STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS

ADDENDUM NO. 2
FOR
SEISMIC RETROFIT, HALEAKALA HIGHWAY ROUTE 377,
WAIALE GULCH, ALAE (NAALAE GULCH),
AND PULEHU GULCH (POHAKUOKALA) BRIDGES
DISTRICT OF MAKAWAO, ISLAND OF MAUI
FEDERAL-AID PROJECT NO. STP-0377(008)

October 21, 2026

This Addendum shall make the following amendment(s) to the Solicitation:

A. SPECIAL PROVISIONS

1. Delete **SECTION 202 – REMOVAL OF STRUCTURES AND OBSTRUCTIONS**, dated 7/17/26, in its entirety and replace it with attached **SECTION 202 – REMOVAL OF STRUCTURES AND OBSTRUCTIONS**, dated r10/21/26.

2. Delete **SECTION 645 – WORK ZONE TRAFFIC CONTROL,** page 645-7a, dated 9/04/26, and replace it with **SECTION 645 – WORK ZONE TRAFFIC CONTROL,** page 645-7a, dated r10/21/26.

B. PROPOSAL SCHEDULE

1. Delete **PROPOSAL SCHEDULE**, pages P-8 to P-21, dated 9/04/26, and replace it with attached **PROPOSAL SCHEDULE**, pages P-8 to P-21, dated r10/21/26.

C. PLANS

1. Delete **PLANS SHEET NO. 3 GENERAL NOTES**, dated July 2026, and replace it with the attached **PLANS SHEET NO. ADD. 3 GENERAL NOTES.**

2. Delete **PLANS SHEET NO. 5 GENERAL NOTES**, dated July 2026, and replace it with the attached **PLANS SHEET NO. ADD. 5 GENERAL NOTES.**

3. Delete **PLANS SHEET NO. 6 GENERAL NOTES**, dated July 2026, and replace it with the attached **PLANS SHEET NO. ADD. 6 GENERAL NOTES.**

4. Delete **PLANS SHEET NO. 56 TYPICAL SOIL NAIL DETAILS**, dated July 2026, and replace it with the attached **PLANS SHEET NO. ADD. 56 TYPICAL SOIL NAIL DETAILS.**

5. Delete **PLANS SHEET NO. 70 WAIALE GULCH BRIDGE BENT NO. 1 DEMOLITION PLAN AND SECTIONS**, dated July 2026, and replace it with the attached **PLANS SHEET NO. ADD. 70 WAIALE GULCH BRIDGE BENT NO. 1 DEMOLITION PLAN AND SECTIONS.**

6. Delete **PLANS SHEET NO. 71 WAIALE GULCH BRIDGE BENT NO. 1 PLAN, SECTION, AND DETAIL**, dated July 2026, and replace it with the attached **PLANS SHEET NO. ADD. 71 WAIALE GULCH BRIDGE BENT NO. 1 PLAN, SECTION, AND DETAIL.**

7. Delete **PLANS SHEET NO. 73 WAIALE GULCH BRIDGE BENT NO. 1 REINFORCING PLANS**, dated July 2026, and replace it with the attached **PLANS SHEET NO. ADD. 73 WAIALE GULCH BRIDGE BENT NO. 1 REINFORCING PLANS.**

8. Delete **PLANS SHEET NO. 74 WAIALE GULCH BRIDGE BENT NO. 1 REINFORCING SECTION**, dated July 2026, and replace it with the attached **PLANS SHEET NO. ADD. 74 WAIALE GULCH BRIDGE BENT NO. 1 REINFORCING SECTION.**

9. Delete **PLANS SHEET NO. 78 WAIALE GULCH BRIDGE BENT NO. 2 DEMOLITION PLAN AND SECTIONS**, dated July 2026, and replace it with the attached **PLANS SHEET NO. ADD. 78 WAIALE GULCH BRIDGE BENT NO. 2 DEMOLITION PLAN AND SECTIONS.**

10. Delete **PLANS SHEET NO. 79 WAIALE GULCH BRIDGE BENT NO. 2 PLAN AND SECTIONS**, dated July 2026, and replace it with the attached **PLANS SHEET NO. ADD. 79 WAIALE GULCH BRIDGE BENT NO. 2 PLAN AND SECTIONS.**

11. Delete **PLANS SHEET NO. 81 WAIALE GULCH BRIDGE BENT NO. 2 REINFORCING SECTION**, dated July 2026, and replace it with the attached **PLANS SHEET NO. ADD. 81 WAIALE GULCH BRIDGE BENT NO.2 REINFORCING SECTION.**

12. Delete **PLANS SHEET NO. 84 WAIALE GULCH BRIDGE TIE BEAM CFRP DETAILS**, dated July 2026, and replace it with the attached **PLANS SHEET NO. ADD. 84 WAIALE GULCH BRIDGE TIE BEAM CFRP DETAILS.**

13. Delete **PLANS SHEET NO. 85 WAIALE GULCH BRIDGE TIE BEAM CFRP DETAILS**, dated July 2026, and replace it with the attached **PLANS**

SHEET NO. ADD. 85 WAIALE GULCH BRIDGE TIE BEAM CFRP DETAILS.

14. Delete **PLANS SHEET NO. 102 ALAE BRIDGE ABUTMENT NO. 2 EROSION PROTECTION DETAILS**, dated July 2026, and replace it with the attached **PLANS SHEET NO. ADD. 102 ALAE BRIDGE ABUTMENT NO. 2 EROSION PROTECTION DETAILS.**

The following is provided for information.

D. <u>RESPONSES TO REQUESTS FOR INFORMATION (RFI'S/QUESTIONS)</u>

1. The attached **RESPONSES TO REQUESTS FOR INFORMATION** are provided for information.

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.

for HENRY KENNEDY
Engineering Program Manager

SECTION 202 – REMOVAL OF STRUCTURES AND OBSTRUCTIONS

Make the following amendments to said Section:

(I) Amend **202.03 (B) – Removal of Concrete Structures** by revising lines 68 to 75 to read as follows:

"**(B) Removal of Concrete Structures.** Cut, with power-driven abrasive saw, a 1/2-inch-deep joint (unless as otherwise stipulated on the drawings) at interface of concrete that is to remain and that which is to be removed. Cut neat and true with no shattering or spalling of concrete to remain in place. Use demolition equipment no larger than allowed in the concrete drawings. Do not damage existing reinforcing steel to remain, unless otherwise explicitly shown.

Demolish concrete to the limits as shown on the plans using pneumatic breakers that do not exceed the weight limits as stipulated in the contract documents. When using electric breakers, use tools with equal energy to their pneumatic counterpart."

(II) Add the following paragraphs to Subsection **202.03(C) Removal of Bridges**, line 118, to read as follows:

"All concrete and/or reinforcing steel removed shall be recycled by an appropriately licensed or certified concrete recycling facility."

(III) Add the following paragraphs to Section **202.03 Construction** line 118 to read as follows:

"(D) Cleaning of Existing Bridge Bearings. Remove all deleterious materials from bridge bearings and on top of bent caps. For metal bearings to remain, clean the bearing by applying a suitable degreaser and solvent agent to clean the surface of the metal, ensuring to remove any dirt or oxidation on the surface. Concrete bent caps, diaphragms, and ends of girders shall be free of all foreign material.

(E) Removal of Existing Bearings. Cut, with power driven abrasive saw, a ¾-inch-deep join around perimeter of existing bearings at the interface of concrete that is to remain and that which is to be removed at both the soffit of girders and top of bent cap.

Demolition shall be to a depth necessary to remove embedded bearing plate and masonry plate studs. No larger than a 15-lb pneumatic breaker shall be used when removing concrete in these areas. Care shall be taken when removing concrete in these areas to not damage existing reinforcing steel.

Remove steel rocker bearings, grout pad, and demolished concrete and dispose of at an appropriately licensed or certified recycling facility.

(F) Removal of Debris from Beneath the Bridges. When directed by the Engineer, remove debris from beneath the bridges. Debris shall be defined as man-made objects such as appliances, car parts, etc... and logs and branches deposited from upstream areas. Debris shall not be items that is included in Section 201 – Clearing and Grubbing."

(IV) Amend **202.04 – Measurement** by revising lines 119 to 120 to read as follows:

"**202.04 Measurement.**

(A) Clean Existing Bearings. Clean Existing Bearings will be paid on a lump sum basis. Measurement for payment will not apply.

(B) Removal of Existing Bearings. Removal of Existing Bearings will be paid on a lump sum basis. Measurement for payment will not apply.

(C) Removal of Debris from Beneath the Bridges. The Engineer will measure removal of debris from beneath the bridges, if ordered by the Engineer, on a force account basis, in accordance with Subsection 109.06 – Force Account Provisions and Compensation."

(V) Amend **202.05 – Payment** by revising lines 122 to 131 to read as follows:

"**202.05 Payment.**

(A) Clean Existing Bearings. The Engineer will pay for accepted Clean Existing Bearings on a contract lump sum basis. Payment will be full compensation for work prescribed in this section and contract documents.

(B) Removal of Existing Bearings. The Engineer will pay for accepted Removal of Existing Bearings on a contract lump sum basis. Payment will be full compensation for work prescribed in this section and contract documents.

(C) Removal of Debris from Beneath the Bridges. The Engineer will pay for accepted removal of debris from beneath the bridges, if ordered by the Engineer, on a force account basis, in accordance with Subsection 109.06 – Force Account Provisions and Compensation."

If the proposal does not show a contract item for the removal of structures and obstructions, the Engineer will not pay for the removal of structures and

obstructions separately. The Contractor shall consider them incidental to the various contract items.

The Engineer will pay for specific items stipulated for demolition, removal and disposal at the contract price bid per unit specified in the proposal. The price shall be full compensation for removal, hauling, and disposal of the items and salvage of materials removed. Salvaging of materials removed includes their custody, preservation, storage on the right-of-way. Also, the price shall be full compensation for equipment, tools, labor, materials and incidentals necessary to complete the work.

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

Pay Item	**Pay Unit**
Clean Existing Bearings	Lump Sum
Removal of Existing Bearings	Lump Sum
Removal of Debris from Beneath the Bridges _____	Force Account

An estimated amount for the force account may be allocated in the proposal schedule under “Removal of Debris from Beneath the Bridges”, but the actual amount to be paid will be the sum shown on the accepted force account records, whether this sum be more or less than the estimated amount allocated in the proposal schedule.”

END OF SECTION 202

(2) Full Bridge Closure. Each bridge can be fully closed one time for up to 20 consecutive days (20 calendar days; 24 hours per a day). Only one bridge can be fully closed at any one time. The Alae Bridge cannot be fully closed between Thanksgiving Day and New Year's Day, inclusive. See Special Provision 108.02 Night Work for additional night work provisions.

No time extension will be given for the above restrictions. The contract time for the project has accounted for any loss of time due to the above restrictions.

If applicable, coordinate lane closures with adjacent project(s) at no increase in contract price or contract time.

Rental fees will be assessed in accordance with Subsection 108.09 – Rental Fees for Unauthorized Lane Closure or Occupancy, for failure to open lanes to traffic during peak hours. Morning and afternoon peak hours shall be from 5:30 a.m. to 8:30 a.m. and 3:00 p.m. to 6:00 p.m., respectively, Monday through Friday.

Before scheduling work, submit requests for detours and lane closures as follows:

(1) Detours - 8 weeks before implementing detours.

(2) Lane closures - 6 weeks before implementing lane closures.

Include the following with detour and lane closure requests:

(1) Explanation of proposed changes to existing traffic pattern.

(2) Installation schedule for informational and traffic control signs.

(3) Publication schedule for legal notices.

(4) Plan showing proposed informational signs.

(5) Plan showing lane changes or detours in accordance with accepted TCP, including details at beginning of multi-lane highway lane changes and detours.

Detours or lane closures will not be allowed before the Engineer accepts detour or lane closure request.

PROPOSAL SCHEDULE

SEISMIC RETROFIT OF WAIALE GULCH BRIDGE

ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
201.3010	Clearing and Grubbing - Waiale Gulch Bridge	0.3	Acre	$	$
202.3000	Clean Existing Bearings	L.S.	L.S.	L.S.	$
202.3100	Removal of Existing Bearings	L.S.	L.S.	L.S.	$
202.3500	Removal of Debris from Beneath the Bridges - Waiale Gulch Bridge	F.A.	F.A.	F.A.	$ 20,000.00
203.3010	Roadway Excavation - Waiale Gulch Bridge	13	C.Y.	$	$
205.3010	Structure Excavation for Abutment No. 1	40	C.Y.	$	$
205.3020	Structure Excavation for Abutment No. 2	70	C.Y.	$	$
205.3025	Structure Excavation for Tie Beam	4	C.Y.	$	$
205.3030	Lightweight Cellular Concrete Backfill for Abutment No. 2	40	C.Y.	$	$
209.3010	Installation, Maintenance, Monitoring, and Removal of BMP - Waiale Gulch Bridge	L.S.	L.S.	L.S.	$
209.3020	Additional Water Pollution, Dust, and Erosion Control - Waiale Gulch Bridge	F.A.	F.A.	F.A.	$ 60,000.00
301.3110	Hot Mix Asphalt Base Course - Waiale Gulch Bridge	12	TONS	$	$
305.3110	Aggregate Subbase - Waiale Gulch Bridge	8	C.Y.	$	$

PROPOSAL SCHEDULE

SEISMIC RETROFIT OF WAIALE GULCH BRIDGE

ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
401.3410	PMA Pavement, Mix. No. IV - Waiale Gulch Bridge	59	Tons	$ _____	$ _____
401.3510	Tensar Rapid Repair PG100 - Waiale Gulch Bridge	540	S.Y.	$ _____	$ _____
415.3410	Cold Planing - Waiale Gulch Bridge	395	S.Y.	$ _____	$ _____
503.3100	Concrete for Corbel	L.S.	L.S.	L.S.	$ _____
503.3200	Concrete for Tie Slab	L.S.	L.S.	L.S.	$ _____
503.3300	Concrete for Anchor Beam	L.S.	L.S.	L.S.	$ _____
503.3400	Concrete for Pier Cap	L.S.	L.S.	L.S.	$ _____
503.3500	Concrete for Built Up Diaphragms	L.S.	L.S.	L.S.	$ _____
503.3600	Concrete for Creep Blocks	L.S.	L.S.	L.S.	$ _____
503.3700	Concrete for Timber Bumper Repair	L.S.	L.S.	L.S.	$ _____
506.3100	Steel Reinforced Elastomeric Bearings	12	Each	$ _____	$ _____
520.3100	Bridge Joint Repair - Waiale Gulch Bridge	48	L.F.	$ _____	$ _____
520.3200	Removal and Repair of the Bottom Plate Irons - Waiale Gulch Bridge	F.A.	F.A.	F.A.	$ 20,000.00

PROPOSAL SCHEDULE

SEISMIC RETROFIT OF WAIALE GULCH BRIDGE

ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
577.3100	Externally Bonded Carbon Fiber Reinforced Polymer (CFRP) Composite System	L.S.	L.S.	L.S.	$ _____
577.3200	Carbon Fiber Reinforced Polymer Anchors	L.S.	L.S.	L.S.	$ _____
577.3300	Finish for CFRP System	L.S.	L.S.	L.S.	$ _____
602.3100	Reinforcing Steel for Corbel	L.S.	L.S.	L.S.	$ _____
602.3200	Reinforcing Steel for Tie Slab	L.S.	L.S.	L.S.	$ _____
602.3300	Reinforcing Steel for Anchor Beam	L.S.	L.S.	L.S.	$ _____
602.3400	Reinforcing Steel for Pier Cap	L.S.	L.S.	L.S.	$ _____
602.3500	Reinforcing Steel for Built Up Diaphragms	L.S.	L.S.	L.S.	$ _____
602.3600	Reinforcing Steel for Creep Blocks	L.S.	L.S.	L.S.	$ _____
602.3700	Reinforcing Steel for Timber Bumper Repair	L.S.	L.S.	L.S.	$ _____
621.3010	Inventory of Invasive Species before Construction - Waiale Gulch Bridge	L.S.	L.S.	L.S.	$ _____
621.3020	Invasive Species Removal Plan - Waiale Gulch Bridge	F.A.	F.A.	F.A.	$ 5,000.00

PROPOSAL SCHEDULE

SEISMIC RETROFIT OF WAIALE GULCH BRIDGE

ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
621.3030	Removal of Plants and Animals Established before Physical Construction or Site Work, Post-removal Monitoring - Waiale Gulch Bridge	F.A.	F.A.	F.A.	$ 20,000.00
621.3040	Monitoring of Invasive Species during and after-Construction - Waiale Gulch Bridge	L.S.	L.S.	L.S.	$
621.3050	Post-Construction Inventory Prior to Returning the Site to the State - Waiale Gulch Bridge	L.S.	L.S.	L.S.	$
629.3015	4-Inch Double Pavement Striping (Type I Tape or Thermoplastic Extrusion) - Waiale Gulch Bridge	165	LF	$	$
629.3025	6-Inch Pavement Striping (Type I Tape or Thermoplastic Extrusion) - Waiale Gulch Bridge	330	LF	$	$
629.3030	Type C Pavement Marker - Waiale Gulch Bridge	8	Each	$	$
629.3040	Type D Pavement Marker - Waiale Gulch Bridge	8	Each	$	$
636.3000	Additional E-Construction Programs, additional licenses or additional equipment	FA	FA	FA	$ 10,000.00
645.3010	Traffic Control - Waiale Gulch Bridge	L.S.	L.S.	L.S.	$
645.3020	Additional Police Officers, Additional Traffic Control Devices, and Advertisement - Waiale Gulch Bridge	FA	FA	FA	$ 40,000.00

PROPOSAL SCHEDULE

SEISMIC RETROFIT OF WAIALE GULCH BRIDGE

ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
648.3000	Field-Posted Drawings - Waiale Gulch Bridge	L.S.	L.S.	L.S.	$
657.3010	Furnishing Soil Nail Drilling and Grouting Equipment - Waiale Gulch Bridge	L.S.	L.S.	L.S.	$
657.3020	Production Soil Nails - Waiale Gulch Bridge	360	L.F.	$	$
657.3030	Pre-Production Verification Test of Sacrificial Soil Nails - Waiale Gulch Bridge	1	Each	$	$
657.3040	Proof Test of Production Soil Nails - Waiale Gulch Bridge	2	Each	$	$
671.3000	Protection of Endangered Species - Waiale Gulch Bridge	FA	FA	FA	$ 20,000.00
696.1000	Field Office Trailer (Not to Exceed $50,000.00)	L.S.	L.S.	L.S.	$
699.3000	Mobilization (Not to Exceed 6 Percent of the Sum of All Items Excluding the Bid Price of this Item) - Waiale Gulch Bridge	L.S.	L.S.	L.S.	$
SUBTOTAL BID ITEMS - Waiale Gulch Bridge					$

