

**STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION**

**ADDENDUM NO. 1
FOR**

**FARRINGTON HIGHWAY SAFETY IMPROVEMENTS
NANAKULI TO MAKAHA
FEDERAL-AID PROJECT NO. STP-093-1(18)**

**DISTRICT OF WAIANAE
ISLAND OF OAHU
FY 2004**

Amend the bid documents as follows:

1. TABLE OF CONTENTS

- a. Replace pages 3 through 5 dated 7/07/03 with the attached pages 3 through 5 dated 12/01/03.

2. SPECIAL PROVISIONS

- a. Replace "Section 636 – Field Office and Project Site Laboratory" Pages 636-1a through 636-4a, Dated 3/3/03 with the attached "Section 636 – Maintenance of Project Field Office" Page 636-1a, Dated 3/5/03.
- b. Replace "Section 694 – Moveable Concrete Barrier (MCB)" Pages 694-1a through 694-4a, Dated 10/29/03 with the attached Pages 694-1a through 694-3a, Dated 12/1/03.
- c. The attached "Section 705 – Joint Materials" Page 705-1a, dated 6/19/03 shall be incorporated and made a part of the Special Provisions.
- d. The attached "Section 712 – Miscellaneous" Page 712.40-1a, dated 5/22/03 shall be incorporated and made a part of the Special Provisions.

3. PROPOSAL SCHEDULE

Replace Pages P-10, P-13 and P-14, dated 7/25/03 with the attached Pages P-10, P-13 and P-14, dated 12/1/03.

4. PLANS

- a. Plan Sheet No. 3. Revise GENERAL NOTES No. 14 to read as follows:

"Driveways, walkways and other passageways shall be maintained and kept open unless the users of these facilities are provided with an alternate access or arrangement that is satisfactory to them and acceptable to the Engineer.

Construction work affecting an existing passageway that inconveniences its users shall be completed within a period of 4 days or less. Use of fast-setting concrete or other methods shall be considered to reduce work time.

Temporary access facilities shall provide for existing pedestrian and other through traffic and shall comply with ADA requirements.

Areas used for temporary access shall be restored to the satisfaction of the Engineer.

Maintenance of access shall be considered incidental to sidewalk construction. The Contractor shall bear all expenses for maintaining access and inconveniencing users."

- b. Plan Sheet No. 9. Revise SIGNING NOTES No. 4 to read as follows:

"New School Crosswalk Warning assemblies (MUTCD S1-1 and W16-7 diagonal arrow) shall be installed at or as close as practicable to existing crosswalks used for school crossings. Existing crosswalk assemblies shall be replaced with new assemblies."

- c. Plan Sheet No. 18. Delete Note No. 1.

- d. Plan Sheet No. 18. Revise Note No. 5 to read as follows:

"All new guardrails shall be tapered in accordance with Table 13-7 of the Statewide Uniform Design Manual and fitted with end treatments per Standard Plan TE-61."

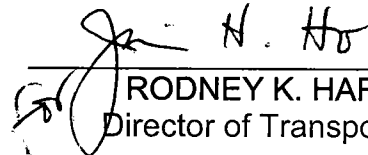
- e. Replace Plan Sheet No. 21 with the attached Plan Sheet No. ADD.21.

- f. Plan Sheet No. 31. Add the following note:

"Detectable warning surfaces shall be added to Curb Ramp 1 and Curb Ramp 2."

- g. Plan Sheet Nos. 43, 44 and 45. Add the following note:
- "New 'AHEAD' (W16-9) plaques shall be attached to existing posts where they are supplementing existing school crossing (S1-1) signs."
- h. Plan Sheet No. 43. At crosswalk near Station 74+00, new signs shall consist of Advance Crosswalk Warning signs (S1-1) with Diagonal Arrow plaques (W16-7) instead of S1-1 signs and W16-9 plaques.

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.



RODNEY K. HARAGA
Director of Transportation

DIVISION 600 - INCIDENTAL CONSTRUCTION		
Section	Description	Pages
608	Sidewalks	608-1a - 608-3a
609	Curb and/or Gutter	609-1a - 609-8a
610	Reinforced Concrete Driveways	610-1a
613	Centerline and Reference Survey Monuments	613-1a - 613-3a
618	Grassed Surfaces	618-1a - 618-4a
621	Traffic Control Signs	621-1a - 621-3a
622	Roadway Lighting System	622-1a - 622-14a
623	Traffic Signal System	623-1a - 623-14a
629	Pavement Markings	629-1a - 629-11a
636	Maintenance of Project Field Office	636-1a
645	Traffic Control Devices	645-1a - 645-13a
650	Curb Ramps	650-1a - 650-3a
652	Cold Planing of Existing Pavement	652-1a - 652-2a
693	TAU-II System Terminal Impact Attenuator	693-1a - 693-2a
694	Moveable Concrete Barrier	694-1a - 694-3a
699	Mobilization	699-1a - 699-2a

