

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

**ADDENDUM NO. 3
for
EMERGENCY EARTHQUAKE ROCKFALL REPAIRS
VARIOUS LOCATIONS ON HAWAII, UNIT 4
FEDERAL-AID PROJECT NO. ER-15(22)**

The following amendments shall be made to the Bid Documents:

A. SPECIFICATIONS

1. Replace **Section 671 – Slope Scaling**, pages 671-1a through 671-8a dated 08/14/09 and all reference to Section 671 in Addendum No. 1 with the attached pages 671-1a through 671-8a dated r2/26/10.
2. Amend **Section 672.05 Basis of Payment**, line 378, by deleting the words "traffic control with police officers,"

B. PROPOSAL SCHEDULE

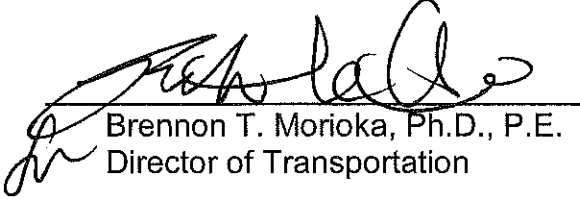
Replace pages P-8 through P-33 dated 12/30/09 with the attached pages P-8 through P-29 dated r2/26/10.

C. PLANS

1. Plan Sheet No. 7: Delete Note 4. under Slope Scaling Notes in its entirety.
2. Plan Sheet No. 34 and 35. Add the following note:
"Sta. 30+50 to 41+50 Rt.
Remove and Replace Existing e.p. 4" White Stripe w/ Type "C" Markers @ 40' o.c."
3. Plan Sheet No. 54. Add the following note:
"Sta. 333+50 to 340+50 Rt.
Remove and Replace Existing e.p. 4" White Stripe w/ Type "C" Markers @ 40' o.c."
4. Plan Sheet No. 61. Add the following note:
"Sta. 282+00 to 285+50 Rt.
Remove and Replace Existing e.p. 4" White Stripe w/ Type "C" Markers @ 40' o.c."

Addendum No. 3
2/26/10

5. Plan Sheet No. 82. Include the attached table "Boring Location" dated 2/26/10".



Brennon T. Morioka, Ph.D., P.E.
Director of Transportation

1 Make the following Section a part of the Standard Specifications:

2
3 **"SECTION 671 – SLOPE TRIMMING/SCALING**

4
5 **671.01 Description.**

6
7 This section is for slope trimming/scaling, which consists of removing
8 loose rock and other materials from the face of the slopes by the use of hand
9 scaling/trimming method in accordance with the Contract Documents. During
10 scaling/trimming process, the Contractor shall provide for the safe conduct of the
11 work, careful removal, securing of, and disposition of material to be removed,
12 protection of property that is to remain undisturbed, and coordination with other
13 work involved. The specified work hours for slope scaling/trimming activities and
14 associated road closures shall be from 8:30 AM to 3:30 PM, Monday through
15 Friday. Work and road closures outside of these specified times will not be
16 allowed without the written approval of the Engineer.

17
18 **671.02 Contractor's Qualifications and Work Plan.**

19
20 The Contractor performing the slope scaling/trimming work must have
21 performed satisfactory slope scaling for a minimum of five years or employ the
22 services of a specialty subcontractor with a minimum of five years of satisfactory
23 slope scaling experience. The Contractor shall submit a project reference list
24 containing at least five projects in which similar work has been conducted and
25 successfully completed within the past five years. Include a brief description of
26 each project including the typical heights of the slopes scaled or trimmed,
27 duration of the slope scaling, working hours on the slope, methods employed to
28 scale the slopes, and the Owner's name and current telephone number for
29 reference.

30
31 The slope scaling crew shall consist of one scaling supervisor and a
32 maximum of three slope scalers. The number of slope scalers to be employed on
33 this project shall be determined by the Contractor or specialty subcontractor
34 performing the slope scaling and approved by the Engineer.

35
36 Prior to the start of the slope scaling work, the Contractor must submit a
37 list identifying the scaling supervisor and slope scalers assigned to this project. In
38 this list, the Contractor shall summarize the individual's experience for the
39 Engineer to determine whether the qualifications of each individual meet the
40 minimum requirements of the scaling supervisor and/or slope scalers as
41 described in the following paragraphs. The Engineer will utilize the following
42 definition of each category to determine the qualifications of each individual
43 proposed by the Contractor.

44
45 **(A) Scaling Supervisor.** The Contractor's designated
46 representative responsible for the prosecution and coordination of slope

47 scaling/trimming activities on this project. The scaling supervisor shall be
48 in charge of and responsible for the safety and work performed by the
49 slope scaling crews. The scaling supervisor shall have a minimum of five
50 (5) years of high slope scaling experience with a minimum of 2,000 hours
51 of demonstrated experience supervising slope scaling. The scaling
52 supervisor shall have completed the American Red Cross "basic first aid
53 course" or equivalent, and shall have experience or training in the use of
54 emergency remote rescue techniques.

55
56 **(B) Slope Scaler.** An individual who is engaged in accessing the
57 slope face and removing loose rock and materials from the slope face
58 using a variety of hand tools at locations that require modified rock
59 climbing techniques for the safe prosecution of the work. Slope scalers
60 shall have a minimum of two (2) years experience with a minimum of 500
61 hours of demonstrated experience performing similar slope scaling work.

