

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	ER-24(007)	2023	3	21

GENERAL NOTES:

- The scope of work for this project includes the filling of voids under the abutments and wingwalls of Ka'aiea Stream Bridge on Hana Highway; Work includes erosion control measures, traffic controls and scour void filling via grout injection into grout bags.
- The Contractor is reminded that the clearing of debris within the stream shall be done by hand. The Placement of machinery within the stream is prohibited based upon the current permit coordination and approvals. The use of the sand bags within the stream to isolate work areas is prohibited. Any deviation in debris removal methods shall require coordination and approval by the Engineer.
- The Contractor is reminded of the requirements of Subsection 105.16 - Subcontracts which requires him to perform work amounting to not less than 30 percent of the total contract cost less deductible items. Non-Compliance with this Subsection may be grounds for rejection of bid.
- The Contractor's attention is directed to the following Sections of the Standard Specifications and the Special Provisions: Subsection 104.09 - Maintenance of Traffic; Subsection 104.11 - Utilities and Services; Subsection 105.09 - Coordination Between the Contractors; Subsection 107.06 - Contractor Duty Regarding Public Convenience; Subsection 107.12 - Protection of Persons and Property; and Section 645 - Work Zone Traffic Control.
- The existence and location of underground utilities, manholes, monuments 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 be held liable for any damages incurred to the existing facilities and/or improvements as a result of his operations.
- 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. All existing utility/light poles, overhead utilities and guy poles/wires shall remain in place and operational. 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 no cost to the State. No delays or extensions of contract time will be allowed as a result of these required repairs.
- The Contractor shall indemnify and be solely responsible for the protection of adjacent properties, utilities, and existing structures from damages due to construction. Repairing any damage shall be at the Contractor's own expense, to the satisfaction of the Engineer.
- Existing drainage system shall be kept functional at all times during construction. The Contractor shall furnish materials, equipment, labor, tools and incidentals necessary to maintain flow. This work shall be considered incidental to the various contract items.
- Existing facilities and/or pavement to remain which has been damaged by the Contractor shall be restored to its original condition at no cost to the State.
- All graded areas and all grassed areas damaged by construction activities shall be planted in accordance with Specifications Section 641 - Hydro-Mulch Seeding. This work is considered incidental to the various contract items.

GENERAL NOTES, CON'T:

- Cost for clearing of vegetation for access shall be considered incidental to the various contract items.
- Contractor shall use Hawaii-licensed Surveyors to stake right-of-way boundaries. Use survey monuments, stake boundary corners and every 500 feet of boundary. Engineer will not pay separately for surveying and will consider the cost as incidental in the contract cost for the various contract pay items.
- No material and/or equipment shall be stockpiled or otherwise stored within the State right-of-way except at locations designated in writing and approved by the Engineer. If use of location is approved by the Engineer, the Contractor shall obtain a permit to use the property within the State right-of-way from the State Highways Division at telephone no. 808-873-3535.
- Any work specified in the contract documents, but not listed separately in the Proposal Schedule, shall be considered incidental to the various contract items and shall not be paid for separately.
- To Avoid and Minimize Potential Project Impacts To The Hawaiian Hoary Bat Do Not Disturb, Remove or Trim Woddy Plants Greater Than 15 Feet Tall During The Bat Birthing And Pup Rearing Season Between June 1 And September 15.
- If Nene Are Observed Within The Projects Area, Do Not Approach, Feed or Disturb The Birds. Notify The Engineer Of Any Sightings. A Biologist Familiar With The Nesting Behavior Of Nene Shall Survey For Nests Are Found Within 150 Feet Of The Construction Area, Work Shall Cease Immediately And The Engineer Shall Notify The US Fish And Wildlife Service.
- If A Nest or Active Brood Of Hawaiian Waterbirds is Found, Notify The Engineer Immediately. The Engineer Shall Contact The US Fish And Wildlife Service Within 48 Hours For Further Guidance. A 100 Foot Buffer Shall Be Established Around The Nesting Area. A Biologist Familiar With The Species Shall Be Present During Construction Until Any Chicks/Ducklings Fledge To Ensure That There Are No Adverse Impacts.

