232 and BNC Antenna Connector; DB25 to Model 170 C2 Cable and Connectors; 2-foot outdoor Whip Antenna with Pole Adapter Bracket; 100 linear feet of RG-58 Coaxial Cable with Connectors; Approximate Size 1.5 Inch H x 8 Inch W x 9 Inch D and Weight 1.5 Lbs.; 24 VDC; Traconex / Multisonics UTS Model 1010 or equal. All UTS equipment and antennas will be installed by the Contractor and included in the controller assembly bid."

## **END OF SECTION**

## PREFERENCES

1. The bidder agrees that preferences shall be taken into consideration to determine the low bidder in accordance with said Sections and the rules promulgated, however, the award of contract will be in the amount of the bid offered exclusive of any preferences.
2. It is further understood by the bidder that if the bidder elects to furnish qualified Hawaii Products, and is awarded the contract, then fails to use such products or meet the requirements of such preference, the bidder shall be subject to the statutory penalties, provided in Section 103D-1002, HRS, and such other remedies as may be available to the State.

### HAWAII PRODUCTS PREFERENCE

It is understood that certain Hawaii products as described in the schedule below are acceptable for use in this project and that, pursuant to Sections 103D-1002, HRS, which provides preference for Hawaii Products, the bidder proposing to use such Hawaii products must fill in the schedule below.

However, where there are a number of qualifying classes of Hawaii products of a given description, the bidder must indicate on the schedule which class will be furnished by circling the class of the particular Hawaii product that will be used. Otherwise, preference will be given based on the class with the lower percentage.

If the bidder proposes to use Hawaii Products, the bidder must so designate in said schedule by entering the cost of such product in the appropriate space provided. Failure on the part of the bidder to designate the use of Hawaii products will automatically void any preference for that product.

SCHEDULE OF ACCEPTABLE HAWAII PRODUCT AND DESIGNATION OF HAWAII PRODUCTS TO BE USED					
ACCEPTABLE HAWAII PRODUCTS			HAWAII PRODUCTS TO BE USED		
DESCRIPTION	CLASS	MANUFACTURER VENDOR	Cost FOB Jobsite, Unloaded Including Applicable General Excise & Use Taxes (a)	% (b)	Credit (a) x (b)
Aggregates (All Islands)	III	West Hawaii Concrete	\$	10%	\$
Aluminum and Galvanized Pipes (All Islands)	I	Hawaii Concrete Products, Inc.	\$	3%	\$
Asphalt Concrete Mixes (Oahu)	II	Grace Pacific Corporation	\$	5%	\$
	III	Jas. W. Glover, Ltd.	\$	10%	\$

Basalt Aggregates – Oahu	III	Grace Pacific Corporation	\$ _____	10%	\$ _____
Basalt Aggregates and Basalt Sand (Oahu)	III	Hawaiian Cement	\$ _____	10%	\$ _____
Basalt Sand (Oahu and Maui)	III	Ameron International Corp. dba Ameron Hawaii	\$ _____	10%	\$ _____
Basalt Sand (All Islands)	III	Jas. W. Glover, Ltd.	\$ _____		\$ _____
Burnt Bagasse (All Islands)	III	Kauai Nursery and Landscaping, Inc.	\$ _____	10%	\$ _____
Catch Basin(s) (All Islands)	III	RJA General Contracting	\$ _____	10%	\$ _____
Catch Basin for Site Drainage (All Islands)	III	Hawaii Precast, Inc.	\$ _____	10%	\$ _____
Concrete Blocks (All Islands)	III	West Hawaii Concrete	\$ _____	10%	\$ _____
Concrete Cylinder Pipe (All Islands)	III	Ameron International Corp., dba Ameron Hawaii	\$ _____	10%	\$ _____
Concrete Masonry Units (Limestone, Cinder, & Basalt) (All Islands)	III	Tileco, Inc.	\$ _____	10%	\$ _____
Concrete Masonry Units (All Islands)	III	Jas. W. Glover, Ltd.	\$ _____	10%	\$ _____
Concrete Pipes (All Islands)	III	Hawaii Concrete Products, Inc.	\$ _____	10%	\$ _____
Consolidated Hawaii Manufactured Products (All Islands)	II	Bomat, Ltd. dba Bonded Materials Company	\$ _____	5%	\$ _____
Cover Mulch (All Islands)	III	Hawaiian Earth Products, Ltd.	\$ _____		\$ _____
Custom Blends (All Islands)	III	Hawaiian Earth Products Ltd.	\$ _____	10%	\$ _____
Drain Rock (Hawaii)	III	Sanford's Service Center, Inc.	\$ _____	10%	\$ _____
Drainage Infrastructure Catch Basin for Site Drainage (All Islands)	III	Hawaii Precast, Inc.	\$ _____	10%	\$ _____