62
63 Approval or denial of the Contractor's qualifications and personnel will be
64 made within 10 working days after receipt of the submittal. Slope scaling work
65 shall not commence until approval of the Contractor's qualifications and work
66 plan has been obtained in writing from the Engineer. The Engineer will suspend
67 the work if the Contractor substitutes unqualified personnel for approved
68 personnel during construction.

69
70 The Contractor shall provide a detailed work plan of the slope scaling
71 work, prior to any such activity, which includes the following items, as a
72 minimum, for review by the Engineer. The Engineer shall be provided a minimum
73 of 10 working days after receipt of the submittal to review and provide comments
74 to the submittal. The work plan shall be approved by the Engineer prior to
75 commencement of the slope scaling work.

- 76
77 1. The proposed construction sequence for slope scaling/trimming
78 work.
- 79 2. The types of equipment and hand tools to be used for the slope
80 scaling/trimming activities.
- 81 3. The number of slope scaling supervisor and slope scalers to be
82 employed on the project.
- 83 4. Provisions to protect the highway pavements, guardrails, any
84 adjacent structures, and personnel below the scaling area including
85 the public in or around the project site.
- 86 5. Removal and disposal plan for debris generated from the slope
87 scaling work at the end of each shift.

88 The Contractor shall perform the slope scaling/trimming work according to
89 the approved work plan and as directed by the Engineer. Maintain the crew size
90 specified and the number of slope scaling members described in the work plan at
91 all times. Any member of the slope scaling crew who must leave for any reason
92 shall be replaced immediately by a qualified replacement. Do not perform slope
93 scaling/trimming when the scaling supervisor is absent, unless an alternate
94 supervisor meeting all the requirements of the scaling supervisor has been
95 designated for the slope scaling work to continue.

96
97 **671.03 Construction Requirements.**

98
99 **(A) Cutting and Removal of Vegetation**

100
101 Cut and remove all vegetation including branches, shrubs, and
102 trees with trunks smaller than 18 inches in diameter from the slope
103 face and within 5 feet beyond the top of slope. Cut all vegetation to
104 within 6 inches of the ground surface and remove the cut materials
105 from the site. Dispose of all materials in a satisfactory manner off
106 the site. Poison all cut stumps with Garlon 4 manufactured by Dow
107 Chemical Company or other equivalent product to prevent
108 regrowth. Cutting and removal of vegetation shall be completed
109 before initiating the slope scaling/trimming activities.

110
111 **(B) Slope Scaling/Trimming Activity.**

112
113 Perform the slope scaling/trimming work to the limits specified on
114 the Contract drawings and/or as directed by the Engineer. The Engineer
115 will determine the final locations and the limits of the area to be scaled in
116 the field during construction after a review and/or inspection of the site
117 conditions with the scaling supervisor.

118
119 General work hours during slope scaling/trimming and lane closure
120 of the highway to traffic shall be between 8:30 AM to 3:30 PM, Monday
121 through Friday, for eight consecutive days only per site or the maximum
122 amount of time indicated for the site in the Proposal Schedule, which ever
123 is less. The Contractor shall furnish police officers to provide for traffic
124 control during the specified working hours. One lane of the roadway shall
125 be opened to allow traffic to traverse during slope scaling/trimming work.
126 The Contractor shall maintain equipment on-site at all times to remove
127 debris from the highway to allow the passage of emergency vehicles in the
128 event that emergency vehicles require passage through the project area
129 along the highway. The slope scaling/trimming activities shall be
130 temporarily suspended to allow the passage of the emergency vehicles
131 through the project area along the highway. The Contractor shall maintain
132 the highway in a manner suitable for traffic to traverse the highway (two
133 lanes open to traffic) beyond the specified working hours.

Slope scalers are defined as persons performing the slope scaling/trimming activity directly on the slope face. Slope scaling activity may include slope scalers hanging from ropes attached to the top of the slope face (rappelling), using a man-lift bucket to allow the slope scalers to reach the slope face, or by any other means that can place slope scalers directly on the slope face. Slope scaling is performed by using hand tools, such as small power tools, crowbars, prybars, shovels, etc., and rolling or pushing scaled materials down toward the highway below the slope. Each slope scaler shall be equipped with communications equipment to enable direct communication with the scaling supervisor and/or a designated person on the ground. Excavation using heavy equipment to scrape the slope face by the use of a backhoe or etc. is prohibited, except for the areas accepted by the Engineer.

The Contractor shall provide all the necessary equipment and hand tools, which is to be of high quality and in good working condition, for each member of the slope scaling crew. The Contractor shall replace the equipment and hand tools when, in the opinion of the Engineer, the condition is below normal for efficient output and production. The Contractor shall also be responsible for providing a safe working environment on the project site.

The use of a ground person will be required to enable the Engineer to communicate with the scaling supervisor and slope scalers and for safety considerations. The scaling supervisor may serve as the ground person. No additional payment will be made to the Contractor for the use of a ground person or for the communications equipment required.

The Contractor shall be responsible for protecting the highway and all appurtenances from damage resulting from the Contractor's activities. The highway shall be protected from damage by laying protection mats over the road surface. In addition, the Contractor shall provide and place a temporary rockfall barrier during slope scaling to reduce the potential for errant boulders from going over to the other side of the highway. The Contractor shall be solely responsible for repairing any damage resulting from the scaling or other construction activities.