PROPOSAL SCHEDULE

SEISMIC RETROFIT OF ALAE (NAALAE GULCH) BRIDGE

ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
201.1010	Clearing and Grubbing - Alae Bridge	0.4	Acre	$	$
202.1000	Clean Existing Bearings	L.S.	L.S.	L.S.	$
202.1500	Removal of Debris from Beneath the Bridges - Alae Bridge	F.A.	F.A.	F.A.	$ 20,000.00
203.1010	Roadway Excavation - Alae Bridge	14	C.Y.	$	$
205.1010	Structure Excavation for Abutment No. 1	71	C.Y.	$	$
205.1020	Structure Excavation for Abutment No. 2	51	C.Y.	$	$
205.1300	Lightweight Cellular Concrete Backfill for Abutment No. 1	52	C.Y.	$	$
205.1400	Lightweight Cellular Concrete Backfill for Abutment No. 2	28	C.Y.	$	$
206.1000	Removal of Loose Material	5	C.Y.	$	$
209.1010	Installation, Maintenance, Monitoring, and Removal of BMP - Alae Bridge	L.S.	L.S.	L.S.	$
209.1020	Additional Water Pollution, Dust, and Erosion Control	F.A.	F.A.	F.A.	$ 50,000.00
301.1110	Hot Mix Asphalt Base Course - Alae Bridge	11	TONS	$	$
305.1110	Aggregate Subbase - Alae Bridge	9	C.Y.	$	$
313.1000	Filter Fabric (Mirafi FW404)	20	S.Y.	$	$

PROPOSAL SCHEDULE

SEISMIC RETROFIT OF ALAE (NAALAE GULCH) BRIDGE

ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
401.1410	PMA Pavement, Mix. No. IV - Alae Bridge	57	Tons	$ _____	$ _____
401.1510	Tensar Rapid Repair PG100 - Alae Bridge	480	S.Y.	$ _____	$ _____
415.1410	Cold Planing - Alae Bridge	370	S.Y.	$ _____	$ _____
503.1100	Concrete for Corbel	L.S.	L.S.	L.S.	$ _____
503.1200	Concrete for Tie Slab	L.S.	L.S.	L.S.	$ _____
503.1300	Concrete for Anchor Beam	L.S.	L.S.	L.S.	$ _____
503.1400	Concrete for Built Up Diaphragms	L.S.	L.S.	L.S.	$ _____
503.1500	Concrete for Creep Blocks	L.S.	L.S.	L.S.	$ _____
508.1000	Cement Rubble Masonry	L.S.	L.S.	L.S.	$ _____
510.1100	Riprap, Class III	40	C.Y.	$ _____	$ _____
510.1200	Partially Grouted Riprap, Class IV	30	C.Y.	$ _____	$ _____
520.1100	Bridge Joint Repair - Alae Bridge	44	L.F.	$ _____	$ _____
520.1200	Removal and Repair of the Bottom Plate Irons - Alae Bridge	F.A.	F.A.	F.A.	$ 20,000.00
602.1100	Reinforcing Steel for Corbel	L.S.	L.S.	L.S.	$ _____

PROPOSAL SCHEDULE

SEISMIC RETROFIT OF ALAE (NAALAE GULCH) BRIDGE

ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
602.1200	Reinforcing Steel for Tie Slab	L.S.	L.S.	L.S.	$
602.1300	Reinforcing Steel for Anchor Beam	L.S.	L.S.	L.S.	$
602.1400	Reinforcing Steel for Built Up Diaphragms	L.S.	L.S.	L.S.	$
602.1500	Reinforcing Steel for Creep Blocks	L.S.	L.S.	L.S.	$
621.1010	Inventory of Invasive Species before Construction - Alae Bridge	L.S.	L.S.	L.S.	$
621.1020	Invasive Species Removal Plan - Alae Bridge	F.A.	F.A.	F.A.	$ 5,000.00
621.1030	Removal of Plants and Animals Established before Physical Construction or Site Work, Post-removal Monitoring - Alae Bridge	F.A.	F.A.	F.A.	$ 20,000.00
621.1040	Monitoring of Invasive Species during and after-Construction - Alae Bridge	L.S.	L.S.	L.S.	$
621.1050	Post-Construction Inventory Prior to Returning the Site to the State - Alae Bridge	L.S.	L.S.	L.S.	$
629.1015	4-Inch Double Pavement Striping (Type I Tape or Thermoplastic Extrusion) - Alae Bridge	200	LF	$	$
629.1025	6-Inch Pavement Striping (Type I Tape or Thermoplastic Extrusion) - Alae Bridge	400	LF	$	$

PROPOSAL SCHEDULE

SEISMIC RETROFIT OF ALAE (NAALAE GULCH) BRIDGE

ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
629.1030	Type C Pavement Marker - Alae Bridge	10	Each	$ _____	$ _____
629.1040	Type D Pavement Marker - Alae Bridge	10	Each	$ _____	$ _____
645.1010	Traffic Control - Alae Bridge	L.S.	L.S.	L.S.	$ _____
645.1020	Additional Police Officers, Additional Traffic Control Devices, and Advertisement - Alae Bridge	FA	FA	FA	$ 40,000.00
648.1000	Field-Posted Drawings - Alae Bridge	L.S.	L.S.	L.S.	$ _____
657.1010	Furnishing Soil Nail Drilling and Grouting Equipment - Alae Bridge	L.S.	L.S.	L.S.	$ _____
657.1020	Production Soil Nails - Alae Bridge	240	L.F.	$ _____	$ _____
657.1030	Pre-Production Verification Test of Sacrificial Soil Nails - Alae Bridge	1	Each	$ _____	$ _____
657.1040	Proof Test of Production Soil Nails - Alae Bridge	2	Each	$ _____	$ _____
671.1000	Protection of Endangered Species - Alae Bridge	FA	FA	FA	$ 20,000.00
699.1000	Mobilization (Not to Exceed 6 Percent of the Sum of All Items Excluding the Bid Price of this Item) - Alae Bridge	L.S.	L.S.	L.S.	$ _____
SUBTOTAL BID ITEMS - Alae (Naalae Gulch) Bridge					$ _____

PROPOSAL SCHEDULE

SEISMIC RETROFIT OF PULEHU GULCH (POHAKUOKALA) BRIDGE

ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
201.2010	Clearing and Grubbing - Pulehu Gulch Bridge	0.2	Acre	$	$
202.2000	Clean Existing Bearings	L.S.	L.S.	L.S.	$
202.2500	Removal of Debris from Beneath the Bridges - Pulehu Gulch Bridge	F.A.	F.A.	F.A.	$ 20,000.00
203.2010	Roadway Excavation - Pulehu Gulch Bridge	22	C.Y.	$	$
205.2010	Structure Excavation for Abutment No. 1	32	C.Y.	$	$
205.2020	Structure Excavation for Abutment No. 2	32	C.Y.	$	$
209.2010	Installation, Maintenance, Monitoring, and Removal of BMP - Pulehu Gulch Bridge	L.S.	L.S.	L.S.	$
209.2020	Additional Water Pollution, Dust, and Erosion Control - Pulehu Gulch Bridge	F.A.	F.A.	F.A.	$ 40,000.00
301.2110	Hot Mix Asphalt Base Course - Pulehu Gulch Bridge	20	TONS	$	$
305.2110	Aggregate Subbase - Pulehu Gulch Bridge	14	C.Y.	$	$
401.2410	PMA Pavement, Mix. No. IV - Pulehu Gulch Bridge	43	Tons	$	$
401.2510	Tensar Rapid Repair PG100 - Pulehu Gulch Bridge	380	S.Y.	$	$
415.2410	Cold Planing - Pulehu Gulch Bridge	270	S.Y.	$	$

PROPOSAL SCHEDULE

SEISMIC RETROFIT OF PULEHU GULCH (POHAKUOKALA) BRIDGE

ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
503.2100	Concrete for Corbel	L.S.	L.S.	L.S.	$
503.2200	Concrete for Tie Slab	L.S.	L.S.	L.S.	$
503.2300	Concrete for Anchor Beam	L.S.	L.S.	L.S.	$
503.2400	Concrete for Built Up Diaphragms	L.S.	L.S.	L.S.	$
503.2500	Concrete for Creep Blocks	L.S.	L.S.	L.S.	$
520.2100	Bridge Joint Repair - Pulehu Gulch Bridge	44	L.F.	$	$
520.2200	Removal and Repair of the Bottom Plate Irons - Pulehu Gulch Bridge	F.A.	F.A.	F.A.	$ 20,000.00
602.2100	Reinforcing Steel for Corbel	L.S.	L.S.	L.S.	$
602.2200	Reinforcing Steel for Tie Slab	L.S.	L.S.	L.S.	$
602.2300	Reinforcing Steel for Anchor Beam	L.S.	L.S.	L.S.	$
602.2400	Reinforcing Steel for Built Up Diaphragms	L.S.	L.S.	L.S.	$
602.2500	Reinforcing Steel for Creep Blocks	L.S.	L.S.	L.S.	$
621.2010	Inventory of Invasive Species before Construction - Pulehu Gulch Bridge	L.S.	L.S.	L.S.	$
621.2020	Invasive Species Removal Plan - Pulehu Gulch Bridge	F.A.	F.A.	F.A.	$ 5,000.00

PROPOSAL SCHEDULE

SEISMIC RETROFIT OF PULEHU GULCH (POHAKUOKALA) BRIDGE

ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
621.2030	Removal of Plants and Animals Established before Physical Construction or Site Work, Post-removal Monitoring - Pulehu Gulch Bridge	F.A.	F.A.	F.A.	$ 20,000.00
621.2040	Monitoring of Invasive Species during and after-Construction - Pulehu Gulch Bridge	L.S.	L.S.	L.S.	$
621.2050	Post-Construction Inventory Prior to Returning the Site to the State - Pulehu Gulch Bridge	L.S.	L.S.	L.S.	$
629.2015	4-Inch Double Pavement Striping (Type I Tape or Thermoplastic Extrusion) - Pulehu Gulch Bridge	205	LF	$	$
629.2025	6-Inch Pavement Striping (Type I Tape or Thermoplastic Extrusion) - Pulehu Gulch Bridge	405	LF	$	$
629.2030	Type C Pavement Marker - Pulehu Gulch Bridge	10	Each	$	$
629.2040	Type D Pavement Marker - Pulehu Gulch Bridge	10	Each	$	$
645.2010	Traffic Control - Pulehu Gulch Bridge	L.S.	L.S.	L.S.	$
645.2020	Additional Police Officers, Additional Traffic Control Devices, and Advertisement - Pulehu Gulch Bridge	FA	FA	FA	$ 40,000.00
648.2000	Field-Posted Drawings - Pulehu Gulch Bridge	L.S.	L.S.	L.S.	$
657.2010	Furnishing Soil Nail Drilling and Grouting Equipment - Pulehu Gulch Bridge	L.S.	L.S.	L.S.	$

PROPOSAL SCHEDULE

SEISMIC RETROFIT OF PULEHU GULCH (POHAKUOKALA) BRIDGE

ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
657.2020	Production Soil Nails - Pulehu Gulch Bridge	280	L.F.	$ _____	$ _____
657.2030	Pre-Production Verification Test of Sacrificial Soil Nails -Pulehu Gulch Bridge	1	Each	$ _____	$ _____
657.2040	Proof Test of Production Soil Nails - Pulehu Gulch Bridge	2	Each	$ _____	$ _____
671.2000	Protection of Endangered Species - Pulehu Gulch Bridge	FA	FA	FA	$ 20,000.00
699.2000	Mobilization (Not to Exceed 6 Percent of the Sum of All Items Excluding the Bid Price of this Item) - Pulehu Gulch Bridge	L.S.	L.S.	L.S.	$ _____
SUBTOTAL BID ITEMS - Pulehu Gulch (Pohakuokala) Bridge					$ _____

PROPOSAL SCHEDULE - SUMMARY

	AMOUNT
SUBTOTAL BID ITEMS - Waiale Gulch Bridge	$ _____
SUBTOTAL BID ITEMS - Alae (Naalae Gulch) Bridge	$ _____
SUBTOTAL BID ITEMS - Pulehu Gulch (Pohakuokala) Bridge	$ _____
TOTAL AMOUNT FOR COMPARISON OF BIDS	$ _____

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0377(008)	2026	ADD. 3	131

GENERAL NOTES:

⚠ 1. The scope of work consists of seismic retrofit of the Waiale Gulch, Alae, and Pulehu Gulch Bridges. Improvements include removal of debris from beneath the bridges; wrapping the tie beams with carbon fiber; removal of a portion of the backfill from behind the abutments, installing soil nails, backfilling with aggregate base and lightweight cellular concrete (LCC), installing concrete tie slabs and corbels; installation of creep blocks and bearing pads; making modifications to the bent caps and diaphragms; installing pavement, pavement markers and temporary erosion control measures; installing scour countermeasures near Alae Bridge Pier 1; and traffic control.

2. The Contractor shall reference the "Hawaii Standard Specifications for Road and Bridge, dated 2005."

3. The Contractor is reminded of the requirements of Subsection 105.16(A) - Subcontract Requirements, which requires him to perform work to not less than 30 percent of the total contract cost less deductible items. Noncompliance with this Subsection may be grounds for rejection of bid.

4. The Contractor's attention is directed to the following Sections of the Special Provisions: Subsection 104.09-Maintenance of Traffic; Subsection 105.09 - Coordination Between Contractors; Subsection 107.06 Contractor Duty Regarding Public Convenience, Subsection 107.11 - Safety: Accident Prevention; Subsection 107.12 - Protection of Persons and Property; and Section 645 - Work Zone Traffic Control.

5. At the end of each day's work, the Contractor shall remove all equipment and other obstructions to permit free and safe passage of public traffic.

6. The existence and location of underground utilities, manholes, monuments, traffic signs and structures as shown on the plans are from the latest available data but the accuracy is not guaranteed. The encountering of other obstacles during the course of work is possible. The Contractor shall make an independent check on the ground by probing and/or with the various utility companies and governmental agencies to verify the exact locations and depths of the existing utilities. The Contractor shall exercise proper care in excavating in the area. Whenever connections of new utilities to existing utilities are shown on the plans, the Contractor shall expose the existing lines at the proposed connections to verify their locations and depths prior to excavating for the new lines. The Contractor shall be held liable for any damages incurred to the existing facilities and/or improvements as a result of his operations.

7. The Contractor shall notify in writing, the Maui County Department of Transportation, Maui BUS, 2145 Kaohu Street #102, Wailuku, Maui, 96793 (Phone: 808 270-7511) two (2) weeks prior to any paving operations.

8. The Contractor shall notify the Engineer in writing two (2) weeks prior to starting construction operations.

9. The Contractor shall remove and dispose of all existing raised pavement markers thermoplastic line markings, traffic tapes and epoxy adhesives prior to the overlaying of Asphalt Concrete. This work shall be considered incidental to the various Asphalt Concrete Pavement items and will not be paid for separately.

10. Smooth riding connections shall be constructed at all limits of project, including the beginning and end of project, connecting approaches, side streets, walkways and driveways as shown on the plans and/or as directed by the Engineer. This work shall be considered incidental to the various contract items and will not be paid for separately.

11. Existing drainage system shall be functional at all times during construction. The Contractor is to furnish materials, equipment, labor, tools and incidentals necessary to maintain flow. This work shall be considered incidental to various contract items and shall not be paid for separately.

12. The Contractor shall provide for traffic and pedestrian access to and from all existing side streets at all times.

13. All saw cutting work including vacuum of slurry shall be considered incidental to the various Asphalt Concrete Pavement items and will not be paid for separately.

14. Contractor shall dispose or deliver any removed material at no cost to the State.

15. At the location where the new pavements tie into the existing pavement, the Contractor shall check the existing and design grades to ensure a smooth riding connection. The Contractor shall saw cut the existing pavement in the transverse direction to provide a neat connection.

16. Work required to complete the project but not itemized specifically in the proposal shall be considered incidental to the various contract items and shall not be paid for separately.

17. The Contractor shall comply with the directives of the State of Hawaii Occupational Safety and Health Law (DOSH). Any citation (fine) received by the State for noncompliance by the Contractor shall be deducted from the progress payment.

18. For verifying the location of underground ductlines and for assistance in providing proper support and protection of underground ductlines, the Contractor is to contact Maui Electric Co. Underground Division at 1-866-423-7287 a minimum of 72 hours in advance.

19. The Contractor shall exercise extreme caution when the excavation and construction crosses or is in close proximity of underground telephone and signal cable facilities and shall maintain adequate clearance for his equipment while working close to and/or under overhead facilities. The Contractor shall be held liable for any damages incurred to the existing utilities as a result of his operations. All damaged portions shall be replaced in accordance with the Standards and Specifications of the affected utility company at the Contractor's expense.

20. Tack Coat shall be incidental to the various Asphalt Concrete Pavement items and will not be paid for separately.

21. When trench excavation is adjacent to existing structures or facilities, the Contractor is responsible for properly sheeting and bracing the excavation and stabilizing the existing ground to render it safe and secure from possible slides, cave-ins, and settlement, and facilities with beams, struts, or underpinning to fully protect it from damage. This work shall be considered incidental to various contract items.

22. All existing utilities, whether or not shown on the plans, shall be protected at all times by the Contractor during construction unless specified on the plans to be abandoned. Any damage to the existing utilities shall be repaired and paid for by the Contractor.

ORIGINAL PLAN
NOTE BOOK
SURVEY PLOTTED BY
DRAWN BY
TRACED BY
DESIGNED BY
QUANTITIES BY
CHECKED BY
DATE
No.

10/9/26	⚠ Revised note
Date	Revision

LICENSED PROFESSIONAL ENGINEER
RANDALL M. URASAKI
No. 7269-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

SIGNATURE 04/30/28 EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GENERAL NOTES

SEISMIC RETROFIT, HALEAKALA HIGHWAY ROUTE 377
Waiale Gulch, Alae (Naalae Gulch) and
Pulehu Gulch (Pohakuokala) Bridges
Federal-Aid Project No. STP-0377(008)

Scale: None Date: July 2026

SHEET No. GN-1 OF 11 SHEETS

ADD. 3

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0377(008)	2026	ADD. 5	131

GRADING NOTES:

1. All grading work shall comply with these notes and requirements of the County of Maui Grading and Grubbing Permit.
2. No Contractor shall perform any grading operation so as to cause falling rocks, soil or debris in any form to fall, slide or flow onto adjoining properties, streets or natural watercourses. Should such violations occur, the costs incurred for any remedial action shall be payable by the Contractor.
3. The Contractor, at his own expense, shall keep the project area and surrounding area free from dust nuisance. The work shall be in conformance with the Air Pollution Control Standards contained in The Hawaii Administrative Rules, Title 11, Chapter 60.1, "Air Pollution Control".
4. The underground pipes, cables or ductlines known to exist by the Engineer from his search of records are indicated on the plans. The Contractor shall verify the locations and depths of the facilities and exercise proper care in excavating in the area. Wherever connections of new utilities are shown on the plans, the Contractor shall expose the existing lines at the proposed connections to verify their locations and depths prior to excavation for the new lines.
5. Adequate provisions shall be made to prevent surface waters from damaging the cut face of an excavation or the sloped surfaces of a fill. Furthermore, adequate provisions shall be made to prevent sediment-laden runoff from leaving the site.
6. All slopes and exposed areas shall be sodded or planted as soon as final grades have been established. Planting shall not be delayed until all grading work has been completed. Grading to final grade shall be continuous, and any area within which work has been interrupted or delayed shall be planted.
7. Fills on slopes steeper than 5:1 shall be keyed.
8. The Engineer shall be informed of the location of the borrow/disposal site for the project when the application for a grading permit is made. The borrow/disposal site must also fulfill the requirements of the grading ordinance.
9. No grading work shall be done on Saturdays, Sundays and holidays at any time without prior notice to the District Engineer, provided such grading work is also in conformance with The Community Noise Control Standard Contained in The Hawaii Administrative Rules, Title 11 Chapter 46, "Community Noise Control".
10. The limits of the area to be graded shall be flagged before the commencement of the grading work.
11. All grading operations shall be performed in conformance with the applicable provisions of the water pollution control and water quality standards contained in Hawaii Administrative Rules, Title 11 Chapter 55, "Water Pollution Control" and Title 11 Chapter 54, "Water Quality Standards" and if applicable, the NPDES permit for the project.
12. Where applicable and feasible the measures to control erosion and other pollutants shall be in place before any earth moving phase of the grading is initiated.
13. Temporary erosion controls shall not be removed before permanent erosion controls are in-place and established.
14. Temporary erosion control procedures shall be submitted for approval prior to application for grading permit.
15. If the grading work involves contaminated soil, then all grading work shall be done in conformance with applicable State and Federal requirements.
16. Non-compliance to any of the above requirements shall mean immediate suspension of all work, and remedial work shall commence immediately. All remedial work shall be billed to the Contractor. All remedial work shall be at no cost to the State. Furthermore, violators shall be subjected to administrative, civil and/or criminal penalties.
17. Prior to placement of any fill, the existing ground shall be scarified to a depth of six inches and compacted to a minimum of 90 percent compaction as determined by AASHTO T-180.
18. After clearing and grubbing, additional roots and other vegetation found in the upper 6 to 8 inches shall be removed.
19. Construction observation and field density testing shall be performed by the State. Where test and/or observations indicate that the density of uniformity of any portion of the fill is inadequate, that portion shall be removed and reworked until the required density or uniformity has been satisfactorily obtained.