DIVISION 700 - MATERIALS		
Section	Description	Pages
702	Bituminous Material	702-1a
703	Aggregates	703-1a - 703-10a
705	Joint Materials	705-1a
710	Fence and Guardrail	710-1a

DIVISION 700 - MATERIALS		
Section	Description	Pages
712	Miscellaneous	
	Grout	712.04-1a
	Frames, Grates, Covers and Ladder Rungs	712.07-1a
	Conduits	712.27-1a - 712.27-2a
	Light Poles	712.28-1a
	Luminaires	712.29-1a - 712.29-2a
	Light Sources	712.32-1a
	Cables, Conductors and Wires	712.34-1a
	Controller Equipment	712.37-1a - 712.37-4a
	Traffic Signals and Appurtenances	712.39-1a - 712.39-3a
	Reflective Pavement Markers	712.40-1a
	Preformed Pavement Marking Tape	712.53-1a
	Reflective Thermoplastic Compound Pavement Markings	712.55-1a
	Luminaire and Conductor Identification	712.62-1a
713	Structural Steel and Related Materials	713-1a - 713-3a
717	Cullet and Cullet-Made Materials	717-1a - 717-2a

Requirement of Chapter 104, HRS
Wages and Hours of Employees on Public Works Law
Attachment 1

Federal Wage Rates

Proposal P-1 - P-7

Proposal Schedule P-8 - P-15

Supplement to Proposal Schedule P-16 - P-19

Confirmation By DBE

Statement of Affirmation and Acknowledgment of
Disadvantaged Business Enterprise (DBE) Requirements

Surety Bid Bond

Sample Forms

Contract

Performance Bond (Surety)

Performance Bond

Labor and Material Payment Bond (Surety)

Labor and Material Payment Bond

Disclosure of Lobbying Activities
Standard Form - LLL and LLL-A

Statement of Compliance
Form WH-348

Statement of Materials and Labor used by Contractors
on Highway Construction Involving Federal Funds
Form FHWA-47

Monthly Report of DBE Participation

Chapter 104, HRS Compliance Certificate

Make the following Section a part of the Standard Specification:

"Section 636 - Maintenance of Project Field Office

636.01 Description. This work includes providing maintenance and renovation work at the existing Salt Lake field office.

636.02 Materials. Furnish and install new material necessary to complete this work.

636.03 Construction Requirements.

(A) General. The contractor shall maintain the Salt Lake Project Field Office buildings, surrounding grounds, all furnishings, appliances and other equipments including weekly rubbish pickup service for a period not to exceed 180 calendar days beyond the date of final inspection of the completed project by the State.

(B) Renovation Work. The renovation work when ordered by the Engineer shall include, but not limited to, the following:

- (1)** Replace water and termite damaged wall panels and floors, including warped and heavily worn vinyl tiles.
- (2)** Repair or replace damaged barbed wire along field office perimeter fence line.
- (3)** Repair or replace worn plumbing and electrical fixtures as directed by the engineer.

636.04 Method of Measurement. Maintenance and renovation of the existing field office shall be performed only when ordered by the Engineer. This work shall be performed on a force account basis in accordance with the provisions of Subsection 109.04 - Extra and force Account Work.

The weekly field office rubbish pickup shall be considered incidental to the contract items and shall not be measured separately for payment.

636.05 Basis of Payment. The Engineer will pay for the ordered field office maintenance and renovation work under force account.

The Engineer will make payment under:

Pay Item	Pay Unit
Maintenance and Renovation of Existing Field Office	Force Account"

Make the following Section a part of the Standard Specifications:

"SECTION 694 - MOVEABLE CONCRETE BARRIER (MCB)

694.01 Description. This section is for furnishing and installing moveable concrete barrier (MCB) or equal according to the contract.

The installation of MCB includes the assembly and erection of component parts at the locations shown in the contract or as specified by the Engineer.

694.02 Materials.

(A) Moveable Concrete Barrier (MCB).

(1) General. Furnish new, moveable concrete barrier designed to be moved across the roadway at continuous speeds of 5 mph or more. Associated equipment shall not extend into the traffic coming from either direction. Barrier movement shall be possible in one continuous operation, in which barrier units are moved across the roadway in one continuous length. The barrier shall have sufficient variable length barrier elements to ensure the smooth transfer of the MCB through the transfer machine while limiting barrier deflection during vehicle impacts. The barrier shall be designed and crash tested to meet the requirements of NCHRP Report 350, Test Level 3 with a deflection of less than 3 feet. The system shall also include five (5) reactive tension system variable length barrier units spaced at even intervals within the barrier.