Start all slope scaling at the top of the slope and proceed down slope, removing loose rock and other debris as the work progresses. All material on the slope face that is loose, hanging or creates a safety hazard to the public must be removed or stabilized, to the Engineer's satisfaction, during or on completion of the section of slope and at the end of each work day. Slopes that have been scaled shall be relatively clean of debris and loose materials for traffic to traverse the highway on a daily basis after the specified work hours. The Contractor shall exercise extra

care in the slope scaling work and shall avoid over-steepening the slope face that may cause instability of the slope face. If during the slope scaling work, the Contractor encounters unstable slope conditions that may constitute a potential slide, immediately notify the Engineer.

Blocks of rock or debris that hang up on the slope during the slope scaling operations shall be removed upon completion of the first pass of slope scaling. The Contractor shall continue scaling of the slopes until the slope scaling has been completed to the satisfaction of the Engineer. The Engineer will inspect the slope faces to determine whether or not scaling of the slope faces has been completed. The Contractor shall assist and provide a 'life line' for the State's personnel or consultants during inspection of the work.

(C) Debris Removal.

All debris generated from the slope scaling/trimming operations shall be the property of the Contractor and shall be removed from the project site for disposal in a proper manner. The Contractor shall sweep the highway clean of all debris on a daily basis. The Engineer will inspect the "cleaned up" highway on a daily basis.

The Contractor shall maintain equipment on-site at all times to remove debris from the highway to allow the passage of emergency vehicles in the event that emergency vehicles require passage through the project area along the highway during the designated closure times. The slope scaling activities shall be temporarily suspended to allow the passage of the emergency vehicles through the project area along the highway.

(D) Protection of Existing Facilities.

Protection of the highway and all appurtenances from damage resulting from the Contractor's activities shall be the Contractor's responsibility. All costs or other compensation for the mitigation of damage to the highway and appurtenances (including re-paving of damaged areas) shall be the responsibility of the Contractor.

A pre-construction condition survey of the existing highway, rock masonry walls, guardrails, and all appurtenances shall be conducted by the Contractor prior to commencement of the slope scaling activities. As a minimum, the pre-construction condition survey shall include photographs of the highway and appurtenances and the installation of crack gauges to document the existing cracks and other damages already existing within the highway and appurtenances prior to commencement of the slope

scaling and related activities. A copy of the pre-construction condition survey shall be submitted to the Engineer for information only.

Slope scaling work shall begin only after the highway protection measures as described in the accepted work plan are put in place at the beginning of each slope scaling work. The Contractor shall protect the traffic on the highway from any rockfall hazards at all times during the Contractor's activities.

671.04 Method of Measurement.

Cutting and removal of vegetation will be paid on a lump sum basis. Measurement for payment will not apply.

The Engineer will measure slope scaling by actual man-hours worked within the normal 8-hour work day for the slope scaling supervisor and each slope scaler in performing the described work. Work time shall begin at the time each scaler reaches the access point for the work including preparation for start of the work and clean up at the end of the shift, or as directed by the Engineer. Slope scaling man-hours will be measured to the nearest 0.50 hours.

Temporary rockfall barrier will be paid on a lump sum basis. Measurement for payment will not apply.

The Engineer will measure the front-end loader with a minimum 3 cubic yard capacity bucket (with a "four-in-one" type bucket) when used for clean up work and removal of debris generated from slope scaling on a daily cost basis for each daily work shift and for each piece of equipment.

The Engineer will measure additional mechanized equipment, such as backhoes, hoe-rams, etc., used for removal of debris generated from slope scaling when approved by the Engineer on a force account basis in accordance with Subsection 109.06 – Force Account Provisions and Compensation.

The Engineer will measure the removal of debris generated from the slope scaling by the cubic yards removed from the highway and hauled off for disposal from the project site. Removal of debris generated from the slope scaling includes existing debris on the highway and debris generated from rock/boulder demolition designated for removal by the Engineer.

Protection of Existing Facilities of the highway will be paid on a lump sum basis for the full duration stated during the cutting and removal of vegetation phase and also during the slope scaling and trimming phase of the project. Measurement for payment will not apply.

270 Police officers for traffic control and advertisement for road closure notices
271 will be paid on a lump sum basis under Item No. 645.0100. Measurement for
272 payment will not apply.

273
274 **671.05 Basis of Payment.**
275

276 The Engineer will pay for the accepted cutting and removal of vegetation
277 on a contract lump sum basis. Payment will be full compensation for cutting all
278 vegetation including branches, shrubs, stumps, tree trunks (18 inches in diameter
279 and smaller), etc., from the face of the slopes extending from the toe of the slope
280 to the top of the slope (and 5 feet beyond the top of the slope), and all incidental
281 items required to complete the work, such as access to the slope face and top of
282 slope, tools, equipment, traffic control, etc.

283
284 The Engineer will pay for the accepted slope scaling man-hours at the
285 contract unit price for each man-hour of completed slope scaling/trimming. The
286 contract unit price includes full compensation for furnishing labor, materials, hand
287 tools, equipment (including communications equipment) and incidentals
288 necessary for scaling the slope face and completing the work.