ORIGINAL PLAN
NOTE BOOK ____ No. ____
SURVEY PLOTTED BY ____ DATE
DRAWN BY
TRACED BY
DESIGNED BY
QUANTITIES BY
CHECKED BY

10/9/26	⚠ Revised note
Date	Revision

RANDALL M. URASAKI
LICENSED PROFESSIONAL ENGINEER
No. 7269-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

04/30/28
SIGNATURE — EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GENERAL NOTES

SEISMIC RETROFIT, HALEAKALA HIGHWAY ROUTE 377
Waiale Gulch, Alae (Naalae Gulch) and
Pulehu Gulch (Pohakuokala) Bridges
Federal-Aid Project No. STP-0377(008)

Scale: None — Date: July 2026

SHEET No. GN-3 OF 11 SHEETS

ADD. 5

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0377(008)	2026	ADD. 6	131

CONSTRUCTION NOTES (WITHIN COUNTY RIGHT-OF-WAY):

1. Contractor shall obtain a permit to Perform Work on County Highways from the Development Services Administration two weeks prior to the commencement of work.
2. Standard detail drawings and standard specifications of the Department of Public Works shall be included as part of the construction plans.
3. All construction work shall strictly conform to the latest version of the Hawaii Standard Specifications for Road and Bridge Public Works Construction, and the September 1984 "Standard Details" for Public Works Construction of the Maui Department of Public Works, as amended.
4. If existing utilities, whether or not shown on plans, are damaged during construction, the contractor shall at his own expense be required to repair such utilities.
5. Contractor shall provide, install and maintain all necessary signs, lights, flares, barricades, and other protective devices for the protection, safety and convenience of the public, according to the latest version of the "Manual on Uniform Traffic Control Devices for Streets and Highways", and to the rules and regulations governing the use of traffic control devices at work sites and/or adjacent to public streets and highways adopted by the Highway Safety Coordinator and the U.S. Federal Highway Administration "Manual on Uniform Traffic Control Devices for Highway Construction and Maintenance Operations".
6. The Director of Public Works and/or the Director of the Department of Water Supply has the right to stop construction should any work be found contrary to the approved construction plan or detrimental to the public's interest.
7. The Contractor shall schedule a pre-construction meeting with the Development Services Administration five (5) days prior to commencement of construction.
8. The Contractor shall, at his own expense, keep the project area and surrounding area free from dust nuisance. The work shall be in conformance with Air Pollution Control Standards and Regulations of the State Department of Health and County Grading Ordinance.
9. The Contractor shall remove all silt and debris resulting from his work and deposited in drainage facilities, roadways and other areas. The cost incurred for any necessary remedial action ordered by the Director of Public Works shall be paid by the Contractor.
10. Construction debris and wastes shall be deposited at an appropriate work site. The Contractor shall inform the Director of Public Works of the location of the disposal sites. The disposal site must fulfill the requirements of the grading ordinance.
11. Should historic sites such as walls, platforms, pavements, or mounds, or remains such as artifacts burials, concentration of shell or charcoal be encountered during construction activities, work shall cease immediately in the immediate vicinity of the find and the find shall be protected from further damage. The Contractor and/or landowner shall immediately contact the State Historic Preservation Division (243-5169), which will assess the significance of the find and recommend an appropriate mitigation measure, if necessary.
12. Steel plate warning signs are required for all steel plates in the right-of-way.

TRAFFIC NOTES (WITHIN COUNTY RIGHT-OF-WAY):

1. A permit shall be obtained from the Development Services Administration before work on any portion of a public street or highway may begin. Construction traffic control plans approved by the Development Services Administration must be provided when applying for the permit.
2. ⚠1 The Contractor shall provide, install and maintain all necessary signs and other protective facilities, which shall conform to the "Hawaii Administration Rules Governing the Use of Traffic Control Devices at Work Site on or Adjacent to Public Streets and Highways" adopted by the Director of Transportation, and the U.S. Department of Transportation, Federal Highways Administration, "Manual on Uniform Traffic Control Devices for Streets and Highways, 11th Edition, December 2023 Including Revision 1 dated 2025, Part 6 - Traffic Control."
3. Work on any County street area may be performed only between the hours of 8:30 a.m. to 3:30 p.m., Monday through Friday, unless otherwise permitted by Maui Department of Public Works.
4. During working hours, the Contractor shall provide for through traffic. During non-working hours, all trenches shall be covered with a safe non-skid bridging material and all lanes shall be open to traffic.
5. As required by the Maui Department of Public Works, the Contractor shall provide off-duty police officers to control the flow of traffic.
6. Where pedestrian walkways exist, they shall be maintained in passable condition in accordance with ADAAG 402.1, or other facilities for pedestrians shall be provided. Passage between walkways at intersections shall likewise be provided.
7. Driveways shall be kept open unless the owners of the property using these rights-of way are otherwise provided for satisfactorily.
8. The Contractor shall reference to the approval of the Maui Department of Public Works, all existing traffic signs, posts and pavement markings prior to the commencement of construction. The Contractor shall replace or repair all traffic signs, posts and pavement markings disturbed by his activities.

ORIGINAL PLAN
NOTE BOOK
SURVEY PLOTTED BY ____ DATE
DRAWN BY
TRACED BY
DESIGNED BY
QUANTITIES BY
CHECKED BY
No.

10/9/26	⚠1 Revised note
Date	Revision

RANDALL M. URASAKI
LICENSED PROFESSIONAL ENGINEER
No. 7269-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

SIGNATURE — EXPIRATION DATE OF THE LICENSE: 04/30/28

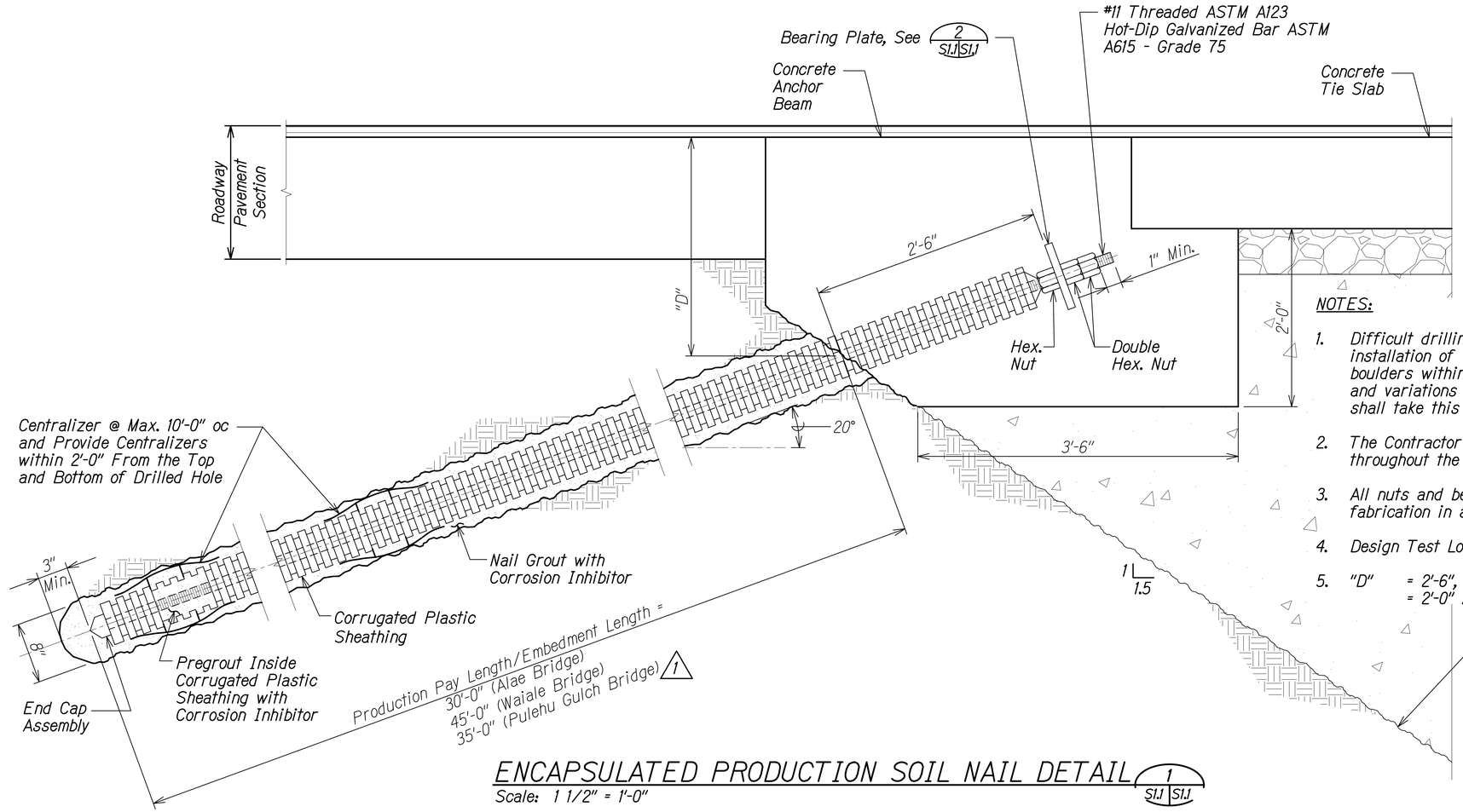
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GENERAL NOTES

SEISMIC RETROFIT, HALEAKALA HIGHWAY ROUTE 377
Waiale Gulch, Alae (Naalae Gulch) and
Pulehu Gulch (Pohakuokala) Bridges
Federal-Aid Project No. STP-0377(008)

Scale: None — Date: July 2026

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0377(008)	2026	ADD. 56	131



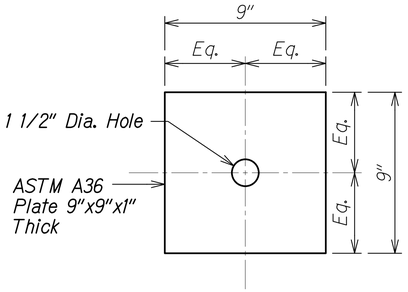
ENCAPSULATED PRODUCTION SOIL NAIL DETAIL

1 — S1.1 | S1.1

Scale: 1 1/2" = 1'-0"

NOTES:

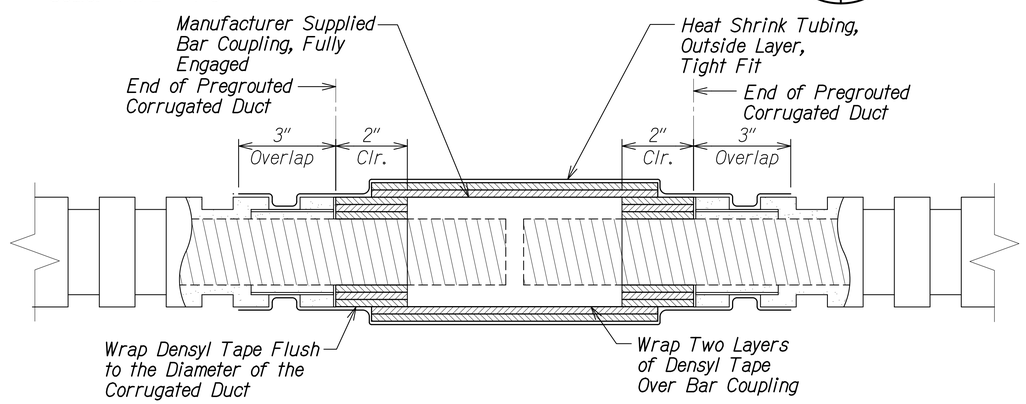
1. Difficult drilling conditions may be encountered during the installation of the soil nails due to the potential of cobbles and boulders within the fill materials anticipated behind the abutments and variations of basalt rock within the subsurface. The Contractor shall take this into consideration during bidding.
2. The Contractor shall be responsible for maintaining an open hole throughout the soil nail installation process.
3. All nuts and bearing plates shall be hot-dip galvanized after fabrication in accordance with ASTM A153 and A123, respectively.
4. Design Test Load (DTL): 40 kips
5. "D" = 2'-6", Typ.
   = 2'-0" Alae Abut. No. 2 and Pulehu Gulch Abut. No. 1



BEARING PLATE DETAIL

2 — S1.1 | S1.1

Scale: 3" = 1'-0"



OPTIONAL COUPLING DETAIL

3 — S1.1 | S1.1 — 1

NTS

DATE	REVISION
10/9/26	1 Add. 2 - Added Detail

ORIGINAL PLAN | NOTE BOOK No. ____

SURVEY PLOTTED BY
DRAWN BY
TRACED BY
DESIGNED BY
QUANTITIES BY
CHECKED BY
DATE

DRAWING NAME: Z:\DOT ONGOING\STP-0377-3 MAUI BRIDGES SEISMIC RETROFIT (NSP\DOT CADD\09-26 ADD REVISIONS\HG-SOIL ADDDWG PLOT TIME: 10:08:26 AM PW

STEPHEN T. PETERS — LICENSED PROFESSIONAL ENGINEER — NO. 17097-S — HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

SIGNATURE — EXPIRATION DATE OF THE LICENSE: 4-30-28

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TYPICAL SOIL NAIL DETAILS

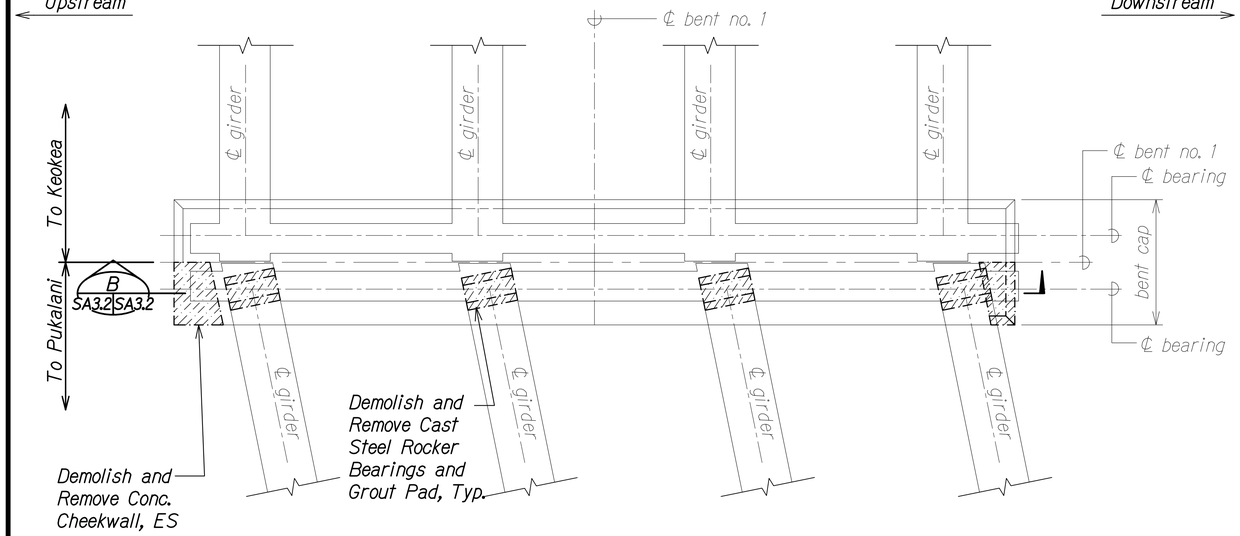
SEISMIC RETROFIT, HALEAKALA HIGHWAY ROUTE 377
Waiale Gulch, Alae (Naalae Gulch) and Pulehu Gulch (Pohakuokala) Bridges
Federal-Aid Project No. STP-0377(008)

Scale: As Noted — Date: July 2026

SHEET No. S1.1 OF 4 SHEETS

ADD. 56

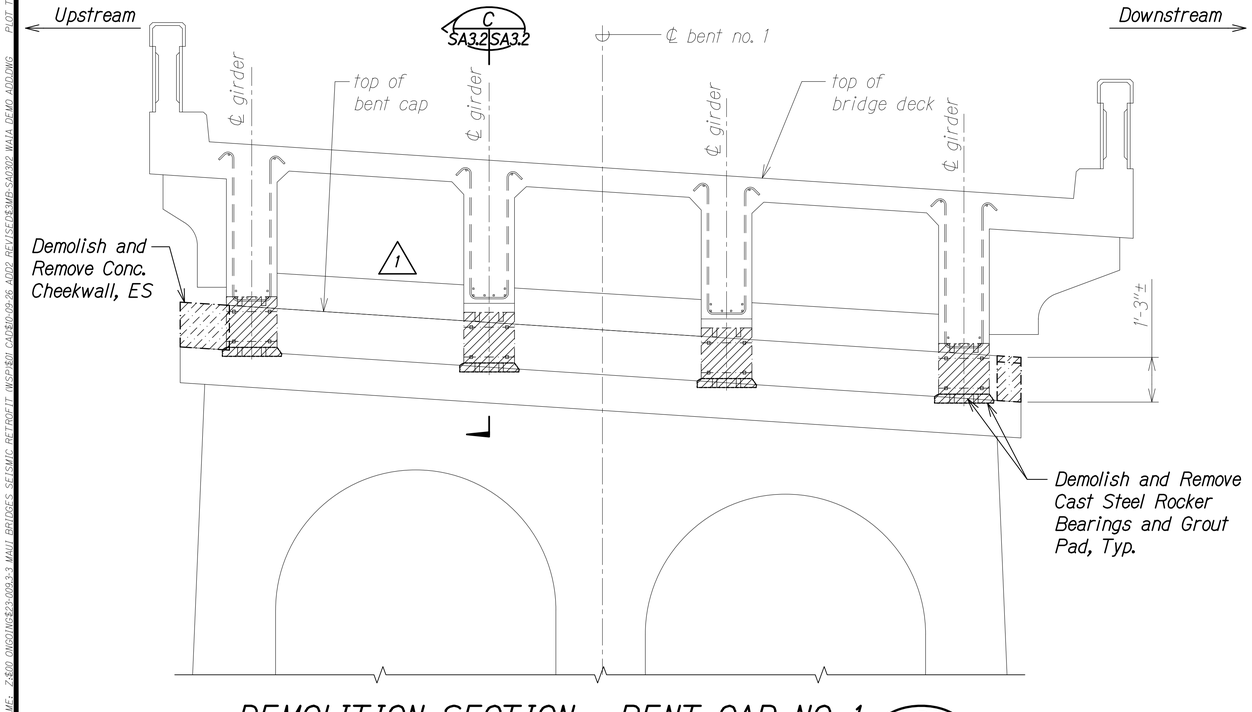
FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0377(008)	2026	ADD. 70	131