(2) MCB.

(a) Concrete Reactive Tension System - Quickchange Moveable Barrier (CRTS-QMB), Specification TB 990901, Rev. 1, BSI Part No. C000205, by Barrier Systems, Inc. (BSI), Rio Vista, CA. (707) 374-6800 or equivalent.

(b) Reactive Tension Variable Length Barrier (RTS-VLB), Specification TB990903, Rev. 1, by Barrier Systems, Inc. (BSI), Rio Vista, CA or equivalent.

(c) Equivalent as accepted by the Engineer as meeting the requirements of Subsection 694.02(A)(1) and 694.02(A)(3).

(3) Minimum Requirements. The MCB shall meet the following minimum requirements:

(a) The MCB shall consist of reinforced precast concrete sections. The barrier section shall be 32 inches high, 18 inches wide at the base, and 39 inches long. The top of the barrier shall be "T" shaped to permit it to be picked up by the transfer equipment. The MCB shall have a minimum weight of 425 pounds per foot of length. The sections are connected by a 1.3-inch hinge pin, which fits through the barrier tensioning hinges forming a continuous wall the desired length. The barrier section shape and the hinge pin design shall permit the connected sections to be picked up off the road bed and rotated so that they can be transferred across the roadway by a transfer vehicle.

(b) Welded wire fabric shall conform to the requirements of ASTM A1 85.

(c) All external steel shall be stainless steel or hot dipped galvanized in accordance with ASTM A 123.

(d) Steel Elements shall conform to the requirements of ASTM A 36. Hinge Pin shall be AISI 4140 or 4142.

(f) Hinge Spring shall conform to the requirements of ASTM A 901.

(g) When the location of manufacturing plants allows, the Engineer may inspect the plants periodically for compliance with specified manufacturing methods. The Engineer may get samples of materials for laboratory testing for compliance with material quality requirements. This may be the basis for acceptance of manufacturing lots regarding quality.

(h) The condition of materials will be subject to inspection for acceptance before or during incorporation of materials into the work.

(B) Markings. Markings shall be yellow traffic tape conform to Subsection 712.53 – Preformed Pavement Marking Tape.

694.03 Furnishing, Storage, Maintenance, Delivery, Inspection and Termination. Submit an MCB proposal in writing for acceptance to the Engineer within 20 working days of award of the contract. Place an order for the MCB with the manufacturer within 10 days of the receipt of written acceptance. Provide

technical assistance from the MCB manufacturer to satisfactorily set up the complete system. The Engineer will consider the technical assistance as included in the contract price of the various contract items.

Maintain the barriers until final acceptance of the project by the State at no additional cost to the State. All defects, and damage or wear to the MCB, shall be repaired before turnover to the State.

The Engineer and the Contractor shall make a joint inspection of the barriers before the State accepts the barriers. The Engineer shall document deficiencies found and the Contractor shall repair or correct them as necessary. Upon final acceptance by the State, transfer all manufacturer's warranties from the Contractor to the State at no additional cost to the State.

694.04 Construction Requirements.

Manufacture moveable concrete barriers by either the wetcast or drycast methods. Minimum concrete 28-day compressive strength shall be 4,000 psi. Repair all surface voids or rock pockets. Surface "bugholes" caused by trapped air bubbles will be permitted. Air entrainment shall be as specified by the Engineer, +/- 1.50 %. Preserve and protect existing facilities that the Contractor may affect by the MCB installation. Replace the barrier that the Contractor damages due to its operation at no cost to the State.

Apply yellow traffic tape to the non-tee section on both sides of the barrier.

694.05 Method of Measurement. The Engineer will measure MCB per linear foot based on the nominal length of the barrier segments when they are connected and the hinge pins are centered in the hinges (3.28 feet), complete in place. The Engineer will not measure the RTS-VLB.

694.06 Basis of Payment. The Engineer will pay for the accepted MCB under the contract unit price per linear foot complete in place. The price includes full compensation for furnishing and installing the MCB; painting; and furnishing labor, materials, tools, equipment, and incidentals necessary to complete the work. The Engineer will not pay for the RTS-VLB separately. The price for the RTS-VLB shall be included in the price for the MCB.

The Engineer will make payment under:

Pay Item	Pay Unit
Moveable Concrete Barrier (MCB) System	Linear Foot"

END OF SECTION

SECTION 705 – JOINT MATERIALS

Make the following amendment to said Section:

(I) Amend **Subsection 705.06 Waterproofing** to read as follows:

"705.06 Waterproofing

- (A) **Primer.** Primer shall conform to ASTM D 41.
- (B) **Fabric.** Fabric for waterproofing shall conform to ASTM D 1668.
- (C) **Asphalt.** Asphalt for waterproofing shall conform to ASTM D 449.