ABBREVIATIONS:

Az	Azimuth
⌘	Baseline
BVC	Begin Vertical Curve
BMP	Best Management Practices
C	Chord
CRM	Cement Rubble Masonry
d	existing drainline
Elev.	Elevation
EP	New Edge of Pavement
ep	Existing Edge of Pavement
ES	New Edge of Shoulder
es	Existing Edge of Shoulder
EVC	End Vertical Curve
Exist.	Existing
ga	Guy Anchor
GRP	Grouted Rubble Paving
HMA	Hot Mix Asphalt
Lc	Length of Curve
Lt.	Left of ⌘
M.L.	Matchline
o.c.	on center
o/s	Offset
OHWM	Ordinary High Water mark
PC	Point of Curvature
PCC	Point of Compound Curvature
PIVC	Point of Intersection Vertical Curve
pp	Power Pole
PT	Point of Tangency
R	Radius
Rt.	Right of ⌘
R/W	Right-of-Way
S	Slope
Sta.	Station along ⌘
T	Tangent
TW	Top Wall Elevation
V.C.	Vertical Curve

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
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THIS WORK WAS PREPARED BY ME  
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SIGNATURE: *Gerald D. Andrade* EXPIRATION DATE: 04/30/24  
OF THE LICENSE

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**GENERAL NOTES  
AND ABBREVIATIONS**

KAAIEA STREAM BRIDGE EMERGENCY REPAIRS  
ROUTE 360, MILE POST 8.6  
Fed. Aid Proj. No. ER-24(007)

Scale: None Date: Jan. 2023

SHEET No. N-2 OF 4 SHEETS

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	ER-24(007)	2023	4	21

NOTES FOR CONSTRUCTION WITHIN STATE RIGHT-OF-WAY:

- The Contractor shall obtain a Permit to Perform Work upon State Highways from the State Highways' District Engineer, at 650 Palapala Drive, Kahului, Hawaii, prior to commencement of work within the State's Highway Right-of-Way.
- Construction and restoration of all existing highway facilities within the State's Right-of-Way, including the legal relations and responsibility to the public, shall be in accordance with the current Hawaii Standard Specifications for Road and Bridge Construction dated 2005, and the Specifications for Installation of Miscellaneous Improvements within State Highways, of the State Highways Division.
- Work may be performed only between the hours of 8:30 a.m. and 3:30 p.m., Monday through Friday, except holidays, unless otherwise permitted by the District Engineer.
- The Contractor shall provide, install and maintain all necessary signs, lights, flares, barricades, markers, cones, and other protective facilities, and shall take all necessary precautions for the protection, convenience, and safety of public traffic. All such protective facilities and precautions to be taken shall conform with the "Administrative Rules of Hawaii Governing the Use of Traffic Control Devices at Work Sites on or Adjacent to Public Streets and Highways", adopted by the Director of Transportation, and the current U.S. Federal Highway Administration "Manual on Uniform Traffic Control Devices, Part VI - Standards and Guides for Traffic Controls for Street and Highway Construction, Maintenance, Utility and Incident Management Operations".

Lane closures shall conform to the traffic control plans incorporated in Section 645 and these construction plans and must be approved by the Division prior to the issuance of the permit.

- No material and/or equipment shall be stockpiled or otherwise stored within the State's Highway Right-of-Way except at locations designated in writing and approved by the District Engineer.
- Compaction tests shall be taken in accordance with the specifications for installation of miscellaneous improvements within State Highways, as follows:
  - Subbase: one (1) compaction test per lift per 200 linear feet of roadway
  - Base course: one (1) compaction test per lift per 200 linear feet of roadway
  - One (1) compaction test per lift per 300 linear feet of trench.
  - A copy of the test results shall be submitted to the District Engineer.
- Existing drainage systems shall be functional at all times.
- The Contractor shall exercise care to minimize damages to existing highway improvements. All damages shall be repaired by the Contractor, at his expense, to the satisfaction of the District Engineer.
- Approval of the permit construction plans shall be valid for a period of one (1) year from the date of notification of approval to the applicant. In the event construction does not commence within this one-year period, the applicant will be required to resubmit the construction plans for the Division's review and reapproval.
- All regulatory, guide, and construction signs and barricades shall have a high-intensity reflective background.