DEMOLITION PLAN - BENT CAP NO. 1

Scale: 1/2" = 1'-0"

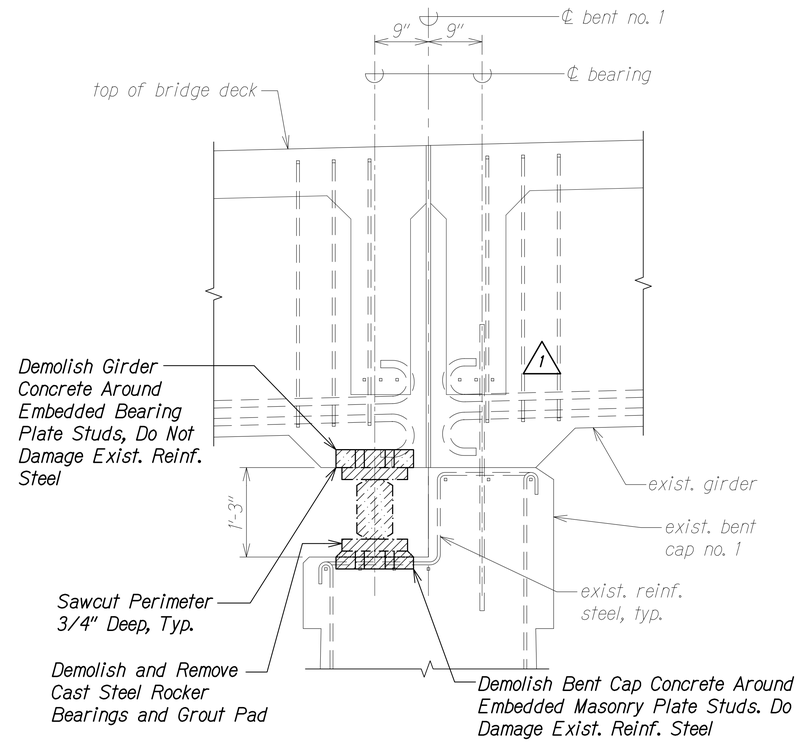
A SA3.2 SA3.2



DEMOLITION PLAN - BENT CAP NO. 1

Scale: 1/2" = 1'-0"

B SA3.2 SA3.2



DEMOLITION SECTION AT BENT NO. 1

Scale: 1" = 1'-0"

C SA3.2 SA3.2

NOTES:

1. Demolition work for cheek walls shall be incidental to removal of existing bearings.
2. Do not damage any existing reinforcing steel.
3. All concrete removed at this girder and bent cap shall be patched with an approved polymer modified repair mortar. Work shall be incidental to removal of existing bearings.

STEPHEN T. PETERS
LICENSED PROFESSIONAL ENGINEER
NO. 17097-S
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

SIGNATURE — EXPIRATION DATE OF THE LICENSE: 4-30-28

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
	DRAWN BY	
NOTE BOOK	TRACED BY	
	DESIGNED BY	
No.	QUANTITIES BY	
	CHECKED BY	

DATE	REVISION
10/9/26	1 Add. 2 - Rvsd. Linework

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

WAIALE GULCH BRIDGE BENT NO. 1
DEMOLITION PLAN AND SECTIONS

SEISMIC RETROFIT, HALEAKALA HIGHWAY ROUTE 377
Waiale Gulch, Alae (Naalae Gulch) and Pulehu Gulch (Pohakuokala) Bridges
Federal-Aid Project No. STP-0377(008)

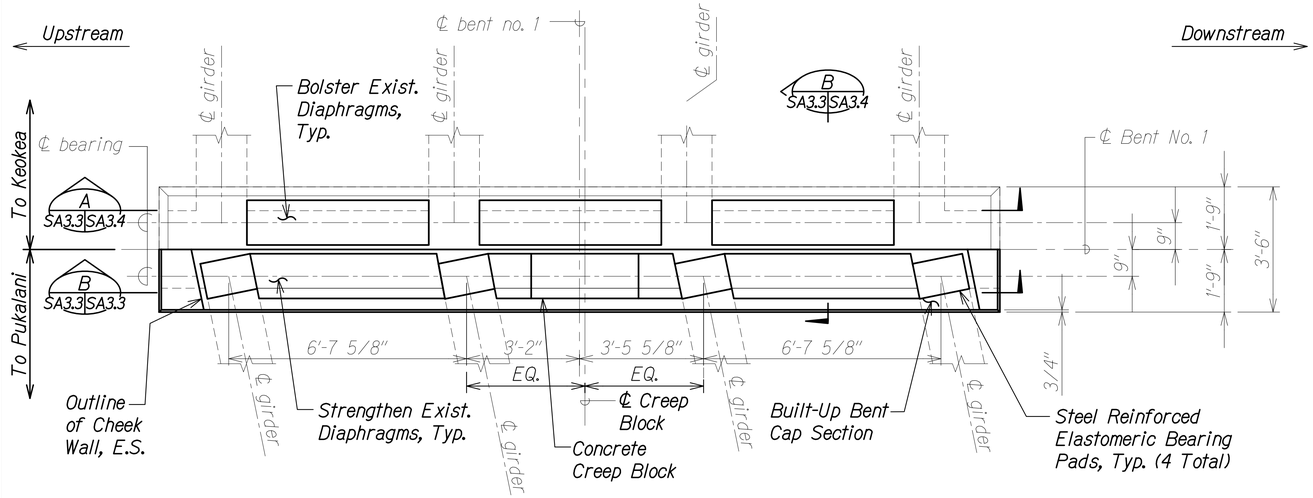
Scale: As Noted — Date: July 2026

SHEET No. SA3.2 OF 17 SHEETS

ADD. 70

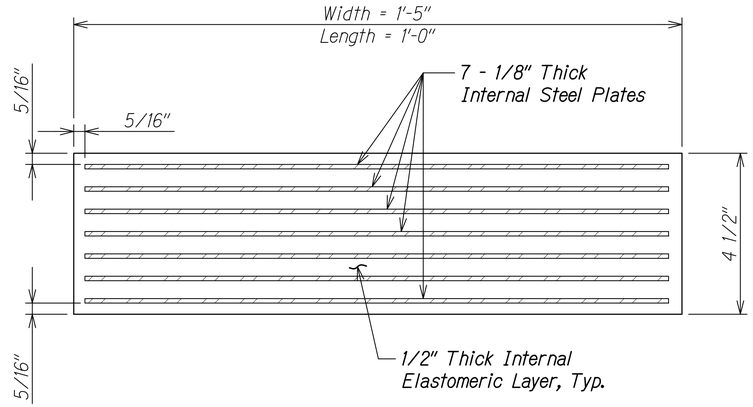
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FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0377(008)	2026	ADD. 71	131



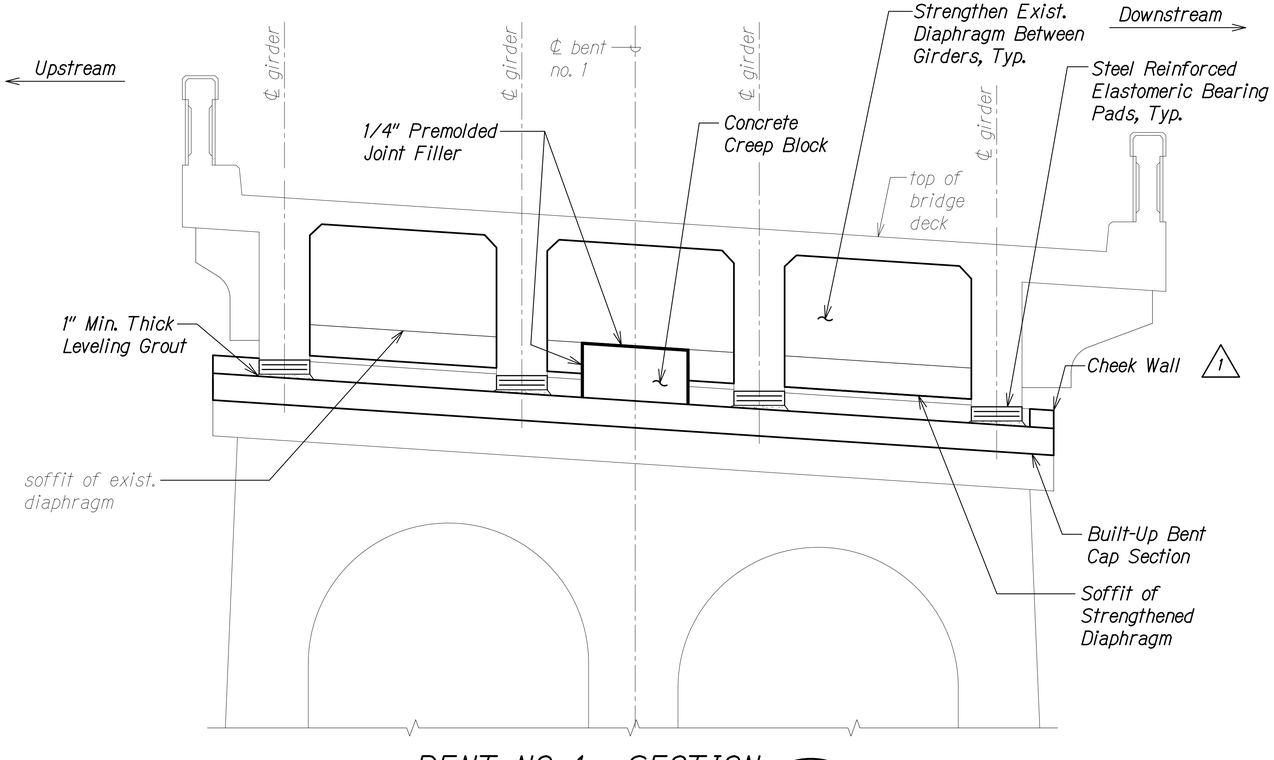
BENT NO. 1 - BENT CAP PLAN (A SA3.3 SA3.3)

Scale: 1/2" = 1'-0"



ELASTOMERIC BEARING DETAIL (1 SA3.3 SA3.3)

Scale: 6" = 1'-0"



BENT NO. 1 - SECTION (B SA3.3 SA3.3)

Scale: 1/2" = 1'-0"

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
	DRAWN BY	
NOTE BOOK	TRACED BY	
	DESIGNED BY	
	QUANTITIES BY	
No.	CHECKED BY	

DRAWING NAME: Z:\BDD ORDINGS\23-003-1 WAI BRIDGES SEISMIC RETROFIT UNSAFE\ CADD\ 09-26 ADD2 REVISED\WB-SA003 WAI BENT 1 PLAN & ELEV ADD2.DWG PLOT TIME: 10:09:26, 4:28 PM

DATE	REVISION
10/9/26	1 Add. 2 - Added Callout

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

WAIALE GULCH BRIDGE BENT NO. 1

PLAN, SECTION, AND DETAIL

SEISMIC RETROFIT, HALEAKALA HIGHWAY ROUTE 377
Waiale Gulch, Alae (Naalae Gulch) and Pulehu Gulch (Pohakuokala) Bridges
Federal-Aid Project No. STP-0377(008)

Scale: As Noted — Date: July 2026

SHEET No. SA3.3 OF 17 SHEETS

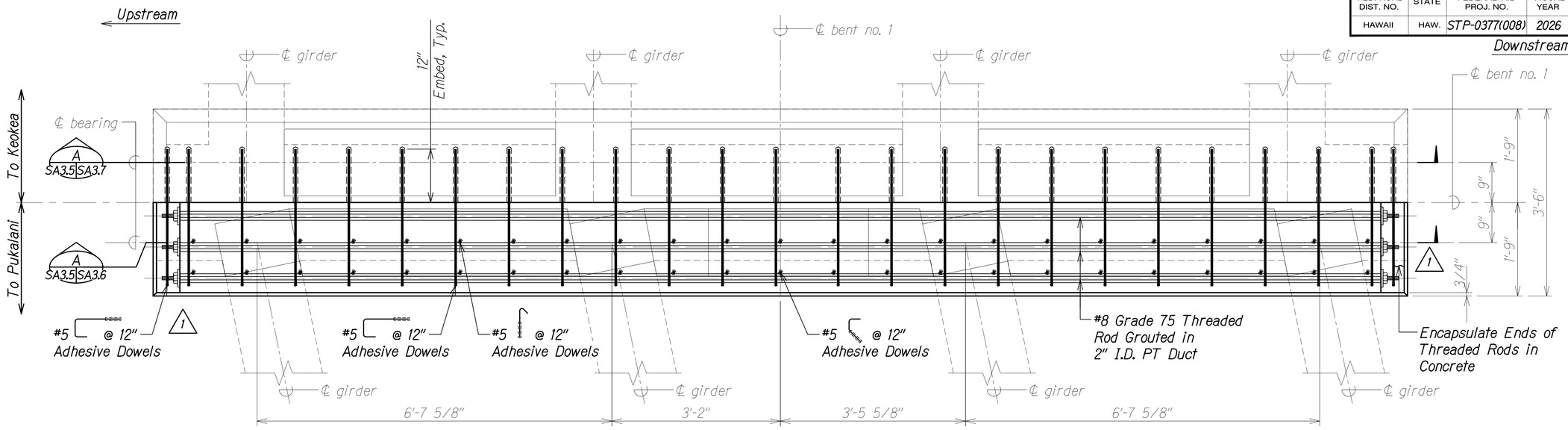
STEPHEN T. PETERS — LICENSED PROFESSIONAL ENGINEER — NO. 17097-S — HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

SIGNATURE — 4-30-28 EXPIRATION DATE OF THE LICENSE

ADD. 71

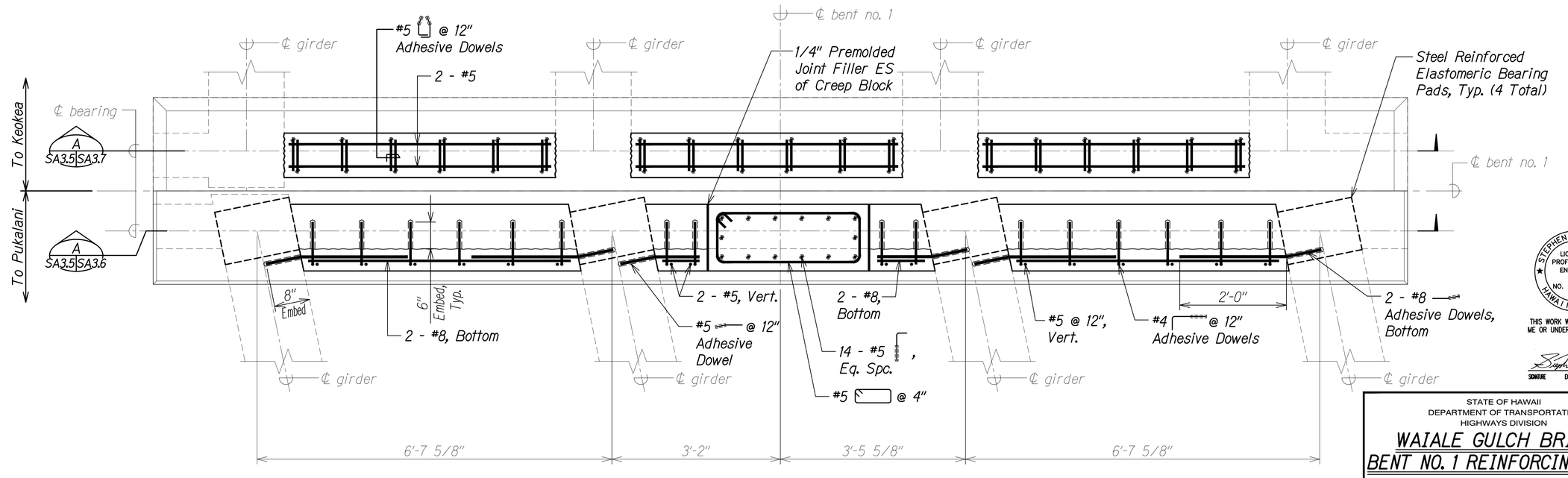
FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0377(008)	2026	ADD. 73	131



BENT NO. 1 - BENT CAP REINFORCING PLAN

Scale: 1" = 1'-0"

A SA3.5 SA3.5



BENT NO. 1 - DIAPHRAGM/CREEP BLOCK REINFORCING PLAN

Scale: 1" = 1'-0"

B SA3.5 SA3.5

ORIGINAL PLAN
NOTE BOOK No.

SURVEY PLOTTED BY
DRAWN BY
TRACED BY
DESIGNED BY
QUANTITIES BY
CHECKED BY
DATE

DRAWING NAME: Z:\DOT\HIGHWAYS\2023\3 HALI BRIDGES SEISMIC RETROFIT IMCP\BF C\2026\09-26 ADD REVISED\WB-S4095 WAIA BENT 1 REINF PLAN ADDING
PLOT TIME: 10:08:26 AM PW

DATE	REVISION
10/9/26	1 Add. 2 - Added Reinforcing

STEPHEN T. PETERS
LICENSED PROFESSIONAL ENGINEER
NO. 17097-S
HAWAII, U.S.A.