Drainage Infrastructure Drain Inlet for Site Drainage (All Islands)	II	Hawaii Precast, Inc.	\$	5%	\$
Drainage Infrastructure Drain Manhole for Site Drainage System (All Islands)	III	Hawaii Precast, Inc.	\$	10%	\$
Drainage Infrastructure Drywell Ring for Site Drainage or Cesspool (All Islands)	III	Hawaii Precast, Inc.	\$	10%	\$
Drainage Infrastructure Sewer Manhole (All Islands)	III	Hawaii Precast, Inc..	\$	10%	\$
Electrical Pullboxes (All Islands)	III	RJA General Contracting	\$	10%	\$
Electrical Utilities 2X4 Concrete Pullbox for Electrical Utilities (All Islands)	II	Hawaii Precast, Inc.	\$	5%	\$
Electrical Utilities Concrete Median Traffic Barriers for Traffic Control (All Islands)	III	Hawaii Precast, Inc.	\$	10%	\$
Grade "A" Basalt Aggregate (Oahu and Maui)	III	Ameron International Corp. dba Ameron Hawaii	\$	10%	\$
Grade "A" Basalt Aggregate (All Islands)	III	Jas. W. Glover, Ltd	\$	10%	\$
Grade "B" Basalt Aggregate (Oahu and Maui)	III	Ameron International Corp. dba Ameron Hawaii	\$	10%	\$
Hydromulch (All Islands)	III	INTECH Incorporated.	\$	10%	\$
Incide PC Insulation (All Islands)	III	INTECH Incorporated.	\$	10%	\$
Kauai Compost (All Islands)	III	Kauai Nursery and Landscaping, Inc.	\$	10%	\$
Limestone Coral Aggregate (All Islands)	III	Jas. W. Glover, Ltd.	\$	10%	\$



Limestone Coral Aggregates & Sand (Oahu)	III	Grace Pacific Corporation	\$	10%	\$
Limestone Coral Sand (All Islands)	III	Jas. W. Glover, Ltd.	\$	10%	\$
Limestone Masonry Sand (All Islands)	III	Tileco, Inc.	\$	10%	\$
Masonry Cement (Super mortar) (All Islands)	I	Hawaiian Cement	\$	3%	\$
Metal Roofing Panels and Sheet Metal components (All Islands)	I	HPM Building Supply	\$	3%	\$
Meter Boxes and Covers (All Islands)	III	Ameron International Corp., dba Ameron Hawaii	\$	10%	\$
Organic Compost (All Islands)	III	Hawaiian Earth Products Ltd.	\$	10%	\$
Organic Soil Conditioner, Burnt Bagasse Mix	III	Halawa Garden Products, Inc.	\$	10%	\$
Organic Soil Conditioner (All Islands)	III	Hawaiian Earth Products Ltd.	\$	10%	\$
Overhead Line Utilities Pole Anchor Slugs for Overhead or Telephone Utilities (All Islands)	III	Hawaii Precast, Inc.	\$	10%	\$
Pole Anchor Slugs for Overhead or Telephone Utilities (For all Islands)	III	Hawaii Precast, Inc.	\$	10%	\$
Portland Cement – Type I/II (All Islands)	I	Hawaiian Cement	\$	3%	\$
Portland Cement and Concrete Mixes (Oahu)	III	Hawaiian Cement	\$		\$
Portland Cement Concrete Ready Mix (Oahu and Maui)	III	Ameron International Corp., dba Ameron Hawaii	\$	10%	\$
Precast Box Culverts (All Islands)	III	Walker Industries, Ltd.	\$	10%	\$
Precast Catch Basins (All Islands)	III	Walker Industries, Ltd.	\$	10%	\$