NOTES FOR CONSTRUCTION WITHIN STATE RIGHT-OF-WAY, CONT:

- The Contractor shall inform the State Highways' Permit Office (873-3535) at least two (2) days prior to closing any lanes.
- Driveways shall be kept open unless the owners of the properties using these rights-of-way are otherwise provided for satisfactory.
- Where pedestrian walkways exist, they shall be maintained in a safe and passable condition, or other facilities for pedestrians shall be provided. Passages between walkways at intersections shall likewise be approved. All walkways shall conform to ADA requirements.
- The Contractor shall reference, to the satisfaction of the District Engineer, all existing traffic signs, posts and pavement markings prior to commencement of construction. The Contractor shall replace or repair all traffic signs, posts, and pavement markings disturbed by his activities, at his expense, unless directed otherwise by the District Engineer or his representative.
- The Contractor shall exercise care when performing work in, on or adjacent to the State's Highway right-of-way. Damages to existing facilities shall be immediately reported to the respective utility companies, and/or County or State agencies. The repair work shall be done at the Contractor's expense.
- The Contractor shall implement Best Management Practices (BMP) measures for all work within the State Highway.
- The Contractor shall notify the State Highway's Maintenance Engineer (873-3535), three (3) working days prior to commencing work.
- The permit to perform work upon State Highways may be revoked because of default in any of the following, but not limited to conditions:
  - Work performed before or after permitted hours.
  - Failure to maintain roadway surfaces in a smooth and safe condition.
  - Failure to clean up construction debris generated from project work.
  - Failure to provide proper traffic control.
  - Failure to replace damaged pavement markings and signs.
- After completion of the project, the Owner and/or Contractor, shall submit the complete set of "as-built" plans to the Highways Division.

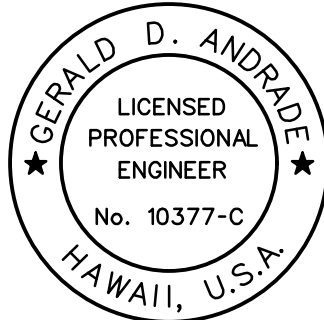
PUBLIC HEALTH, SAFETY AND CONVENIENCE NOTES:

- The Contractor shall observe and comply with all Federal, State, and Local laws required for the protection of public health and safety and environmental quality.
- The Contractor, at his own expense, shall keep the project and its surrounding areas free from dust nuisance. The work shall be in conformance with the air pollution standards and regulations of the State Department of Health. The County may require supplementary measures as necessary.
- The Contractor's attention is directed to Chapter 46, Public Health Regulations, Department of Health, State of Hawaii, "Community Noise Control" in which maximum allowable noise levels have been set. If the construction activities for this project will exceed the allowable noise levels, the Contractor will be required to obtain a permit from the Director of the Department of Health. The Contractor shall obtain a copy of Chapter 448 and become familiar with the noise level restrictions and the procedures for obtaining a Permit for construction activities.
- The Contractor is to comply with the directions of the State of Hawaii Occupation Safety and Health Law (DOSH).

HISTORICAL PRESERVATION NOTES:

- Should historic remains such as artifacts, burials, concentrations 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 shall cordon off the area and immediately notify the State Historic Preservation Division at (808) 692-8015, which will assess the significance of the find and recommend the appropriate mitigation measures, if necessary. In addition, if human burial are found, the Contractor shall immediately notify the County of Maui Police Department.