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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

WAIALE GULCH BRIDGE
BENT NO. 1 REINFORCING PLANS

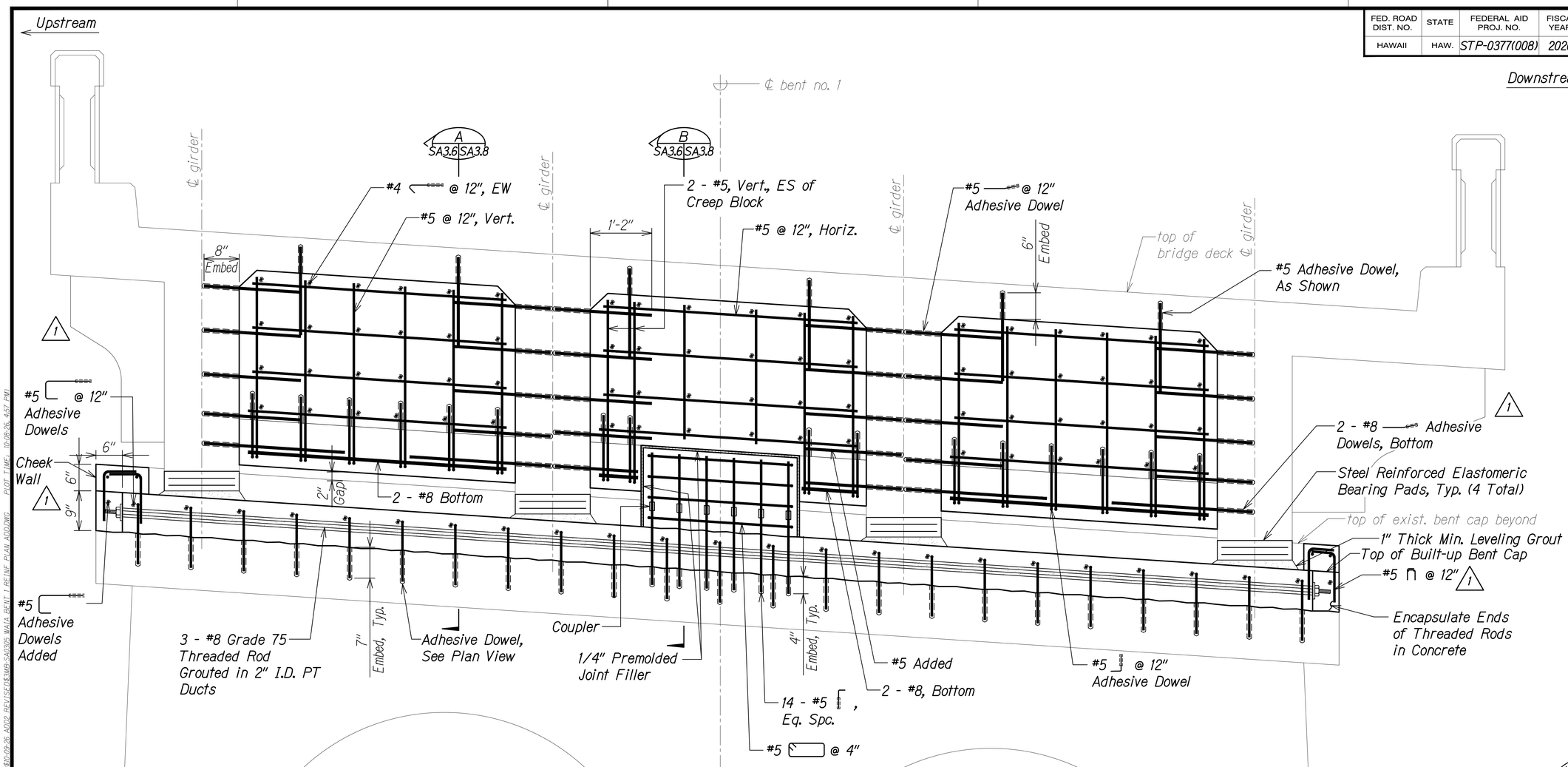
SEISMIC RETROFIT, HALEAKALA HIGHWAY ROUTE 377
Waiale Gulch, Alae (Naalae Gulch) and Pulehu Gulch (Pohakuokala) Bridges
Federal-Aid Project No. STP-0377(008)

Scale: As Noted Date: July 2026

SHEET No. SA3.5 OF 17 SHEETS

ADD. 73

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0377(008)	2026	ADD. 74	131



BENT NO. 1 - REINFORCING SECTION

A SA3.5 SA3.6

Scale: 1" = 1'-0"

DATE	REVISION
10/9/26	1 Add. 2 - Added Reinforcing

ORIGINAL PLAN

NOTE BOOK No.

SURVEY PLOTTED BY
DRAWN BY
TRACED BY
DESIGNED BY
QUANTITIES BY
CHECKED BY
DATE

DRAWING NAME: Z:\DOCUMENTS\093-3 MAUI BRIDGES SEISMIC RETROFIT INSPECTION\09-26 ADD REVISIONS\SA3606 WAIA BENT 1 REINF PLAN ADD.DWG PLOT TIME: 10/09/26 4:57 PM

STEPHEN T. PETERS
LICENSED PROFESSIONAL ENGINEER
NO. 17097-S
HAWAII, U.S.A.

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Stephen Peters 4-30-28
SIGNATURE EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

WAIALE GULCH BRIDGE
BENT NO. 1 REINFORCING SECTION

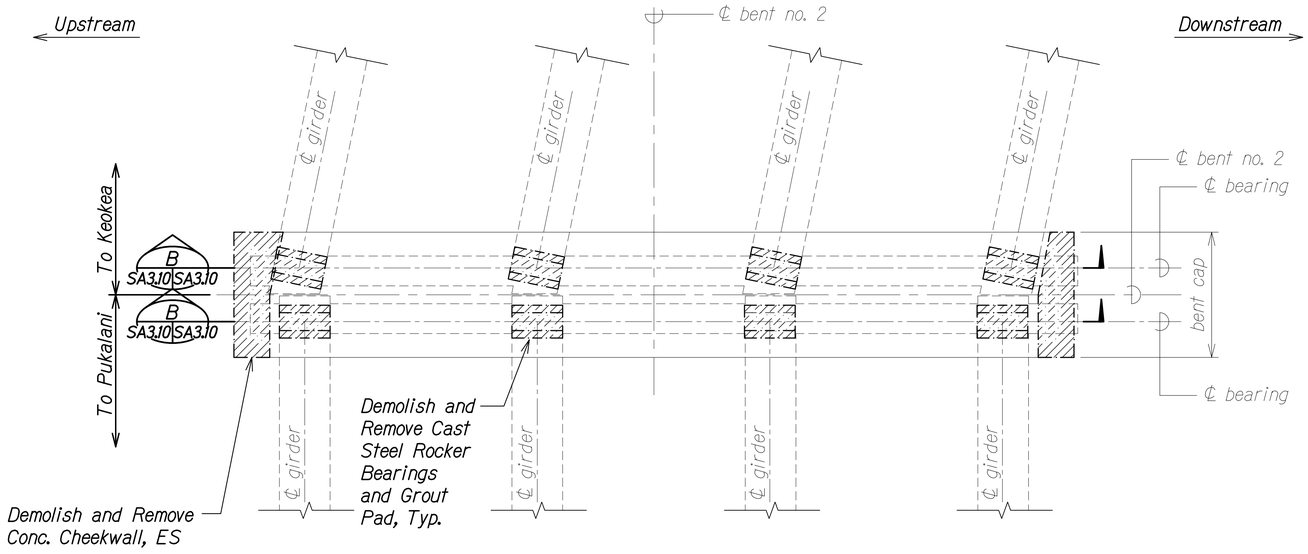
SEISMIC RETROFIT, HALEAKALA HIGHWAY ROUTE 377
Waiale Gulch, Alae (Naalae Gulch) and Pulehu Gulch (Pohakuokala) Bridges
Federal-Aid Project No. STP-0377(008)

Scale: As Noted Date: July 2026

SHEET No. SA3.6 OF 17 SHEETS

ADD. 74

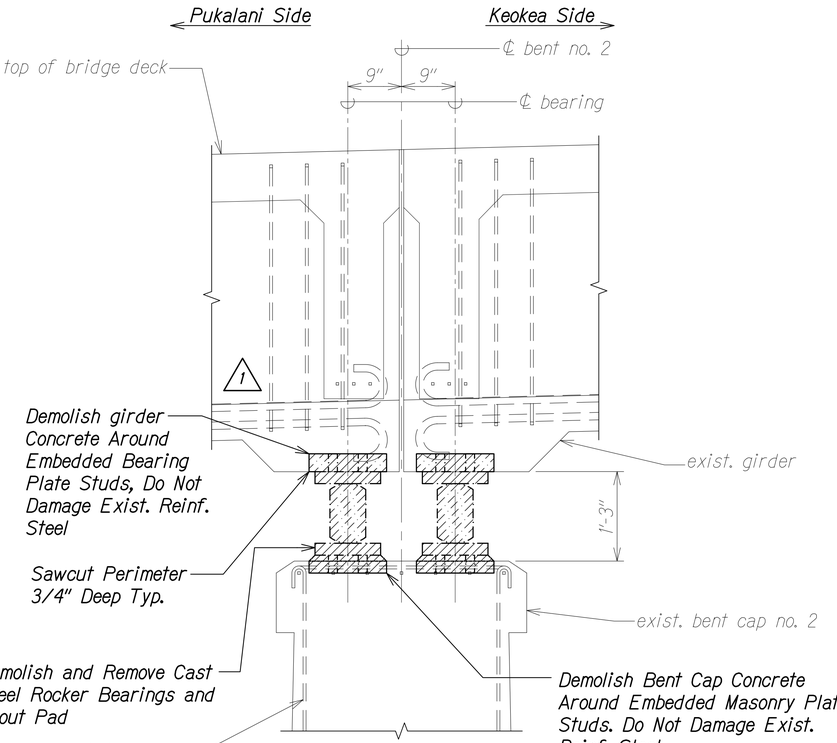
FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0377(008)	2026	ADD. 78	131



DEMOLITION PLAN - BENT CAP NO. 2

Scale: 1/2" = 1'-0"

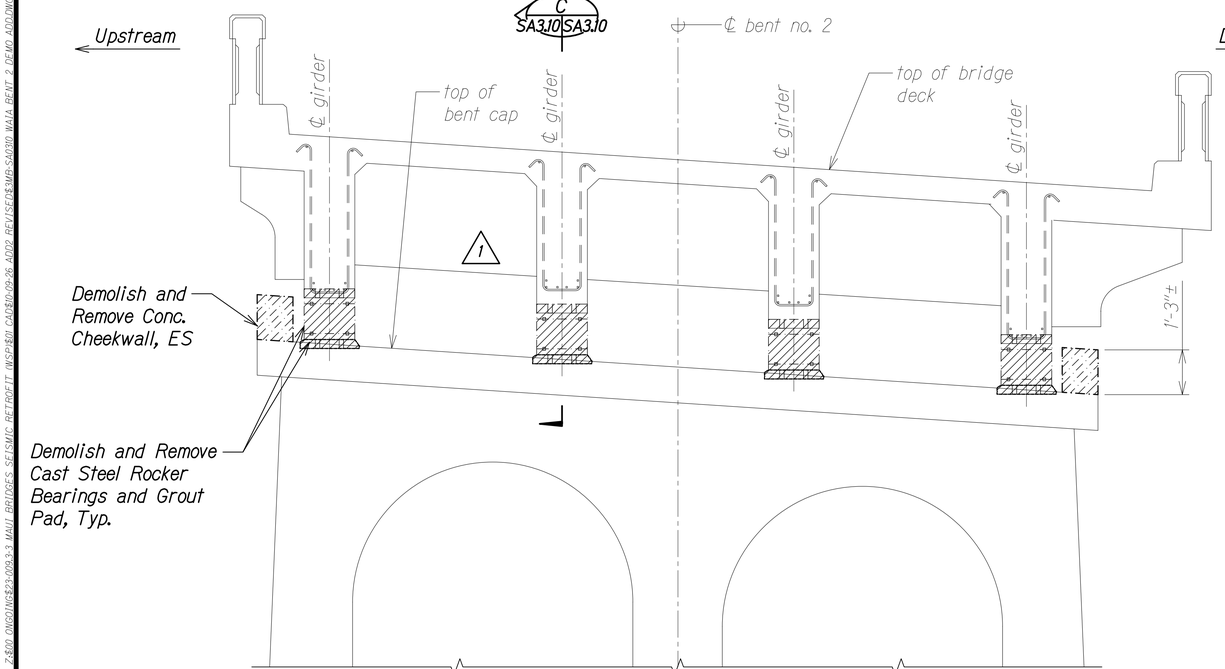
A SA3.10 SA3.10



DEMOLITION SECTION AT BENT NO. 2

Scale: 1" = 1'-0"

C SA3.10 SA3.10



DEMOLITION SECTION - BENT CAP NO. 2

Scale: 1/2" = 1'-0"

B SA3.10 SA3.10

NOTES:

1. Demolition work for cheek walls shall be incidental to removal of existing bearings.
2. Do not damage any existing reinforcing steel.
3. All concrete removed at this girder and bent cap shall be patched with an approved polymer modified repair mortar. Work shall be incidental to removal of existing bearings.

STEPHEN T. PETERS
LICENSED PROFESSIONAL ENGINEER
NO. 17097-S
HAWAII, U.S.A.

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SIGNATURE 4-30-28 EXPIRATION DATE OF THE LICENSE

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	
No.	TRACED BY	
	DESIGNED BY	
	QUANTITIES BY	
	CHECKED BY	

DRAWING NAME: Z:\DOT DRAWINGS\STP-0377-3 MAUI BRIDGES SEISMIC RETROFIT W\STP-0377(008) 09-26 ADD REVISED\WG SA310 WAIA BENT 2 DEMO ADD.DWG PLOT TIME: 10/09/26 4:54 PM

DATE		REVISION
10/9/26	1	Add. 2 - Rvsd. Callout

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

WAIALE GULCH BRIDGE BENT NO. 2
DEMOLITION PLAN AND SECTIONS

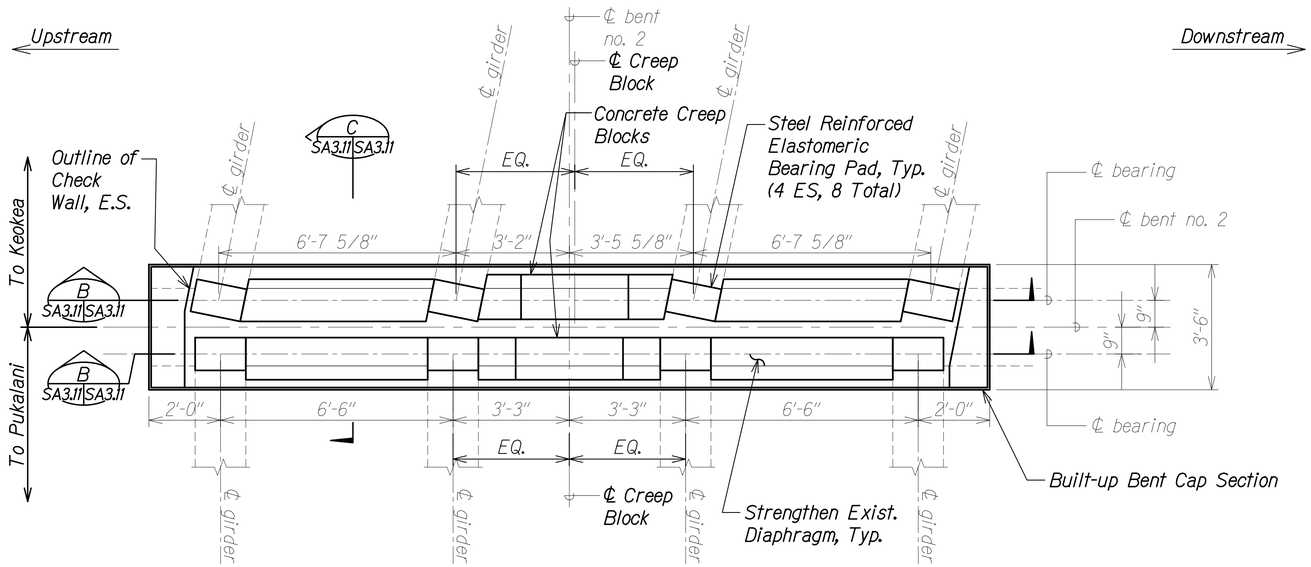
SEISMIC RETROFIT, HALEAKALA HIGHWAY ROUTE 377
Waiale Gulch, Alae (Naalae Gulch) and Pulehu Gulch (Pohakuokala) Bridges
Federal-Aid Project No. STP-0377(008)

Scale: As Noted Date: July 2026

SHEET No. SA3.10 OF 17 SHEETS

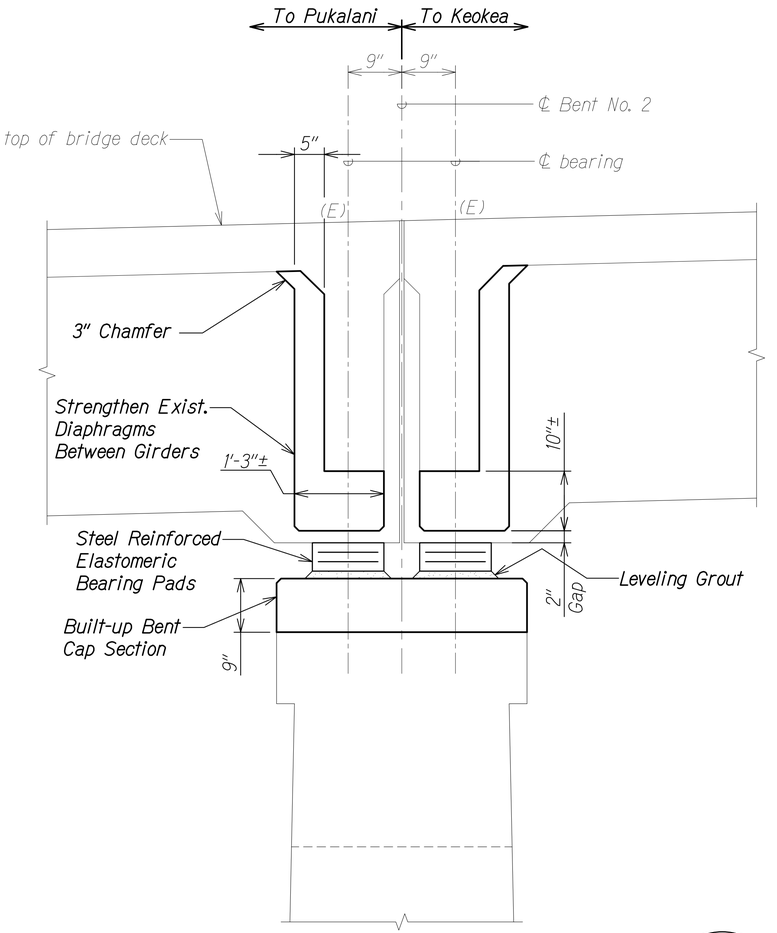
ADD. 78

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0377(008)	2026	ADD. 79	131



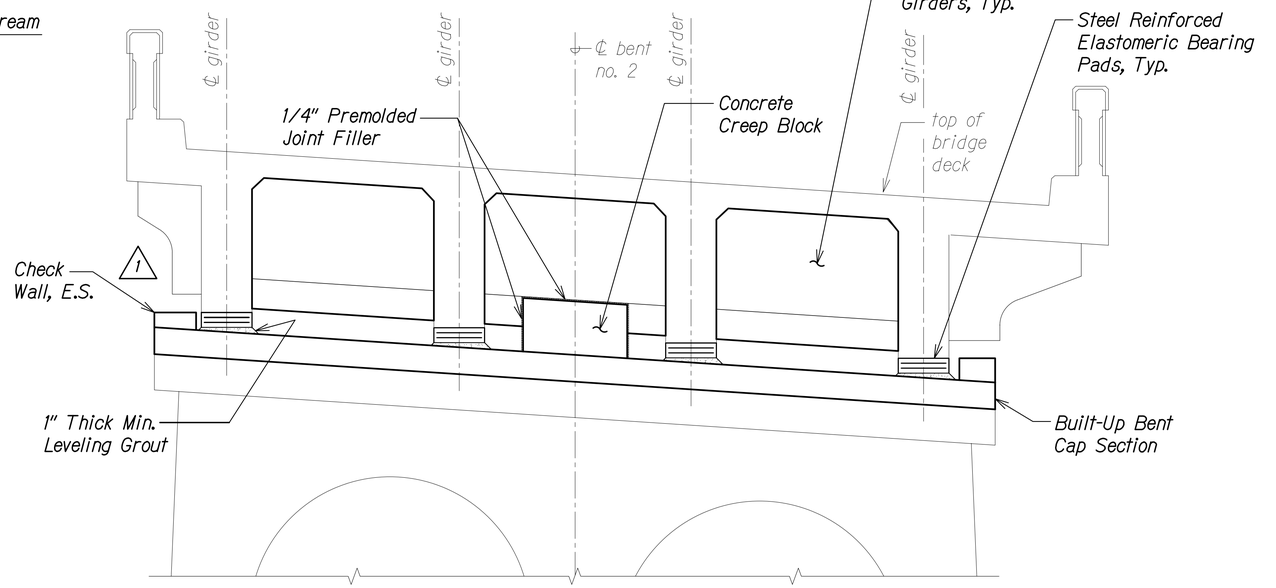
BENT NO. 2 - BENT CAP PLAN (A SA3.11 | SA3.11)

Scale: 1/2" = 1'-0"



BENT NO. 2 - SECTION (C SA3.11 | SA3.11)

Scale: 1" = 1'-0"



BENT NO. 2 - SECTION (B SA3.11 | SA3.11)

Scale: 1/2" = 1'-0"

STEPHEN T. PETERS LICENSED PROFESSIONAL ENGINEER NO. 17097-S HAWAII, U.S.A.