289
290 The Engineer will pay for accepted temporary rockfall barrier for slope
291 scaling (and for erosion control) on a contract lump sum basis. Payment will be
292 full compensation for fabricating a temporary rockfall barrier for use during slope
293 scaling based on approved shop drawings. The same temporary rockfall barrier
294 will be used for the work at Sites 5, 9, 10 and 11. The temporary rockfall barrier
295 will become the property of the State at the conclusion of the project. Payment
296 will include delivery of the temporary rockfall barrier to one of the State's
297 baseyards by the Contractor, when directed by the Engineer.

298
299 The Engineer will pay for the additional items required in the demolition
300 using the expansive stress method, hydraulic rock splitters, or hydraulic jacks on
301 a force account basis in accordance with Subsection 109.06 – Force Account
302 Provisions and Compensation.

303
304 The Engineer will pay for one (1) front-end loader per daily work shift for
305 clean up and removal of debris generated from slope scaling/trimming. The daily
306 cost includes operator, fuel, oil, lubricants, supplies, necessary attachments,
307 repairs, maintenance, tire wear, depreciation, storage, and other incidentals
308 including idle or standby time.

309
310 The Engineer will pay for additional mechanized equipment used for
311 removal of debris generated from slope scaling on a force account basis in
312 accordance with Subsection 109.06 – Force Account Provisions and
313 Compensation.

The Engineer will pay for the removal of debris generated from slope scaling/trimming by the cubic yards removed from the highway and hauled off for disposal from the project site. The contract unit price includes full compensation for removing debris from the highway for each slope scaling shift, stockpiling the debris (as necessary), loading the materials onto haul trucks, hauling the materials to suitable disposal sites for disposal, and furnishing, labor, materials, tools, equipment and incidentals necessary to complete the work.

The Engineer will pay for Protection of Existing Facilities on a contract lump sum basis. Payment will be full compensation for setting up and removal of all accepted protective measures on a daily basis during the cutting and removal of vegetation phase and also during the slope scaling and trimming phase of the project to protect the highway and appurtenant improvements from damage due to the nature of the work including all incidental items required to complete the work.

The Engineer will pay for police officers for traffic control on a lump sum basis in accordance with Section 645 of the Standard Specifications.

The Engineer will pay for advertisement for road closure notices on a lump sum basis, in accordance with Section 645 of the Standard Specifications.

The Engineer will make payment under:

Pay Item	Pay Unit
Cutting and Removal of Vegetation	Lump Sum
Slope Scaling Supervisor	Man-Hour
Slope Scaler	Man-Hour
Temporary Rockfall Barrier for Slope Scaling/Trimming	Lump Sum
Front-End Loader	Daily
Additional Mechanized Equipment	Force Account
Removal of Debris from Slope Scaling/Trimming	Cubic Yards
Protection of Existing Highway	Lump Sum"

END OF SECTION 618

PROPOSAL SCHEDULE – Site 1 (Mile Post 12.1)

ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
205.0100	Structure Excavation for Containment Curb	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.	\$ 5,000.00
304.0100	Aggregate Base	L.S.	L.S.	L.S.	\$ _____
401.0100	HMA Pavement, Mix No. IV	75	TON	\$ _____	\$ _____
406.0100	Crack Sealing of Existing Pavement	L.S.	L.S.	L.S.	\$ _____
503.1000	Concrete for Containment Curb	L.S.	L.S.	L.S.	\$ _____
602.1000	Reinforcing Steel for Containment Curb	L.S.	L.S.	L.S.	\$ _____
606.3100	Guardrail Type 3 – W-Beam with Strong Post	L.S.	L.S.	L.S.	\$ _____
606.7100	Terminal Section Type Modified A-1	L.S.	L.S.	L.S.	\$ _____
629.1010	4-inch Pavement Striping (Thermoplastic Extrusion)	L.S.	L.S.	L.S.	\$ _____
629.2030	Type C Pavement Marker	L.S.	L.S.	L.S.	\$ _____
629.2040	Type D Pavement Marker	L.S.	L.S.	L.S.	\$ _____
629.2050	Type H Pavement Marker	L.S.	L.S.	L.S.	\$ _____
629.2060	Type J Pavement Marker	L.S.	L.S.	L.S.	\$ _____

PROPOSAL SCHEDULE – Site 1 (Mile Post 12.1)

ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
632.4100	Reflector Marker (RM-2, White, Bi-Directional) on Flexible Post	L.S.	L.S.	L.S.	\$ _____
632.4200	Reflector Marker (RM-3, Yellow, Bi-Directional) on Flexible Post	L.S.	L.S.	L.S.	\$ _____
645.7000	Traffic Control	L.S.	L.S.	L.S.	\$ _____
645.7110	Additional Police Officers, Additional Traffic Control Devices, and Advertisement	F.A.	F.A.	F.A.	\$ 5,000.00
648.1000	Field Posted Drawings	L.S.	L.S.	L.S.	\$ _____
699.1000	Mobilization (Not to Exceed 10% of the Sum of all Items (Milepost 12.1) Excluding the Bid Price of this Item and Force Account Items)	L.S.	L.S.	L.S.	\$ _____

SUM OF ALL ITEMS (SITE 1, MILEPOST 12.1)