END OF SECTION

SECTION 712 - MISCELLANEOUS

Make the following amendments to said Section:

(I) Amend **712.40(C) – Reflective Pavement Markers** by revising the first paragraph to read as follows:

"(C) Reflective Pavement Markers.. The two types of reflective pavement markers are regular size (nominal 4 inches x 4 inches or 3.5 inches x 4 inches) and low profile size (nominal 2.3 inches x 4.7 inches."

(II) Amend **712.40(C)(3)(b)** to read as follows:

"(b) Regular marker (4 inches by 4 inches or 3.5 inches x 4 inches) shall support a minimum load of 2,000 pounds as applied in the following manner:

1. The marker shall be centered, base down, over the open end of a vertically positioned hollow metal cylinder.
2. The cylinder shall be 1 -inch high, with an internal diameter of 3-inches and wall thickness of 1/4-inch.
3. The Contractor shall apply a load necessary to break the marker at a speed of 0.2 inch per minute to the top of the marker through a 1-inch diameter solid metal cylinder centered on the top of the marker."

END OF SECTION

PROPOSAL SCHEDULE

	ITEM	APPROX QUANTITY	UNIT	UNIT PRICE	AMOUNT
609.3062	Curb, Type Modified Type 2D	64	LF	\$ _____	\$ _____
609.3063	Curb and Gutter, Type 2DG	633	LF	\$ _____	\$ _____
610.0600	Reinforced Concrete Driveway (6-inch)	500	SY	\$ _____	\$ _____
613.0200	Centerline and Reference Survey Monuments	8	EA	\$ _____	\$ _____
618.1001	Grassed Surfaces	LS	LS	LS	\$ _____
621.5000	Regulatory and Warning Sign 10 Sq. Ft. or Less without Post	22	EA	\$ _____	\$ _____
621.5100	Regulatory and Warning Sign 10 Sq. Ft. or Less with Post	133	EA	\$ _____	\$ _____
621.7100	Construction Sign with Posts	20	EA	\$ _____	\$ _____
621.8000	Type II Object Marker	260	EA	\$ _____	\$ _____
621.9000	Relocation of Existing Signs	4	EA	\$ _____	\$ _____
622.0611	Highway Lighting Standard, 15 foot Mast Arm, Luminaire and Foundation	80	EA	\$ _____	\$ _____
622.0612	Highway Lighting Mast Arm and Luminaire on Existing Wood Pole	1	EA	\$ _____	\$ _____

STP-093-1(18)

12/1/03

P-10

PROPOSAL SCHEDULE

	ITEM	APPROX QUANTITY	UNIT	UNIT PRICE	AMOUNT
629.2070	Type H Pavement Marker	LS	LS	LS	\$ _____
629.2080	Type J Pavement Marker	LS	LS	LS	\$ _____
636.1000	Maintenance and Renovation of Existing Field Office	FA	FA	FA	\$50,000.00
645.0200	Additional Police Officers and/or Additional Traffic Control Devices	FA	FA	FA	\$200,000.00
650.0100	Curb Ramps, Type A	1	EA	\$ _____	\$ _____
650.0200	Curb Ramps, Type D	4	EA	\$ _____	\$ _____
650.0300	Curb Ramps, Type Truncated	11	EA	\$ _____	\$ _____
650.0400	Detectable Warning Surfaces	16	EA	\$ _____	\$ _____
652.0100	1 1/2-Inch Cold Planing	2,152	SY	\$ _____	\$ _____
652.0200	2 1/2-Inch Cold Planing	8,338	SY	\$ _____	\$ _____
693.0100	TAU-II System Terminal Impact Attenuator	2	EA	\$ _____	\$ _____
693.0101	TAU-II Replacement Assembly	2	EA	\$ _____	\$ _____

STP-093-1(18)

12/1/03

P-13

PROPOSAL SCHEDULE

	ITEM	APPROX QUANTITY	UNIT	UNIT PRICE	AMOUNT
694.0200	Moveable Concrete Barrier (MCB) System	4,674	LF	\$ _____	\$ _____
699.1000	Mobilization (Not to exceed 10% of the sum of all items excluding the bid price of this item, and force account items)	LS	LS	LS	\$ _____
<div style="margin-left: 40px;"> <p>a. Sum of All Items \$ _____</p> <p>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) * \$ _____</p> <p>c. Amount for Comparison of Bids (a+b) * \$ _____</p> <p>* All bidders must fill in b and complete c.</p> </div>					
<p>NOTE: Bidders must complete all unit prices and amounts. Failure to do so may be grounds for rejection of bid.</p>					

STP-093-1(18)

12/1/03

P-14