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SIGNATURE 4-30-28 EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

WAIALE GULCH BRIDGE
BENT NO. 2 PLAN AND SECTIONS

SEISMIC RETROFIT, HALEAKALA HIGHWAY ROUTE 377
Waiale Gulch, Alae (Naalae Gulch) and Pulehu Gulch (Pohakuokala) Bridges
Federal-Aid Project No. STP-0377(008)

Scale: As Noted Date: July 2026

SHEET No. SA3.11 OF 17 SHEETS

DATE	REVISION
10/9/26	1 Add. 2 - Revised Cheek Wall Height

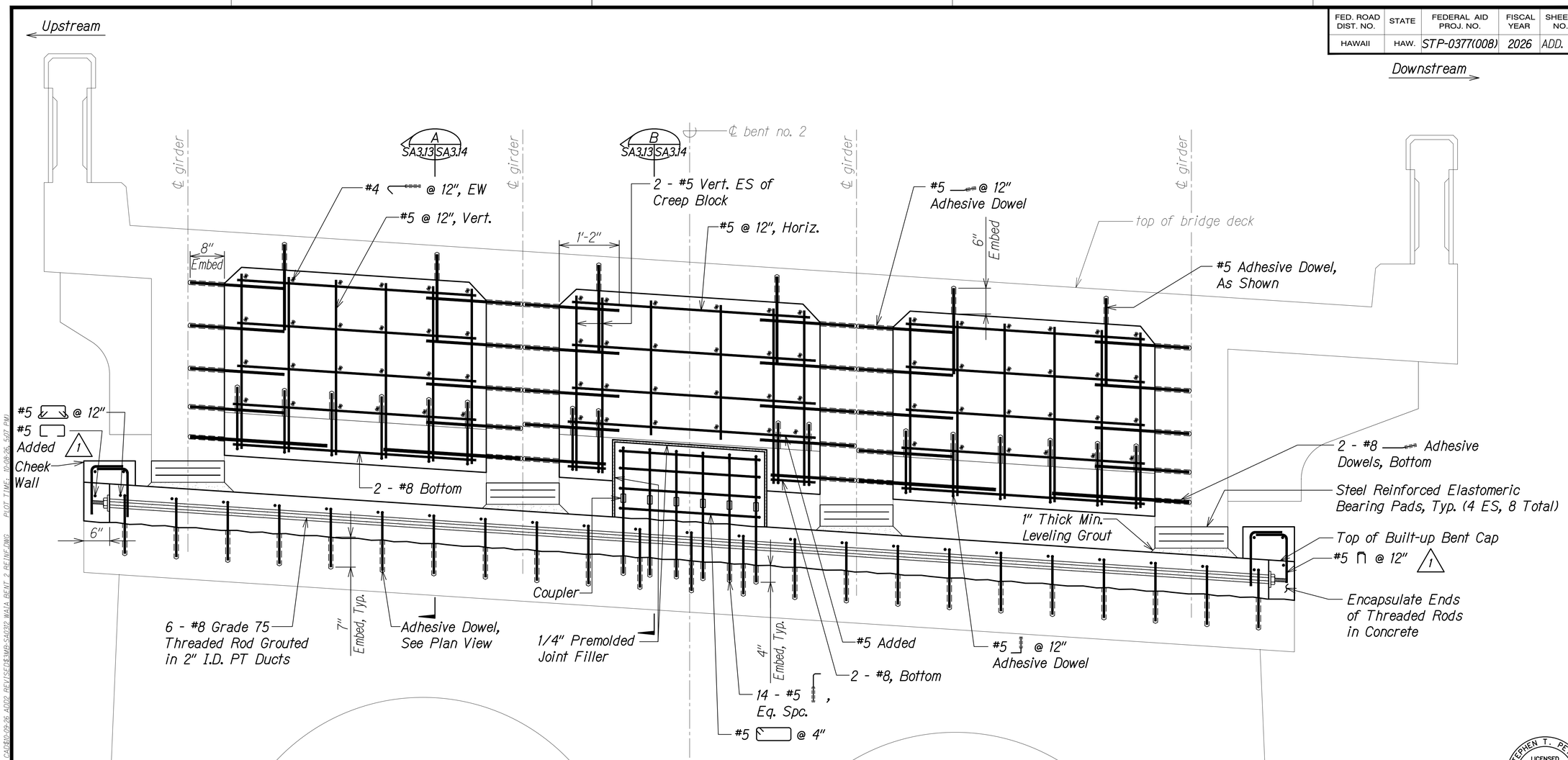
ORIGINAL PLAN | NOTE BOOK No.

SURVEY PLOTTED BY
DRAWN BY
TRACED BY
DESIGNED BY
QUANTITIES BY
CHECKED BY
DATE

DRAWING NAME: Z:\BD DRAWINGS\2025\3 WAI BRIDGE SEISMIC RETROFIT (DSF&B)\ DATE: 09-26-2025 PLOT TIME: 10:09:26 4:53 PM

ADD. 79

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0377(008)	2026	ADD. 81	131



BENT NO. 2 - REINFORCING SECTION

Scale: 1" = 1'-0"

A
SA3.12 | SA3.13

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
	DRAWN BY	
NOTE BOOK	TRACED BY	
	DESIGNED BY	
No.	QUANTITIES BY	
	CHECKED BY	

DATE	REVISION
10/9/26	1 Add. 2 - Added Reinforcing

STEPHEN T. PETERS
LICENSED PROFESSIONAL ENGINEER
NO. 17097-S
HAWAII, U.S.A.

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SIGNATURE 4-30-28 EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

WAIALE GULCH BRIDGE
BENT NO. 2 REINFORCING SECTION

SEISMIC RETROFIT, HALEAKALA HIGHWAY ROUTE 377
Waiale Gulch, Alae (Naalae Gulch) and Pulehu Gulch (Pohakuokala) Bridges
Federal-Aid Project No. STP-0377(008)

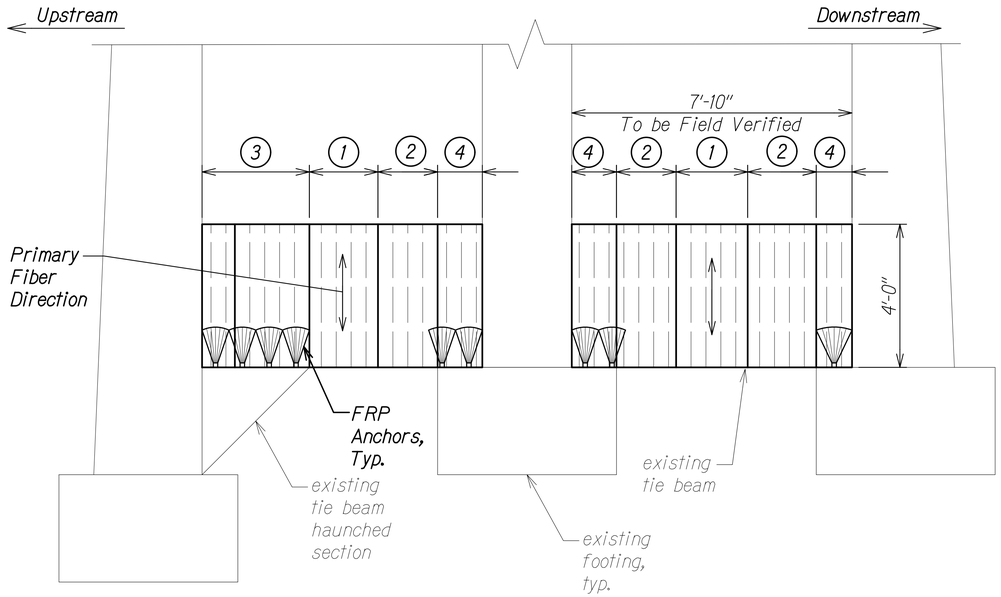
Scale: As Noted Date: July 2026

SHEET No. SA3.13 OF 17 SHEETS

ADD. 81

DRAWING NAME: Z:\DOT DRAWINGS\3-0023-3 MAUI BRIDGES SEISMIC RETROFIT W\SHEET DGN\SA3\0-09-26 ADD2 REVISED\WB-SA3W0 WAIA BENT 2 REINF.DWG PLOT TIME: 10:09:26, 5:01 PM

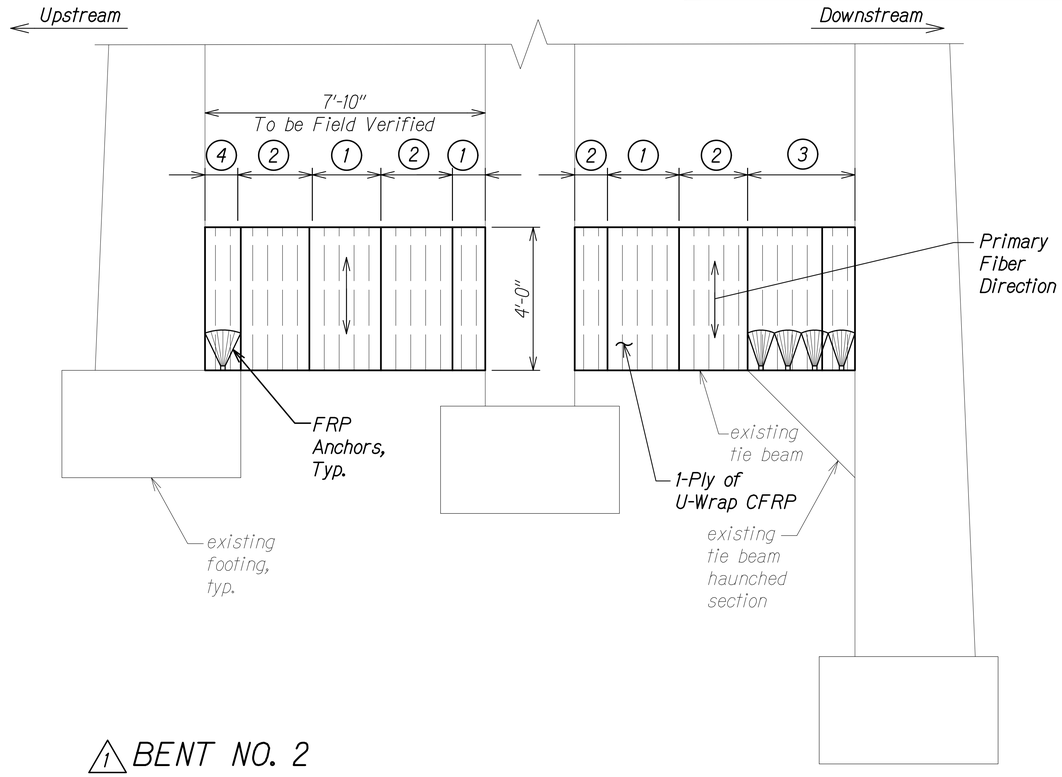
FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0377(008)	2026	ADD. 84	131



⚠1 BENT NO. 1
CFRP STRENGTHENING DETAIL OF TIE BEAM (A)

Scale: 1/2" = 1'-0"

SA3.16 | SA3.16



⚠1 BENT NO. 2
CFRP STRENGTHENING DETAIL OF TIE BEAM (B)

Scale: 1/2" = 1'-0"

SA3.16 | SA3.16

LEGEND:

(1) TYPE 1 - CFRP Fully Wrapped Bottom Lap

(2) TYPE 2 - CFRP Fully Wrapped Top Lap

(3) TYPE 3 - CFRP U-Wrap with FRP Anchors

(4) TYPE 4 - CFRP U-Wrap with FRP Anchors

NOTES:

1. See sheet SA3.17 for Sections
2. All materials shall be Carbon Fiber Reinforced Polymer (FRP) Composite installed via the wet-layup method.
3. All concrete surfaces to which FRP will be bonded shall be considered "Bond Critical". See Special Provisions Section 577 for additional information.
4. Each layer of FRP shall have a minimum thickness per layer of 0.04 inches. Use of a product having a thickness of 0.08 inches per layer is acceptable providing the minimum cumulative thickness (number of layers x 0.04 inches) as shown on these details is installed.

ORIGINAL PLAN | NOTE BOOK No. ____

SURVEY PLOTTED BY : DATE
DRAWN BY :
TRACED BY :
DESIGNED BY :
QUANTITIES BY :
CHECKED BY :

DRAWING NAME: Z:\DOT DRAWINGS\2025\1 WAIL BRIDGE SEISMIC RETROFIT (NCSHS)\ DGN\09-26-APP2 REVISED\WS-SA3W6 WAIALE BENT TIE BM ADD2.DGN PLOT TIME: 10:09:26 4:30 PM

DATE	REVISION
10/9/26	⚠1 Add. 2 - Revised Titles

STEPHEN T. PETERS
LICENSED PROFESSIONAL ENGINEER
NO. 17097-S
HAWAII, U.S.A.

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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

WAIALE GULCH BRIDGE
TIE BEAM CFRP DETAILS

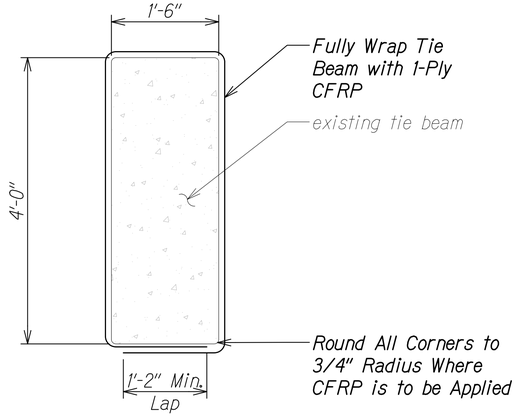
SEISMIC RETROFIT, HALEAKALA HIGHWAY ROUTE 377
Waiale Gulch, Alae (Naalae Gulch) and Pulehu Gulch (Pohakuokala) Bridges
Federal-Aid Project No. STP-0377(008)

Scale: As Noted Date: July 2026

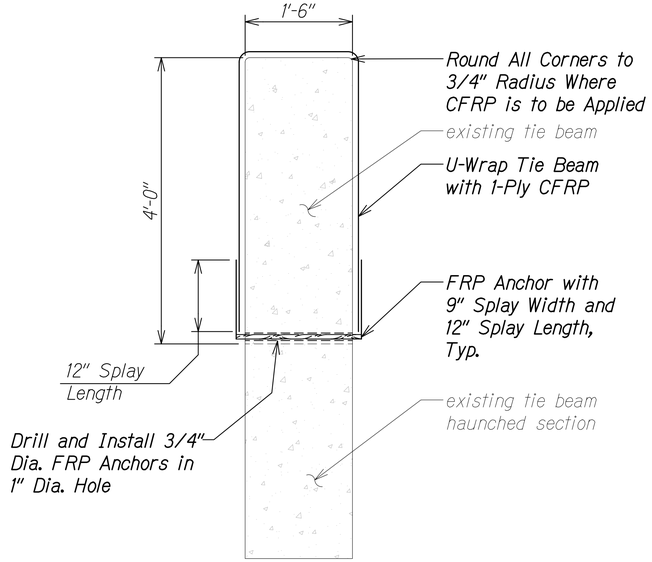
SHEET No. SA3.16 OF 17 SHEETS

ADD. 84

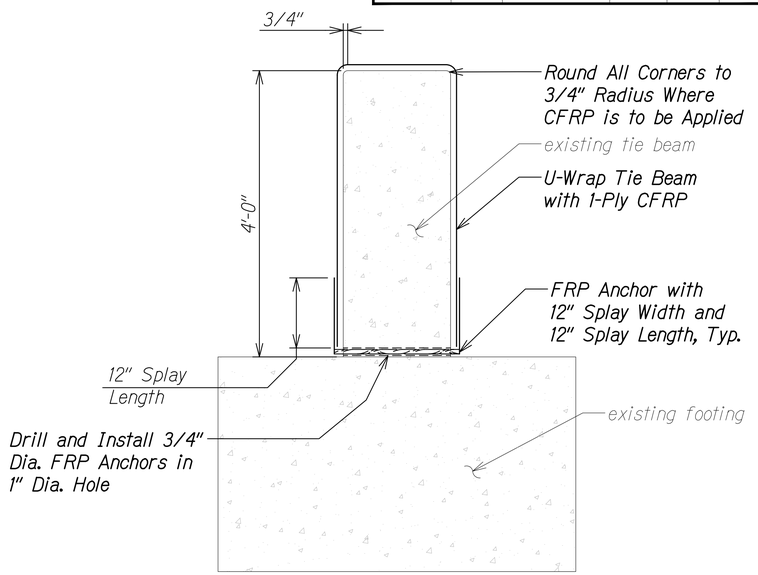
FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0377(008)	2026	ADD. 85	131



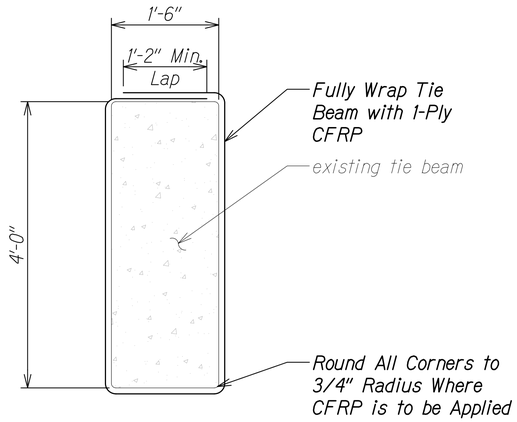
TYPE 1 SECTION (A) SA3.17 | SA3.17
Scale: 1" = 1'-0"



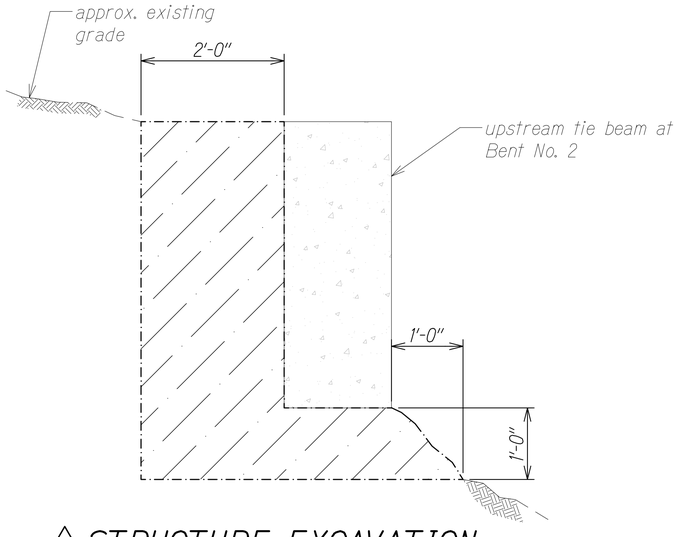
TYPE 3 SECTION (C) SA3.17 | SA3.17
Scale: 1" = 1'-0"



TYPE 4 SECTION (D) SA3.17 | SA3.17
Scale: 1" = 1'-0"



TYPE 2 SECTION (B) SA3.17 | SA3.17
Scale: 1" = 1'-0"



⚠1 STRUCTURE EXCAVATION PAY LIMITS SECTION (E) SA3.17 | SA3.17
Scale: 1" = 1'-0"

LEGEND:

Structure Excavation

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
	DRAWN BY	
NOTE BOOK	TRACED BY	
	DESIGNED BY	
No.	QUANTITIES BY	
	CHECKED BY	

DRAWING NAME: J:\ESD DWGS\STP-0003(3) HAW BRIDGES SEISMIC RETROFIT DWG\PSR CAD\00-09-26 ADD REVISED\MS-SA06 WAIALEAKA RT TIE BM ADD2.dwg PLOT TIME: 10:09:26 4:54 PM

DATE	REVISION
10/9/26	1 Add. 2 - Added Section

STEPHEN T. PETERS
LICENSED PROFESSIONAL ENGINEER
NO. 17097-S
HAWAII, U.S.A.