\$ _____

PROPOSAL SCHEDULE – Site 2 (Mile Post 13.4)					
ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
205.0300	Structure Excavation for Cement Rubble Masonry Wall	L.S.	L.S.	L.S.	\$ _____
205.0400	Structure Backfill for Cement Rubble Masonry Wall	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.	\$ 3,000.00
304.0100	Aggregate Base	L.S.	L.S.	L.S.	\$ _____
401.0100	HMA Pavement, Mix No. IV	43	TON	\$ _____	\$ _____
406.0100	Crack Sealing of Existing Pavement	L.S.	L.S.	L.S.	\$ _____
508.1000	Cement Rubble Masonry Wall	L.S.	L.S.	L.S.	\$ _____
606.3100	Guardrail Type 3 – W-Beam with Strong Post	L.S.	L.S.	L.S.	\$ _____
606.7000	Terminal Section Type FLEAT-350	L.S.	L.S.	L.S.	\$ _____
629.1000	Double 4-inch Pavement Striping (Thermoplastic Extrusion)	L.S.	L.S.	L.S.	\$ _____
629.1010	4-inch Pavement Striping (Thermoplastic Extrusion)	L.S.	L.S.	L.S.	\$ _____
629.2030	Type C Pavement Marker	L.S.	L.S.	L.S.	\$ _____
629.2040	Type D Pavement Marker	L.S.	L.S.	L.S.	\$ _____

PROPOSAL SCHEDULE – Site 2 (Mile Post 13.4)

ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
632.4100	Reflector Marker (RM-2, White, Bi-Directional) on Flexible Post	L.S.	L.S.	L.S.	\$ _____
645.7000	Traffic Control	L.S.	L.S.	L.S.	\$ _____
645.7110	Additional Police Officers, Additional Traffic Control Devices, and Advertisement	F.A.	F.A.	F.A.	\$ 3,000.00
648.1000	Field Posted Drawings	L.S.	L.S.	L.S.	\$ _____
699.1000	Mobilization (Not to Exceed 10% of the Sum of all Items (Milepost 13.4) Excluding the Bid Price of this Item and Force Account Items)	L.S.	L.S.	L.S.	\$ _____

SUM OF ALL ITEMS (SITE 2, MILEPOST 13.4)

\$ _____

PROPOSAL SCHEDULE – Site 3 (Mile Post 13.8 to 13.81)					
ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
205.0300	Structure Excavation for Cement Rubble Masonry Wall	L.S.	L.S.	L.S.	\$ _____
205.0400	Structure Backfill for Cement Rubble Masonry Wall	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.	\$ 5,000.00
304.0100	Aggregate Base Course	L.S.	L.S.	L.S.	\$ _____
401.0100	HMA Pavement, Mix No. IV	185	TON	\$ _____	\$ _____
406.0100	Crack Sealing of Existing Pavement	L.S.	L.S.	L.S.	\$ _____
508.1000	Cement Rubble Masonry Wall	L.S.	L.S.	L.S.	\$ _____
606.3100	Guardrail Type 3 – W-Beam with Strong Post	L.S.	L.S.	L.S.	\$ _____
606.7100	Terminal Section Type Modified A-1	L.S.	L.S.	L.S.	\$ _____
629.1000	Double 4-inch Pavement Striping (Thermoplastic Extrusion)	L.S.	L.S.	L.S.	\$ _____
629.1010	4-inch Pavement Striping (Thermoplastic Extrusion)	L.S.	L.S.	L.S.	\$ _____
629.2030	Type C Pavement Marker	L.S.	L.S.	L.S.	\$ _____
629.2040	Type D Pavement Marker	L.S.	L.S.	L.S.	\$ _____

PROPOSAL SCHEDULE – Site 3 (Mile Post 13.8 to 13.81)					
ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
629.2050	Type H Pavement Marker	L.S.	L.S.	L.S.	\$ _____
629.2060	Type J Pavement Marker	L.S.	L.S.	L.S.	\$ _____
632.4100	Reflector Marker (RM-2, White, Bi-Directional) on Flexible Post	L.S.	L.S.	L.S.	\$ _____
632.4200	Reflector Marker (RM-3, Yellow, Bi-Directional) on Flexible Post	L.S.	L.S.	L.S.	\$ _____
645.7000	Traffic Control	L.S.	L.S.	L.S.	\$ _____
645.7110	Additional Police Officers, Additional Traffic Control Devices, and Advertisement	F.A.	F.A.	F.A.	\$ 5,000.00
648.1000	Field Posted Drawings	L.S.	L.S.	L.S.	\$ _____
699.1000	Mobilization (Not to Exceed 10% of the Sum of all Items (Milepost 13.8 to 13.81) Excluding the Bid Price of this Item and Force Account Items)	L.S.	L.S.	L.S.	\$ _____
SUM OF ALL ITEMS (SITE 3, MILEPOST 13.8 to 13.81)				\$	_____

PROPOSAL SCHEDULE – Site 4 (Mile Post 15.3)

ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
203.0200	Borrowed Excavated Material	100	CU YD	\$ _____	\$ _____
205.0300	Structure Excavation for Cement Rubble Masonry Wall	L.S.	L.S.	L.S.	\$ _____
205.0400	Structure Backfill for Cement Rubble Masonry Wall	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.	\$ 5,000.00
304.0100	Aggregate Base	L.S.	L.S.	L.S.	\$ _____
401.0100	HMA Pavement, Mix No. IV	75	TON	\$ _____	\$ _____
508.1000	Cement Rubble Masonry Wall	L.S.	L.S.	L.S.	\$ _____
606.3100	Guardrail Type 3 – W-Beam with Strong Post	L.S.	L.S.	L.S.	\$ _____
606.7000	Terminal Section Type FLEAT-350	L.S.	L.S.	L.S.	\$ _____
606.7100	Terminal Section Type Modified A-1	L.S.	L.S.	L.S.	\$ _____
629.1000	Double 4-inch Pavement Striping (Thermoplastic Extrusion)	L.S.	L.S.	L.S.	\$ _____
629.1010	4-inch Pavement Striping (Thermoplastic Extrusion)	L.S.	L.S.	L.S.	\$ _____
629.2030	Type C Pavement Marker	L.S.	L.S.	L.S.	\$ _____
629.2040	Type D Pavement Marker	L.S.	L.S.	L.S.	\$ _____