Precast Concrete Drywell Rings and Covers (All Islands)	III	RJA General Contracting	\$	10%	\$
Precast Concrete Structures (All Islands)	III	Aloha Precast, Inc.	\$	10%	\$
Precast Con/Span Arch Culverts (All Islands)	II	Walker Industries, Ltd.	\$	5%	\$
Precast Drop Inlets (All Islands)	III	RJA General Contracting	\$	10%	\$
Precast Hand Holes (All Islands)	III	RJA General Contracting	\$	10%	\$
Precast and Prestressed Structural and Architectural Concrete Products (All Islands)	III	Rocky Mountain Prestress	\$	10%	\$
Precast Manhole Cones and Risers (All Islands)	III	Hawaii Concrete Products, Inc.	\$	10%	\$
	III	Walker Industries, Ltd.	\$	10%	\$
Precast Utility Vaults (Telephone & Electrical) (All Islands)	III	Walker Industries, Ltd.	\$	10%	\$
Preformed Metal Roofing (Oahu, Hawaii, Kauai, Maui, Molokai)	I	Ferro Union Hawaii, Inc.	\$	3%	\$
Ready Mix Concrete: Portland Cement Concrete Mixes (All Islands)	III	West Hawaii Concrete	\$	10%	\$
Reinforced Concrete Pipe (Non Cylinder) (All Islands)	III	Ameron International Corp., dba Ameron Hawaii	\$	10%	\$
Rigid Vinyl Framed Windows & Doors (All Islands)	I	Coastal Windows Inc.	\$	3%	\$
Segmental Retaining Wall Units (All Islands)	III	Tileco, Inc.	\$	10%	\$
Sewer Manhole (All Islands)	III	Hawaii Precast, Inc.	\$	10%	\$
Signs	II	Sun Industries, Inc.	\$	5%	\$
Sized Basalt Rock (Oahu)	III	Ameron International Corp. dba Ameron Hawaii	\$	10%	\$
Sized Basalt Rock (All Islands)	III	Jas. W. Glover, Ltd	\$	10%	\$

Soil Blends (All Islands)	III	Hawaiian Earth Products Ltd.	\$ _____	10%	\$ _____
Traffic and Construction Signs	II	Safety Systems Hawaii, Inc.	\$ _____	5%	\$ _____
Underground Utilities 2X4 Concrete Pullbox (#435 Telephone or Cable TV Utilities) (All Islands)	II	Hawaii Precast, Inc.	\$ _____	5%	\$ _____
Underground Utilities DPW 9X9 Standard R-40 Drywell Cover (All Islands)	II	Hawaii Precast, Inc.	\$ _____	5%	\$ _____
Underground Utilities (Electrical Lines) HELCO Handhole (All Islands)	ii	Hawaii Precast, Inc.	\$ _____	5%	\$ _____
Underground Utilities (Electrical Lines) HELCO Manhole (All Islands)	III	Hawaii Precast, Inc.	\$ _____	10%	\$ _____
Underground Utilities (Telephone Lines) GTE H2O Loading Handhole (All Islands)	II	Hawaii Precast, Inc.	\$ _____	5%	\$ _____
Underground Utilities (Telephone Lines) GTE Manholes (All Islands)	II	Hawaii Precast, Inc.	\$ _____	5%	\$ _____
Underground Utilities (Telephone Lines) GTE Parkway Handhole (All Islands)	II	Hawaii Precast, Inc.	\$ _____	5%	\$ _____
Underground Utilities (Telephone Lines) HTCO Handholes (All Islands)	II	Hawaii Precast, Inc.	\$ _____	5%	\$ _____
Wood Furniture, Cabinetry and Millwork	III	Martin & MacArthur Enterprises, Ltd.	\$ _____	5%	\$ _____
T O T A L					\$ _____

The bidder agrees that preference for Hawaii products shall be taken into consideration to determine the low bidder according to said Sections and the rules promulgated, however, the award of contract will be in the amount of the bid offered exclusive of any preferences.

It is further understood by the bidder that if the bidder elects to furnish qualified Hawaii Products, and is awarded the contract, then fails to use such products or meet the requirements of such preference, the bidder shall be subject to the statutory penalties, provided in Section 103D-1002, Hawaii Revised Statute, and such other remedies as may be available to the State.

**RECYCLED PRODUCT PREFERENCE.**

Recycled product preference shall not apply to this proposal.