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4-30-28
SIGNATURE EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

WAIALE GULCH BRIDGE
TIE BEAM CFRP DETAILS

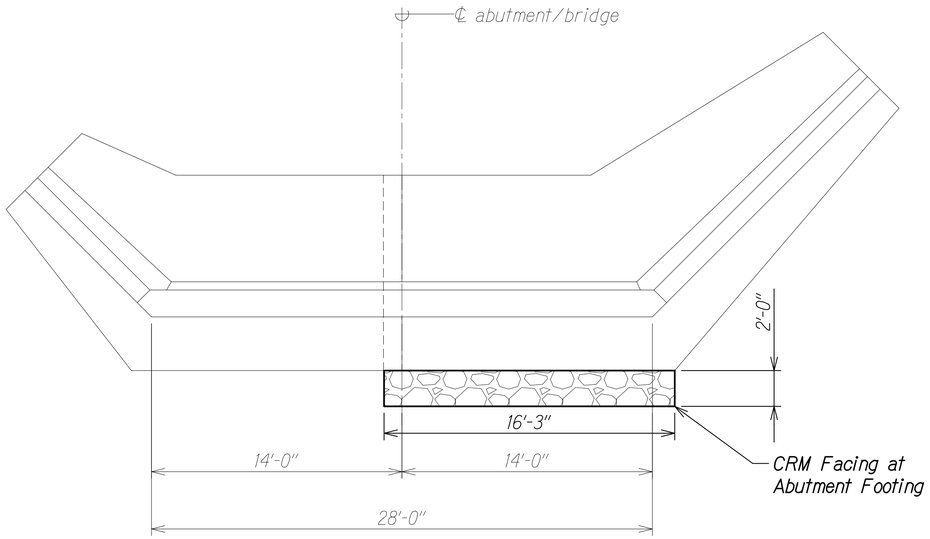
SEISMIC RETROFIT, HALEAKALA HIGHWAY ROUTE 377
Waiale Gulch, Alae (Naalae Gulch) and Pulehu Gulch (Pohakuokala) Bridges
Federal-Aid Project No. STP-0377(008)

Scale: As Noted Date: July 2026

SHEET No. SA3.17 OF 17 SHEETS

ADD. 85

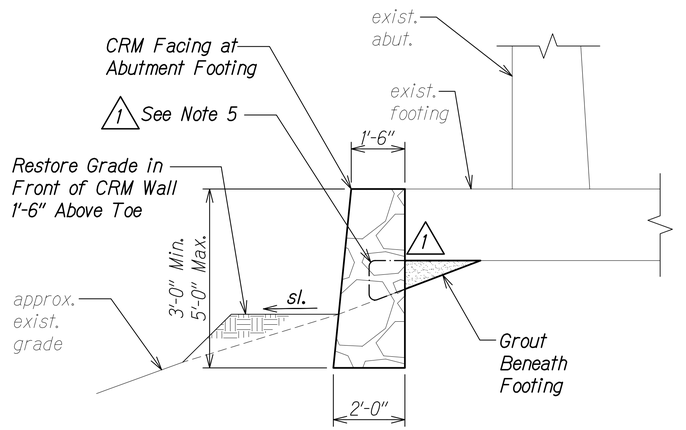
FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0377(008)	2026	ADD. 102	131



PLAN - CRM AT ABUTMENT NO. 2

Scale: 1/4" = 1'-0"

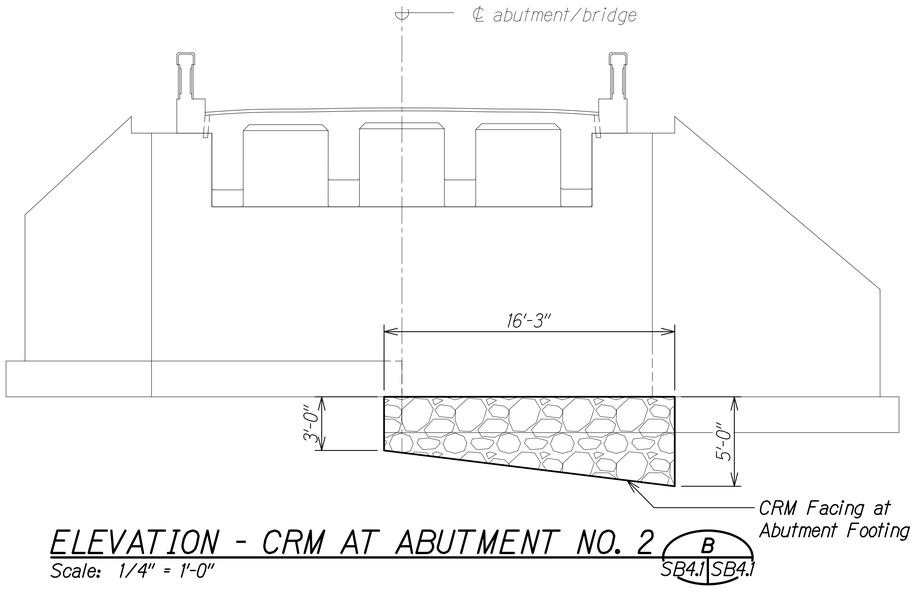
A SB4.1 | SB4.1



SECTION - CRM AT ABUTMENT NO. 2

Scale: 1/2" = 1'-0"

C SB4.1 | SB4.1



ELEVATION - CRM AT ABUTMENT NO. 2

Scale: 1/4" = 1'-0"

B SB4.1 | SB4.1

1 NOTES:

1. CRM work shall be paid for under Pay Item 508.1000 - Cement Rubble Masonry.
2. Grouting work beneath footing shall assume 15 cubic feet of material and shall be incidental to CRM work.
3. Grout shall completely fill void beneath the footing.
4. Grout shall be a non-shrink, pumpable, free-flowing, deep-pour compatible, cementitious grout capable of developing a minimum 28-day compressive strength of 7,000 psi.
5. Existing concrete repairs at toe of footing to be removed prior to grouting.

STEPHEN T. PETERS
LICENSED PROFESSIONAL ENGINEER
NO. 17097-S
HAWAII, U.S.A.

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SIGNATURE 6-30-26 EXPIRATION DATE OF THE LICENSE

DATE	REVISION
10/9/26	1 Add. 2 - Added Notes

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ALAE BRIDGE ABUTMENT NO. 2 EROSION PROTECTION DETAILS

SEISMIC RETROFIT, HALEAKALA HIGHWAY ROUTE 377
Waiale Gulch, Alae (Naalae Gulch) and
Pulehu Gulch (Pohakuokala) Bridges
Federal-Aid Project No. STP-0377(008)

Scale: As Noted Date: July 2026

SHEET No. SB4.1 OF 1 SHEETS

ADD. 102

ORIGINAL PLAN | SURVEY PLOTTED BY | DRAWN BY | NOTE BOOK | TRACED BY | DESIGNED BY | QUANTITIES BY | No. | CHECKED BY | DATE

DRAWING NAME: 2400 DWG\HWYS\2023 HWY BRIDGES SEISMIC RETROFIT (MSRR) CABLE\09-26 ADD REVISED\MS-SB4M ERS ADD.DWG PLOT TIME: 10/9/26, 1:37 PM

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS

RESPONSES TO REQUESTS FOR INFORMATION

Project Title: Seismic Retrofit, Haleakala Highway Route 377, Waiale Gulch, Alae (Naalae Gulch) and Pulehu Gulch (Pohakuokala) Bridges, District of Makawao, Island of Maui

F.A.P. No.: STP-0377(008)

Solicitation No.: B27000415

Prospective bidders had submitted RFI in HIePRO. Questions and responses are as follows:

1. **We are submitting TuffTex Materials substitution requests to the project manager for products as specified in the solicitation**

   See response to RFI Question 6.

2. **Detail 1 of Sheet No. S1.1 shows a min. 8" diameter drilled hole for the soil nails. a. Due to the limited access of the drilling locations and adverse subsurface conditions, it's unlikely a small drill rig that can access the drilling locations will be able to drill 8" diameter holes through gravels, cobbles, and boulders. Are 6" diameter holes allowable? 6" diameter drilled holes are much more typical for soil nails and can be drilled with smaller equipment.**

   8" Hole Diameter is required. Soil nail capacity and corrosion protection is a function of the hole diameter.

3. **Specification Section 657.02 (B) (4) states, "Nail Grout. Grout for the soil nails shall be a pre-bagged neat cement, non-shrink grout with silica fume admixture and anti-washout additive in conformance with ASTM C1107. Grout shall achieve minimum 8,000 psi compressive strength at 28-days per ASTM C-109 Mortar and Sand…" a. Pre-bagged non-shrink grout is more typically used for base plates, columns, foundations, etc. and is highly atypical for a soil nail installation. It will be much more expensive than a typical neat cement grout with non-shrink and corrosion inhibiting admixtures that's batched onsite using bulk Portland cement. Can a typical neat cement grout with non-shrink and corrosion inhibiting admixtures with a min. compressive strength of 5,000 psi be used instead?**

Prebagged grout as specified in the contract plans and specs shall be used. Grout quantities are minimal due to the limited number of soil nails on the project. Prebagged grouts provide a superior product and improved quality control.

4. **The soil nails will need to be shipped in shorter sections and coupled in the field. a. Can a coupler detail be provided?**

   It is acceptable to couple soil nails in the field. A coupler detail will be provided on Plan Sheet ADD. 56 Typical Soil Nail Details in Addendum No. 2.

5. **Due to the complexity of this project, we would like to request a two-week extension to the bid date.**

   See Addendum No. 1.

6. **We are submitting TuffTex Materials substitution requests to the project manager for products as specified in the solicitation Specs Section 401.05 (a) Polymer Modified Asphalic (PMA) "Concrete Tensar Rapid Repair PG100 - TuffTex RepCrete HES Specs Section 520.02 (b) -Rapid Cure Sealant - "RCS Dow Corning 902" - TuffTex RepSil FS Specs Section 520.02 (c) .Polymer Nosing System (PNS) "Silspec 900"- TuffTex - RepPoxy II Nosing Specs Section 577-1A 14 (e) Anchor Adhesive- "Simpson Strong-Tie Set-3G" -TuffTex RepPoxy DBA Specs Section 577.02 (13) Crack Injection - TuffTex RepPoxy CI Plans Page 53 7 (c) Leveling Grout -"FasTrac CE815 Epoxy Grout" - TuffTex RepPoxy DP Plans Page 53 7 (i) Concrete Repair Mortar- "FasTrac V/O" - TuffTex RepPatch VOH-XL Plans Page 53 7 (j) Grout for PT ducts "Target 1121 Grout" - TuffTex RepGrout NS Specs Section 577.02 - Plans Page 53 7 (h) CFRP Wet Layup method .04" thickness min -TuffTex RepWrap CFRP System: RepWrap 300 Specs Section 577.03 (G) FRP Finishing- TuffTex RepCoat UV Plans Page 52 5 (g) Concrete Curing Compound -"Sinak Lithium Cure 1000" TuffTex RepCure W, RepCure P Section 657.02 Soil Nail Grout - RepGrout 1107**

   + 401.05 (b) Polymer Modified Asphaltic (PMA) “Concrete Tensar Repair PG100 – TuffTex RepCrete HES – This product is not accepted for a material substitution.

   + 520.02(b) Rapid Cure Sealant – “RCS Dow Corning 902” – TuffTex RepSil FS – This product is not accepted for a material substitution. A single component silicone is not an equal product to the product specified in Spec Section 520.

+ 520.02(a) Polymer Nosing System (PNS) “Silspec 900” – TuffTex RepPoxy II Nosing – This product is not accepted for a material substitution. The expansion joint system with polymer nosing and silicone is a system. If Silione from TuffTex is not approved, cannot approve TuffTex RepPoxy II Nosing since it is unclear how it performs with RCS Dow Corning 902 product.

+ 577-1A 14(e) Anchor Adhesive “Simpson Strong-Tie Set-3G” – TuffTex RepPoxy DBA – This product is not accepted for a material substitution. A current ICC-ES evaluation service report was not provided and no indication of one is mentioned in the TDS. Unable to verify if product provides equivalent bond strength to specified product.

+ 577.02 (13) Crack Injection – TuffTex RepPoxy CI – This product is acceptable for a material substitution.

+ Plans Page 53 7 (c) Leveling Grout “FasTrac CE815 Epoxy Grout” – TuffTex RepPoxy DP - This product cannot be accepted for a material substitution request at this time since there is missing information. No indication of compressive modulus of elasticity values on TDS.

+ Plans Page 53 7 (i) Concrete Repair Mortar “FasTrac V/O” – TuffTex RepPatch VOH-XL - This product is not accepted for a material substitution. No internal corrosion inhibitor indicated in TDS as required by the contract plans.

+ Plans Page 53 7 (j) Grout for PT ducts “Target 1121 Grout” – TuffTex RepGrout NS – This product is not accepted for a material substitution. Compressive strength characteristics do not meet contract plan requirements.

+ 577.02 – Plans Page 53 7 (h) CFRP Wet Layup Method .04 inch thickness min – TuffTex RepWrap CFRP System: RepWrap 300 – It is noted that the dry fiber and composite gross laminate properties meet the requirements of Spec Section 577. However, this product cannot be accepted for a material substitution request at this time since there is missing information. The material may be considered acceptable only if the following items were satisfied and information provided to the Engineer:

1. RepWrap 300 TDS does not provide any information for FRP anchors. FRP anchors would need to meet the requirements as shown in Spec Section 577.

2. RepWrap 300 TDS does not provide any information about whether the system has a current ICC Evaluation Service Report. This is required. See Spec Section 577.

3. Applicator needs to be certified by FRP manufacture and needs a list of no fewer than 10 successful installations and 5 years of experience. Ensure that this requirement can be met.

+ 577.03 (G) FRP Finishing – TuffTex RepCoat UV – This product is not accepted for a material substitution request. An acrylic polycarbonate resin is not an equal product to what is specified in Spec Section 577.

+ Plans Page 52-5 (g) Concrete Curing Compound “Sinak Lithium Cure 1000” – TuffTex RepCure P – This product is not accepted for a material substitution request. A Silicate based curing compound is not an equal product to what is specified on the Contract Plans.

+ 657.02 Soil Nail Grout – RepGrout 1107 – No TDS for RepGrout 1107 was provided for review, therefore no acceptance can be given.

7. **We are submitting TuffTex Materials substitution requests to the project manager for products as specified in the solicitation Specs Section 401.05 (b) RepCrete QP Specs Section 520.02 (a) - RepCrete JN Specs Section 6 (d)- RepCrete HES Specs Section 7 (j) - PT Grout Specs Section 577.03 (G) FRP Finishing -RepPoxy WP mid coat and RepDeck PA topcoat**

   + 401.05 (b) - RepCrete QP – This product is not acceptable for a material substitution.

   + 520.02(a) - RepCrete JN – This product is not acceptable for a material substitution, unable to find RepCrete JN specifications.

   + Specs Section 6 (d) – RepCrete HES – It is unclear what “Specs Section 6 (d)” is referring to.

   + Plans Page 53 7 (j) – PT Grout – This product is acceptable for a material substitution.

   + 577.03 (G) FRP Finishing – RepPoxy WP Mid Coat and RepDeck PA Topcoat. Need more information to assess whether this is a compatible system with each other and for application to a CFRP system. Contractor would need to provide a list of CFRP projects successfully coated using this system. Additionally, this coating would only be accepted for use if the RepWrap 3000 system were ultimately accepted as well.

8. **Sht. S0.5 Note 9.A; Shts. 124-131; SP 657.03(C)(19) - Structural General Note 9.A states that the geotechnical parameters are based on the Geolabs, Inc. report "Final Submission Geotechnical Engineering Exploration, Waiale, Pohakuokala, and Alae Bridges Seismic Retrofit" dated March 25, 2026, and SP 657.03(C)(19) refers to the allowable pullout resistance "as specified on the Plans or in the Geotechnical Report." Only the boring logs are included in the bid documents. Please issue the complete geotechnical report (laboratory data, core photographs, design parameters, and any groundwater or seepage observations) by addendum so that all bidders price the same subsurface information.**

Geotechnical Report was included in HIePro as part of the original bid set.

9. **SP 657.03(C)(9); Std. Spec 104.08, 105.07; Shts. 127-131 - SP 657.03(C)(9) states that the Contractor may assume the subsurface materials at the soil nail locations consist of the geologic formations identified in the boring logs, while Std. Spec 105.07 states the logs are not warranted to be representative of the site. Please confirm that, for purposes of Std. Spec 104.08 (Differing Site Conditions), Borings A-1, A-2, P-1, P-2, W-1 and W-2 establish the subsurface conditions indicated in the contract, and that materially different conditions (for example voids, buried concrete or masonry, unrecorded fill, or groundwater) will be eligible for an equitable adjustment of contract price and time.**

   Any unforeseen conditions requiring modification of the design will be evaluated by the Engineer.