PROPOSAL SCHEDULE - Site 4 (Mile Post 15.3)					
ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
629.2050	Type H Pavement Marker	L.S.	L.S.	L.S.	\$ _____
629.2060	Type J Pavement Marker	L.S.	L.S.	L.S.	\$ _____
632.4100	Reflector Marker (RM-2, White, Bi-Directional) on Flexible Post	L.S.	L.S.	L.S.	\$ _____
645.7000	Traffic Control	L.S.	L.S.	L.S.	\$ _____
645.7110	Additional Police Officers, Additional Traffic Control Devices, and Advertisement	F.A.	F.A.	F.A.	\$ 5,000.00
648.1000	Field Posted Drawings	L.S.	L.S.	L.S.	\$ _____
696.1000	Field Office Trailer (Not to Exceed \$100,000)	L.S.	L.S.	L.S.	\$ _____
696.2000	Maintenance of Trailer	F.A.	F.A.	F.A.	\$ 10,000.00
699.1000	Mobilization (Not to Exceed 10% of the Sum of all Items (Milepost 15.3) Excluding the Bid Price of this Item and Force Account Items)	L.S.	L.S.	L.S.	\$ _____
SUM OF ALL ITEMS (SITE 4, MILEPOST 15.3)				\$ _____	

PROPOSAL SCHEDULE – Site 5 (Mile Post 27.7)					
ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
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.	\$ 10,000.00
645.7000	Traffic Control	L.S.	L.S.	L.S.	\$ _____
629.1010	4-inch Pavement Striping (Thermoplastic Extrusion)	L.S.	L.S.	L.S.	\$ _____
629.2030	Type C Pavement Marker	L.S.	L.S.	L.S.	\$ _____
645.7110	Additional Police Officers, Additional Traffic Control Devices, and Advertisement	F.A.	F.A.	F.A.	\$ 5,000.00
648.1000	Field Posted Drawings	L.S.	L.S.	L.S.	\$ _____
670.0010	Drape Wire Mesh	1,100	S.Y.	\$ _____	\$ _____
671.0010	Slope Scaling Supervisor	64	Man-Hrs	\$ _____	\$ _____
671.0020	Slope Scaler	192	Man-Hrs	\$ _____	\$ _____
671.0030	Temporary Rockfall Barrier for Slope Scaling /Trimming	L.S.	L.S.	L.S.	\$ _____
671.0040	Front End Loader	16	Days	\$ _____	\$ _____
671.0050	Additional Mechanized Equipment	F.A.	F.A.	F.A.	\$ 60,000.00
671.0060	Removal of Debris Generated from Slope Scaling	250	C.Y.	\$ _____	\$ _____
671.0070	Protection of Existing Highway	L.S.	L.S.	L.S.	\$ _____

PROPOSAL SCHEDULE – Site 5 (Mile Post 27.7)					
ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
699.1000	Mobilization (Not to Exceed 10% of the Sum of all Items (Milepost 27.7) Excluding the Bid Price of this Item and Force Account Items)	L.S.	L.S.	L.S.	\$ _____
SUM OF ALL ITEMS (SITE 5, MILEPOST 27.7)				\$	_____

PROPOSAL SCHEDULE – Site 6 (Mile Post 27.7 to 28.7)					
ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
205.0300	Structure Excavation for Cement Rubble Masonry Wall	L.S.	L.S.	L.S.	\$ _____
205.0400	Structure Backfill for Cement Rubble Masonry Wall	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.	\$ 5,000.00
304.0100	Aggregate Base	L.S.	L.S.	L.S.	\$ _____
401.0100	HMA Pavement, Mix No. IV	400	TON	\$ _____	\$ _____
401.0150	Leveling Course	180	TON	\$ _____	\$ _____
406.0100	Crack Sealing of Existing Pavement	L.S.	L.S.	L.S.	\$ _____
412.0100	"Glassgrid" Pavement Fabric	3,000	S.Y.	\$ _____	\$ _____
415.0100	Cold Planing	L.S.	L.S.	L.S.	\$ _____
508.1000	Cement Rubble Masonry Wall	L.S.	L.S.	L.S.	\$ _____
606.9000	Reset Guardrail	L.S.	L.S.	L.S.	\$ _____
629.1000	Double 4-inch Yellow Pavement Striping (Thermoplastic Extrusion)	L.S.	L.S.	L.S.	\$ _____
629.1010	4-inch Pavement Striping (Thermoplastic Extrusion)	L.S.	L.S.	L.S.	\$ _____

PROPOSAL SCHEDULE – Site 6 (Mile Post 27.7 to 28.7)

ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
629.2030	Type C Pavement Marker	L.S.	L.S.	L.S.	\$ _____
629.2040	Type D Pavement Marker	L.S.	L.S.	L.S.	\$ _____
645.7000	Traffic Control	L.S.	L.S.	L.S.	\$ _____
645.7110	Additional Police Officers, Additional Traffic Control Devices, and Advertisement	F.A.	F.A.	F.A.	\$ 5,000.00
648.1000	Field Posted Drawings	L.S.	L.S.	L.S.	\$ _____
699.1000	Mobilization (Not to Exceed 10% of the Sum of all Items (Milepost 27.7 to 28.7) Excluding the Bid Price of this Item and Force Account Items)	L.S.	L.S.	L.S.	\$ _____

SUM OF ALL ITEMS (SITE 6, MILEPOST 27.7 to 28.7)

\$ _____

PROPOSAL SCHEDULE – Site 7 (Mile Post 29.2)					
ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
203.0200	Borrow Excavated Material	150	CU YD	\$ _____	\$ _____
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.	\$ 3,000.00
304.0100	Aggregate Base	L.S.	L.S.	L.S.	\$ _____
401.0200	HMA Pavement Behind Guardrail, Mix No. IV	13	TON	\$ _____	\$ _____
406.0100	Crack Sealing of Existing Pavement	L.S.	L.S.	L.S.	\$ _____
645.7000	Traffic Control	L.S.	L.S.	L.S.	\$ _____
645.7110	Additional Police Officers, Additional Traffic Control Devices, and Advertisement	F.A.	F.A.	F.A.	\$ 3,000.00
648.1000	Field Posted Drawings	L.S.	L.S.	L.S.	\$ _____
699.1000	Mobilization (Not to Exceed 10% of the Sum of all Items (Milepost 29.2) Excluding the Bid Price of this Item and Force Account Items)	L.S.	L.S.	L.S.	\$ _____
SUM OF ALL ITEMS (SITE 7, MILEPOST 29.2)				\$ _____	\$ _____

PROPOSAL SCHEDULE – Site 8 (Mile Post 29.5)					
ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
203.0200	Borrow Excavated Material	150	CU YD	\$ _____	\$ _____
205.0300	Structure Excavation for Cement Rubble Masonry Wall	L.S.	L.S.	L.S.	\$ _____
205.0400	Structure Backfill for Cement Rubble Masonry Wall	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.	\$ 5,000.00
304.0100	Aggregate Base	L.S.	L.S.	L.S.	\$ _____
401.0200	HMA Pavement Under Guardrail, Mix No. IV	75	TON	\$ _____	\$ _____
406.0100	Crack Sealing of Existing Pavement	L.S.	L.S.	L.S.	\$ _____
508.1000	Cement Rubble Masonry Wall	L.S.	L.S.	L.S.	\$ _____
606.9000	Reset Guardrail	L.S.	L.S.	L.S.	\$ _____
629.1010	4-inch Pavement Striping (Thermoplastic Extrusion)	L.S.	L.S.	L.S.	\$ _____
629.2030	Type C Pavement Marker	L.S.	L.S.	L.S.	\$ _____
645.7000	Traffic Control	L.S.	L.S.	L.S.	\$ _____
645.7110	Additional Police Officers, Additional Traffic Control Devices, and Advertisement	F.A.	F.A.	F.A.	\$ 5,000.00

PROPOSAL SCHEDULE – Site 8 (Mile Post 29.5)					
ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
648.1000	Field Posted Drawings	L.S.	L.S.	L.S.	\$ _____
699.1000	Mobilization (Not to Exceed 10% of the Sum of all Items (Milepost 29.5) Excluding the Bid Price of this Item and Force Account Items)	L.S.	L.S.	L.S.	\$ _____
SUM OF ALL ITEMS (SITE 8, MILEPOST 29.5)				\$	_____

PROPOSAL SCHEDULE – Site 9 (Mile Post 29.7)

ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
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.	\$ 3,000.00
629.1010	4-inch Pavement Striping (Thermoplastic Extrusion)	L.S.	L.S.	L.S.	\$ _____
629.2030	Type C Pavement Marker	L.S.	L.S.	L.S.	\$ _____
645.7000	Traffic Control	L.S.	L.S.	L.S.	\$ _____
645.7110	Additional Police Officers, Additional Traffic Control Devices, and Advertisement	F.A.	F.A.	F.A.	\$ 3,000.00
648.1000	Field Posted Drawings	L.S.	L.S.	L.S.	\$ _____
670.0010	Drape Wire Mesh	1,300	S.Y.	\$ _____	\$ _____
671.0010	Slope Scaling Supervisor	40	Man-Hrs	\$ _____	\$ _____
671.0020	Slope Scaler	120	Man-Hrs	\$ _____	\$ _____
671.0030	Temporary Rockfall Barrier for Slope Scaling /Trimming	L.S.	L.S.	L.S.	\$ _____
671.0040	Front End Loader	10	Days	\$ _____	\$ _____
671.0050	Additional Mechanized Equipment	F.A.	F.A.	F.A.	\$ 60,000.00
671.0060	Removal of Debris Generated from Slope Scaling	350	C.Y.	\$ _____	\$ _____
671.0070	Protection of Existing Highway	L.S.	L.S.	L.S.	\$ _____

PROPOSAL SCHEDULE – Site 9 (Mile Post 29.7)					
ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
699.1000	Mobilization (Not to Exceed 10% of the Sum of all Items (Milepost 29.7) Excluding the Bid Price of this Item and Force Account Items)	L.S.	L.S.	L.S.	\$ _____
SUM OF ALL ITEMS (SITE 9, MILEPOST 29.7)				\$	_____