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THIS WORK WAS PREPARED BY ME  
OR UNDER MY SUPERVISION.  
Signature: *Gerald D. Andrade* 04/30/24  
EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

GENERAL NOTES

KAAIEA STREAM BRIDGE EMERGENCY REPAIRS  
ROUTE 360, MILE POST 8.6  
Fed. Aid Proj. No. ER-24(007)

Scale: None Date: Jan. 2023

SHEET No. N-3 OF 4 SHEETS

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US FISH AND WILDLIFE GENERAL NOTES

The contractor shall comply to the following measures to avoid or minimize project impacts to threatened and endangered animals, including bats, birds, turtles, and invertebrates, in Hawaii and the Pacific Islands as described below.

HAWAIIAN HOARY BAT

- Do not disturb, remove, or trim woody plants greater than 15 feet tall during the bat birthing and pup rearing season (June 1 through September 15).
- Do not use barbed wire for fencing.

HAWAIIAN SEABIRDS

- Fully shield all outdoor lights so the bulb can only be seen from below bulb height and only use when necessary.
- Install automatic motion sensor switches and timer controls on all outdoor lights or turn off lights when human activity is not occurring in the lighted area.
- Avoid nighttime construction during the seabird fledging period, September 15 through December 15.

HAWAIIAN WATERBIRDS

If a Hawaiian Waterbird nest or active brood is found in the action area:

- Immediately notify the Engineer who will coordinate with contact USFWS Pacific Island Fish and Wildlife Office for further guidance.
- Establish and maintain a 100-foot (ft) buffer around all active nests and/or broods until the chicks/ducklings have fledged. Do not conduct potentially disruptive activities or habitat alteration within this buffer.

HAWAIIAN GOOSE OR NENE

- Do not approach, feed, or disturb Hawaiian Geese.
- If Hawaiian geese are observed loafing or foraging within the project area during the breeding season (September through April), halt work and have a biologist familiar with the nesting behavior of Hawaiian geese survey for nests in and around the project area prior to the resumption of any work. Repeat surveys after any subsequent delay of work of 3 or more days (during which the birds may attempt to nest).
- Cease all work immediately and contact the USFWS Pacific Island Fish and Wildlife Office for further guidance if a nest is discovered within a radius of 150 ft of proposed work, or a previously undiscovered nest if found within said radius after work begins.

- In areas where Hawaiian geese are known to be present, post and implement reduced speed limits, and inform project personnel and contractors about the presence of endangered species on-site.
- Have a biological monitor that is familiar with the species' biology present on the project site during all construction or Earth moving activities until the chicks/ducklings fledge to ensure that Hawaiian waterbirds and nests are not adversely impacted.

PACIFIC HAWAIIAN DAMSELFLY

- Turbidity and siltation from project-related work shall be minimized and contained within the vicinity of the site through the appropriate use of effective silt containment devices and the curtailment of work during adverse tidal and weather conditions.
- All project-related materials and equipment (dredges, barges, backhoes, etc.) to be placed in the water shall be cleaned of pollutants prior to use.
- No project-related materials (fill, revetment rock, pipe etc.) should be stockpiled in the water (intertidal zones, reef flats, stream channels, wetlands, etc.) or on each habitats.
- All debris removed from the marine/aquatic environment shall be disposed of at an approved upland or ocean dumping site.
- No contamination (trash or debris disposal, non-native species introduction, attraction of non-native pests, etc.) of adjacent habitats (reef flats, channels, open-ocean, stream channels, wetlands, beaches, forests, etc.) shall result from project-related activities. This shall be accomplished by implementing a litter-control plan and developing a Hazard Analysis and Critical Control Point Plan (<https://www.fws.gov/policy/AI750fwl.html>) to prevent attraction and introduction of non-native species.

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GERALD D. ANDRADE

LICENSED PROFESSIONAL ENGINEER

No. 10377-C

HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

Signature

04/30/24

EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

HIGHWAYS DIVISION

GENERAL NOTES

KAAIEA STREAM BRIDGE EMERGENCY REPAIRS

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SHEET No. N-4 OF 4 SHEETS