10. **Sht. S1.1 Note 1; SP 657.03(C)(8), (9), (11)(b) - Sheet S1.1 Note 1 and SP 657.03(C)(11)(b) require bidders to anticipate cobbles and boulders in the abutment fill and drilling through hard basalt. Please confirm that man-made obstructions (for example remnant original abutment or wingwall concrete, CRM, timber, rubble, or buried utilities) are "unanticipated obstructions" to be paid as Extra Work, including abandoning, backfilling and relocating the affected nails. Please also confirm that nails added, lengthened or relocated by the Engineer under SP 657.03(C)(8) will be paid at the contract unit price per linear foot, with any added verification or proof tests paid per each.**

    Contractors shall anticipate drilling through the subsurface materials described in the boring logs, including fill, residual soils, cobbles, boulders, clinker, and basalt rock. Due to the limited working area behind the abutments and the design configuration of the soil nail system, relocation of soil nails may not be feasible. Contractors shall provide drilling equipment and tooling capable of advancing through anticipated subsurface materials and isolated obstructions encountered within the soil nail alignment. Any unforeseen conditions requiring modification of the design will be evaluated by the Engineer.

11. **SP 657.03(C)(2); Shts. 129-131 - SP 657.03(C)(2) states that perched groundwater or seepage shall not be considered a differing site condition, yet no water was encountered in any of the six borings. Please confirm that groundwater or seepage requiring cased drilling, dewatering, or a change to the accepted grouting method, and stream water entering the abutment or footing excavations, will be evaluated under Std. Spec 104.08. Alternatively, please define a measurable threshold (for example a sustained inflow rate) above which the condition will be treated as a differing site condition.**

Groundwater was not encountered during the geotechnical exploration. However, groundwater levels and seepage conditions may vary due to rainfall, seasonal conditions, surface water runoff, and other environmental factors. The selection of drilling equipment, casing, dewatering methods, and grouting procedures shall be the responsibility of the Contractor.

12. **Shts. SA1.1, SA3.1; Sht. S0.4 Note 8; Sht. S0.5 - Sheet SA1.1 notes that the as-constructed Waiale Abutment No. 2 differs from the as-built drawings, Sheet SA3.1 notes that the Waiale foundation elevations differ from the as-built drawings, and Construction Note 8 on Sheet S0.4 states that existing dimensions are shown for the Contractor's convenience only. Please (a) post to HIePRO the 1929 (Waiale and Pohakuokala) and 1932 (Alae) as-built drawings and any field measurements or survey the designer relied on, (b) describe the known differences at Waiale Abutment No. 2 and the bent foundations, and (c) confirm that existing dimensions, reinforcing, or configurations found in the field that differ from the plans and require redesign or additional work will be handled as a change or differing site condition with adjustment of price and time.**

    Please see Structural General Notes 8. Construction Notes. S for obtaining a copy of the as-built drawings.

    During site investigation, it was noticed that Abutment No. 2 deviates from the as-built plans in several ways. There are wingwalls at both the upstream and downstream ends of the abutment that are not shown on the as-built drawings. Additionally, the abutment is taller than is shown on the as-built drawings. The depth of the abutment footing was not able to be verified.

    During site investigation, it was noticed that for Bent No. 1 and Bent No. 2, the in-field dimension from the soffit of the bent cap to the top of the foundations was higher than shows in the as-built drawings.

13. **SP 645.03(F)(2), 108.09; Shts. SA4.1-SA4.3, SB5.1-SB5.3, SC4.1-SC4.3 - Each bridge may be fully closed once for up to 20 consecutive days, with rental fees of $72,000 (Waiale), $40,000 (Pulehu) and $11,000 (Alae) per day beyond 20 days and no maximum. The existing abutment backfill, reinforcing and configuration can only be fully exposed after the closure begins. Please confirm (a) that exploratory potholing, test pits and GPR scanning may be performed under lane closures before the full closure,**

(b) that if a differing site condition, unanticipated obstruction, utility conflict, or Engineer-directed redesign discovered during the closure extends it beyond 20 days, the rental fee will be waived under SP 108.09 and contract time extended, and (c) whether a supplemental full closure will be allowed in that event.

a) Exploratory work may be conducted under one lane closures before the full closure.

b) Any unforeseen conditions requiring modification of the design will be evaluated by the Engineer.

c) Any unforeseen conditions requiring modification of the design will be evaluated by the Engineer.

14. **Shts. SA3.2, SA3.9, SA3.10, SA3.15; SP 202.03(E) - The Waiale bent construction sequences require concrete repairs on the bottom of the girders and top of the bent caps at the bearing seats, and Sheet SA3.2 makes this patching incidental to the lump sum Removal of Existing Bearings. These surfaces cannot be observed until the cast steel rocker bearings and grout pads are removed. Please state the repair area and depth bidders should include in the lump sum, and confirm that deterioration beyond that extent (including section loss of existing reinforcing) will be paid as extra work.**

    The extents of the demolition in both plan and depth are based on the intent of removing the existing cast steel rocker bearings and grout pads. Please see record as-built plans for dimensions and details of rocker bearing, including the dimensions of the concrete embedded bearing/masonry plate studs. No corrosion or section loss in existing reinforcing steel at these locations is anticipated.

15. **Sht. S0.5 (jacking note); Shts. SA3.9, SA3.15 Notes 2-3; Item 506.3100 - The Contractor's Hawaii-licensed structural engineer must check the existing bridge elements for adequacy at the temporary jacking locations, and jacking is incidental to Removal of Existing Bearings. Please provide the dead load bearing reactions, existing diaphragm and girder reinforcing information, and any load rating used in design. Please confirm that if the existing elements are inadequate for the jacking loads, the required strengthening or alternate temporary support will be paid as extra work. Please also confirm that bearing replacement and jacking apply to Waiale only (12 bearings), and that the Alae and Pulehu bearings are cleaned in place only.**

    Bridge jacking only occurs at Waiale Stream Bridge. 12 Bearings. Calculating dead load bearing reactions shall be done by the Contractor’s Structural Engineer. Existing diaphragm and girder reinforcing information can be obtained from record as-built drawings. Please see Structural General Notes 8. Construction Notes. S for obtaining a

copy of the as-built drawings.

It is unclear what is meant by “any load rating used in design.” Load rating calculations are applicable to in-service bridges subjected to truck loads, which would not be applicable to hydraulically jacking of the bridge since bridge is required to be closed to traffic during jacking work.

16. **SP 577.03(C)(1)-(2); Shts. SA3.16-SA3.17 - SP 577.03(C) requires repair of all damaged or defective concrete and pressure epoxy injection of cracks wider than 0.010 inch before CFRP is applied, and the tie beam dimensions on Sheet SA3.16 are "To be Field Verified." The CFRP items are lump sum and there is no item for substrate repair or crack injection. Please provide the estimated spall repair (square feet and depth) and crack injection (linear feet) to include in the lump sum, or add unit-price or force account items. Please also confirm that tie beam dimensions that differ from the plans will be adjusted under Std. Spec 104.06(3).**

    Existing dimensions are always to be field verified by the Contractor. Contract plans show dimensions of tie beam elements. Additionally, as-built plans are available, so the Contractor is able to obtain the geometric quantities necessary for bidding. The Contractor can use zero square feet of spall repair and zero linear feet of crack injection repair for lump sum bid price. Tie beam dimensions that differ from the plans may be adjusted under Std. Spec 104.06(3) or any of the other methods that apply and as mutually agreed upon by all parties.

17. **Sht. GN-1 Note 1; Notice to Bidders; Shts. SA1.1, SA3.16 - GN-1 Note 1 and the Notice to Bidders include "removal of debris from the piers," but no pay item, limits, or quantity are shown, and the Waiale tie beams that receive CFRP appear to be at or near existing grade. Please identify for each bridge (a) the locations and approximate volume of debris to be removed, (b) the pay item, (c) whether excavation is required to expose the tie beams or footings and how it is paid, and (d) the disposal requirements, including whether the work is within the Section 404 jurisdictional area.**

    a) The amount of debris, if any, is undetermined and thus a force account item has been added for each bridge.
    b) The following force account pay items have been added:
        i. 202.3500 Removal Debris from Beneath the Bridges – Waiale Gulch Bridge

ii. 202.1500 Removal Debris from Beneath the Bridges – Alae Bridge
iii. 202.2500 Removal Debris from Beneath the Bridges – Pulehu Gulch Bridge

c) The Upstream side Tie Beam at Pier 2 for Waiale Stream Bridge is the only tie beam location that requires soil excavation in order to perform the CFRP work. A pay item for this work will be created for in the proposal schedule. Excavation pay limits will be included on sheet SA3.17. Any excavation work outside of the prescribed pay limits will be at the Contractor's discretion and cost.

d) The Contractor is responsible for proper disposal of excavated material. For Waiale Gulch, the USACE has authorized the installation of the carbon fiber reinforced polymer within the USACE Ordinary High Water Mark (OHWM).

18. **Shts. SB1.1, SB4.1, SB5.3, C-2; Item 508.1000 - Sheet SB4.1 makes grouting of the voids beneath the Alae Abutment No. 2 footing incidental to lump sum Item 508.1000 Cement Rubble Masonry. The void extent is known only from the June 4, 2024 inspection shown "For Reference Only" on Sheet C-2 and may have enlarged since. Please provide the estimated grout volume to include in the lump sum, and confirm that grout required beyond that volume will be paid as extra work. Please also clarify whether the Abutment No. 1 footing undermining listed in the Sheet C-2 defect table is part of the scope.**

    Grout quantity for void extent will be addressed on Plan Sheet ADD. 102 Alae Bridge Abutment No. 2 Erosion Protection Details as part of Addendum No. 2.

    Abutment No. 1 footing undermining is not included in the scope of work.

19. **Shts. C-1 to C-3; SP 510.03-510.05; Items 206.1000, 510.1100, 510.1200 - The riprap quantities (40 CY Class III and 30 CY Class IV partially grouted) appear to be based on the 2024 scour pocket dimensions (17'-6" x 13'-5" x 6'-9"). Please confirm that riprap will be paid by the measured in-place volume at the contract unit prices, that Std. Spec 104.07 applies if the scour pocket has changed, and that removal of sediment and loose material from the pocket is paid under Item 206.1000 Removal of Loose Material.**

    The estimated quantities were based on the scour pocket observed during the 6/4/24 inspection date. Riprap placement will be paid under the applicable contract unit price based on the measured in-place volume of riprap incorporated into the work. If field conditions indicate that the limits or dimensions of the scour pocket differ from those shown in the Contract Documents, the provisions of Specification Section 104.07 shall apply for any resulting adjustment to the work.

20. **Sht. C-3 Note 4; Sht. GN-2 (NWP 3); SP 209.01(C) - Sheet C-3 requires the scour work to be performed during prolonged dry stream conditions and prohibits placing riprap or grout underwater. Please confirm (a) whether temporary clear-water diversion or isolation is authorized under the Nationwide Permit No. 3 verifications and, if so, how it is paid, (b) that contract time will be extended if stream flow prevents this work, and (c) whether any work at the Waiale or Pulehu piers is below the ordinary high water mark.**

    a) The Nationwide Permit No. 3 authorizes the Contractor to propose clear water isolation BMPs within the temporary impact area. Costs associated with the means and methods required to construct the riprap shall be included in the 510 riprap pay items.
    b) Any unforeseen conditions requiring modification of the design or schedule will be evaluated by the Engineer.
    c) For Waiale Gulch, the USACE has authorized the installation of the carbon fiber reinforced polymer within the USACE OHWM. The work at Pulehu Gulch is above the USACE OHWM.

21. **Shts. GN-1, GN-9, S0.4; SP 627.03(A); Std. Spec 104.11 - SP 627.03 refers to waterlines and conduits within the LCC fill behind the abutments, but no utilities are shown within the abutment excavation, tie slab, or soil nail limits. Please identify all known utilities (DWS, Hawaiian Telcom, cable television, MECO) crossing or attached to each bridge and approach within these limits, with approximate depths; state whether relocation or temporary support is required, by whom, and under which pay item; and confirm that utilities not shown that conflict with the work will be treated as a differing site condition.**

    There are no known underground utilities behind the bridge abutments.

    Any unforeseen conditions requiring modification of the design will be evaluated by the Engineer.

22. **SP 202.03(D)-(E), 209.01(A); Sht. GN-3 - The work includes cleaning and removing 1930s-era cast steel rocker bearings, bottom plate irons, joint materials and coatings, and excavating existing fill and channel sediment. Please provide any hazardous materials survey (lead-based paint, asbestos, PCBs) or soil and sediment testing performed for the project. If none has been performed, please confirm that hazardous materials encountered will be handled as extra work or a differing site condition, and identify the pay item for their handling and disposal.**

No hazardous materials survey was performed.

Any unforeseen conditions requiring modification of the design will be evaluated by the Engineer.

23. **SP 104.13; Sht. S0.5; Items 201.1010, 201.2010, 201.3010 - The piers, tie beams, scour pocket and footing work are in steep gulches, and securing staging outside the HDOT right-of-way is the Contractor's responsibility. Please (a) provide the right-of-way limits and any State easements or rights of entry for access into each gulch, (b) confirm whether temporary access roads, ramps and work platforms are permitted within the clearing and grubbing limits (0.3, 0.4 and 0.2 acre) and the NWP 3 authorizations, and (c) identify any State right-of-way areas the Engineer will designate for staging or stockpiling.**

    a) HDOT Right-of-way (ROW) limits are shown on the plans. The Bidder shall view and inspect each bridge and determine their proposed access into each gulch utilizing the HDOT ROW.
    b) Temporary access roads, ramps and work platforms are permitted within the clearing and grubbing limits. The Nationwide Permit 3 is for work within the USACE jurisdiction and placement of temporary access roads, ramps and work platforms are not authorized.
    c) The Contractor shall assume staging and stockpiling areas shall be outside the State right-of-way and their responsibility.

24. **Shts. GN-2, GN-3, GN-5; SP 209.01(C), Section 671 - Please post copies of the Department of the Army NWP 3 verifications (POH-2026-00074, POH-2026-00057 and POH-2026-00075), the Section 401 Water Quality Certification, the USFWS consultation, and the SHPD (HRS 6E / Section 106) determination, including all conditions and expiration dates. Please confirm which permits the State has obtained and which the Contractor must obtain (for example County grading or DOH noise permits). Sheet GN-3 cites the Revised Ordinances of Honolulu; please confirm that Maui County grading requirements apply.**

    The applicable permits were included as part of the contract documents in HIePro.

    The Section 106/HRS 6E determinations do not have any mitigation and the Section 7 USFWS BMPs have been included in the contract specifications.

    Maui County grading requirements shall apply.

The Noise Permit and Noise Variance have been obtained and was included with the contract documents in HIePro.

25. **Sht. GN-5 (State Historic Preservation Notes) - The bridges were constructed in 1933-1934 and may be eligible for historic listing. Please confirm whether any SHPD or Section 106 conditions (archaeological or architectural monitoring, or protection or treatment of parapets, CRM walls, or other original elements) apply to this work, who retains and pays for any required monitor, and that contract time will be extended for work stoppages caused by an inadvertent discovery.**

    The Section 106 process for this project has not resulted in any special monitoring or preservation actions by the Contractor.

    Any unforeseen conditions requiring modification of the design will be evaluated by the Engineer.

26. **SP 671.03; SP 108.20; SP 645.03(F)(2) - SP 671.03 requires work to stop within 100 feet of Hawaiian waterbird nests and 150 feet of nene nests (breeding season September 1 through April 30), restricts trimming of woody plants over 15 feet from June 1 through September 15, and prohibits night work from September 15 through December 15. Please confirm that stoppages directed under Section 671 will be compensated under the Protection of Endangered Species force account items (including standby of labor and equipment), that contract time will be extended, and that full-closure rental fees will be waived if a stoppage occurs during a full bridge closure.**

    Any unforeseen conditions will be evaluated by the Engineer.

27. **SP 657.03(C)(9), (19); Shts. SA4.1, SB5.1, SC4.1 - Pre-production verification testing must be completed before production nail materials are ordered and before any structure or roadway excavation. Please confirm (a) the Engineer's review time for verification test results, (b) that the Contractor may order encapsulated production bars at its own risk before verification testing is complete, and (c) that if a verification test fails because of subsurface conditions that differ from the boring logs, the additional verification tests will be paid under the contract item and contract time will be extended.**

a) The Engineer will be present during verification testing. Verification test results will be reviewed within one working day following completion of the testing and receipt of the complete test data.
b) Yes. The Contractor may procure production soil nail materials prior to completion of verification testing at the Contractor's own risk.
c) If a verification test fails, the Engineer will review the test results and subsurface conditions and determine whether additional testing is required. If additional verification testing is required because the encountered subsurface conditions differ from those indicated in the contract documents, the additional testing will be paid under the applicable contract item. Any associated adjustment to the contract time will be determined by the Engineer.

28. **SP 657.02(B)(4); Sht. S0.4 Note 6 - SP 657.02(B)(4) requires the soil nail grout to achieve a minimum 28-day compressive strength of 8,000 psi, while Sheet S0.4 Note 6 requires a minimum of 7,000 psi. Please confirm which requirement governs.**

    The requirement for 28-day compressive strength of the soil nail grout shall be 7,000 psi.

29. **Notice to Bidders; Sht. GN-1 Note 1; SP 205.03(C), 627; Proposal Schedule - The Notice to Bidders and GN-1 describe backfilling with controlled low strength material (CLSM), wrapping "the piers" with carbon fiber, and "pier footing upgrades." The plans and Proposal Schedule show lightweight cellular concrete (Waiale Abutment No. 2 and Alae only), CFRP at the Waiale tie beams only, and no pier footing work other than the Alae Pier 1 scour protection and the Alae Abutment No. 2 grouting and CRM. Please confirm that the plans and Proposal Schedule govern, and that no CFRP or pier footing work is required at Alae or Pulehu.**

    See revised scope of work on Plan Sheet ADD. 3 General Notes, Note 1 in Addendum No. 2 and revised notice to bidders in Addendum No. 1.

30. **SP 205.04(B), 205.05, 627.04; Items 205.3030, 205.1300, 205.1400 - SP 205.04(B) and 205.05 provide payment for Lightweight Cellular Concrete Backfill per cubic yard, while SP 627.04 states that LCC will not be measured for payment. Please confirm that LCC backfill will be measured and paid per cubic yard within the payment limits shown on the plans.**

    Lightweight Cellular Concrete (LCC) Backfill is not measured or paid under SP Section 627. It is measured and paid for under SP Section 205 per Cubic Yard and within the

payment limits as shown on the plans.

31. **Proposal Schedule pp. P-9, P-14, P-17, P-18; Sht. AL-4 - Items 520.3100 and 520.3200 are used for all three bridges, and Item 401.1510 is used for both Alae and Pulehu, while Sheet AL-4 references Items 520.1100 and 520.1200 (Alae) and 520.2100 and 520.2200 (Pulehu). Please correct the item numbers by addendum so that each HIePRO line item is unique.**

    See revised Proposal Schedule in Addendum No. 2.

32. **SP 108.20, 645.03(F); Sht. GN-2 (working hours); Shts. SA4.2-SA4.3 - To complete the full-closure scope within 20 days, please confirm (a) that 24-hour work is permitted at Waiale during its full closure outside the September 15 through December 15 restriction, (b) that extended hours up to 9:00 p.m. and weekend and holiday work are permitted at Alae and Pulehu during their full closures, and (c) that noise permit or County requirements will not further restrict these hours.**

    a) At Waiale Bridge, 24-hour work is permitted during its full closure, except from September 15 to December 15.
    b) For Alae and Pulehu Bridges, see special provision 108.20 Night Work, both sentences apply.
    c) The noise permit is for day work and the noise variance is for night and weekend work not covered under the noise permit.