PROPOSAL SCHEDULE – Site 10 (Mile Post 30.8)					
ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
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.	\$ 3,000.00
608.0100	Cattle Fence	L.S.	L.S.	L.S.	\$ _____
629.1010	4-inch Pavement Striping (Thermoplastic Extrusion)	L.S.	L.S.	L.S.	\$ _____
629.2030	Type C Pavement Marker	L.S.	L.S.	L.S.	\$ _____
645.7000	Traffic Control	L.S.	L.S.	L.S.	\$ _____
645.7110	Additional Police Officers, Additional Traffic Control Devices, and Advertisement	F.A.	F.A.	F.A.	\$ 3,000.00
648.1000	Field Posted Drawings	L.S.	L.S.	L.S.	\$ _____
670.0010	Drape Wire Mesh	1,200	S.Y.	\$ _____	\$ _____
671.0010	Slope Scaling Supervisor	40	Man-Hrs	\$ _____	\$ _____
671.0020	Slope Scaler	120	Man-Hrs	\$ _____	\$ _____
671.0030	Temporary Rockfall Barrier for Slope Scaling /Trimming	L.S.	L.S.	L.S.	\$ _____
671.0040	Front End Loader (Each)	10	Days	\$ _____	\$ _____
671.0050	Additional Mechanized Equipment	F.A.	F.A.	F.A.	\$ 60,000.00
671.0060	Removal of Debris Generated from Slope Scaling	100	C.Y.	\$ _____	\$ _____

PROPOSAL SCHEDULE – Site 10 (Mile Post 30.8)

ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
671.0070	Protection of Existing Highway	L.S.	L.S.	L.S.	\$ _____
699.1000	Mobilization (Not to Exceed 10% of the Sum of all Items (Milepost 30.8) Excluding the Bid Price of this Item and Force Account Items)	L.S.	L.S.	L.S.	\$ _____
SUM OF ALL ITEMS (SITE 10, MILEPOST 30.8)					\$ _____

PROPOSAL SCHEDULE – Site 11 (Mile Post 31.1 to 31.15)					
ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
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.	\$ 3,000.00
304.0100	Aggregate Base	L.S.	L.S.	L.S.	\$ _____
401.0100	HMA Pavement, Mix No. IV	80	TON	\$ _____	\$ _____
406.0100	Crack Sealing of Existing Pavement	L.S.	L.S.	L.S.	\$ _____
629.1010	4-inch Pavement Striping (Thermoplastic Extrusion)	L.S.	L.S.	L.S.	\$ _____
629.2030	Type C Pavement Marker	L.S.	L.S.	L.S.	\$ _____
645.7000	Traffic Control	L.S.	L.S.	L.S.	\$ _____
645.7110	Additional Police Officers, Additional Traffic Control Devices, and Advertisement	F.A.	F.A.	F.A.	\$ 3,000.00
648.1000	Field Posted Drawings	L.S.	L.S.	L.S.	\$ _____
671.0010	Slope Scaling Supervisor	64	Man-Hrs	\$ _____	\$ _____
671.0020	Slope Scaler	192	Man-Hrs	\$ _____	\$ _____
671.0030	Temporary Rockfall Barrier for Slope Scaling /Trimming	L.S.	L.S.	L.S.	\$ _____
671.0040	Front End Loader (Each)	16	Days	\$ _____	\$ _____

PROPOSAL SCHEDULE – Site 11 (Mile Post 31.1 to 31.15)					
ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
671.0050	Additional Mechanized Equipment	F.A.	F.A.	F.A.	\$ 60,000.00
671.0060	Removal of Debris Generated from Slope Scaling	350	C.Y.	\$ _____	\$ _____
672.0100	Ring Netting	900	S.Y.	\$ _____	\$ _____
699.1000	Mobilization (Not to Exceed 10% of the Sum of all Items (Milepost 31.1 to 31.15) Excluding the Bid Price of this Item and Force Account Items)	L.S.	L.S.	L.S.	\$ _____
SUM OF ALL ITEMS (SITE 11, MILEPOST 31.1 to 31.15)				\$ _____	

PROPOSAL SCHEDULE SUMMARY

SITE	MILEPOST	SUM OF ALL ITEMS
1	12.1	\$ _____
2	13.4	\$ _____
3	13.8 to 13.81	\$ _____
4	15.3	\$ _____
5	27.7	\$ _____
6	27.7 to 28.7	\$ _____
7	29.2	\$ _____
8	29.5	\$ _____
9	29.7	\$ _____
10	30.8	\$ _____
11	31.1 to 31.15	\$ _____

a. SUM OF ALL ITEMS (SITES 1 - 11)

\$ _____

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.

BORING LOCATION					
Boring Nos.	Station (approx.)	Offset from Baseline	Offset Direction	Site Nos.	Note
		(feet)	(facing up- station)		
1	75+00	5	right	1	
2	74+00	5	left	1	
3	73+00	5	right	1	
4	792+25	5	right	2	
5	789+00	5	left	2	between Site # 2 and # 3
6	788+50	5	right	2	
7	773+90	5	left	3	
8	773+00	5	right	3	
9	14+00	5	left	6	
10	9+60	5	right	6	
11	286+10	50	right	10	
12	285+00	60	right	10	

ER-15(22)

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