Make the following Section a part of the Standard Specifications:

## "SECTION 671 – PROTECTION OF THREATENED AND ENDANGERED SPECIES

671.01 Description. The endangered Hawaiian hoary bat or 'ope'ape'a (Lasiurus cinereus semotus) may roost, forage, and rear young in the general vicinity of the proposed project. The project site is located in a known flight corridor for the endangered Hawaiian petrel or 'ua'u (Pterodroma sandwichensis), the endangered Hawai'i distinct population segment (DPS) of the band-rumped stormpetrel or 'ake'ake (Oceanodroma castro), and the threatened Newell's shearwater or 'a'o (Puffinus auricularis newelli), hereinafter referred to as Hawaiian seabirds. Endangered Hawaiian waterbirds, including the Hawaiian stilt or ae'o (Himantopus mexicanus knudseni), the Hawaiian coot or 'alae ke'oke'o (Fulica americana alai), the Hawaiian gallinule or 'alae 'ula (Gallinula galeata sandvicensis), and the Hawaiian duck or koloa (Anas wyvilliana) are known to be in the general vicinity of the project and may be attracted to the project staging areas even in sub-optimal locations if water is present. Also, to be considered is the threatened Hawaiian goose or nēnē (Branta [=Nesochen] sandvicensis) which may use the construction staging areas or areas adjacent to the roadway.

The Contractor shall protect these threatened and endangered species throughout the construction duration.

671.02 Materials. None

671.03 Construction.

- **(A)** Pre-Construction and Construction Requirements. Comply with the following conditions and the notes in the Contract Plans:
  - (1) Hawaiian Hoary Bat. Hawaiian hoary bats nest in both native and non-native woody vegetation.

The Contractor shall incorporate these measures to avoid and minimize project-related adverse effects to the Hawaiian hoary bat:

- (a) There shall be no disturbance, removal, or trimming of woody plants greater than 15 feet (4.6 meters) tall during the bat birthing and pup rearing season (June 1 through September 15).
- **(b)** Barbed wire shall not be used for fencing.
- (2) Hawaiian Seabirds. Hawaiian seabirds may traverse the project area at night during breeding, nesting and fledgling season, which extends from March 1 through December 15. Permanent lighting poses a very high risk of seabird attraction so new highway lighting should not be installed to protect seabird flyways and preserve the night sky. Additional or increased lighting exacerbates the problem of Newell's shearwater fallout.

Fallout shall be defined as the occurrence of seabirds being harmed, injured or killed and falling to the ground due to: 1) collision with structures such as wires, poles, or other objects; 2) light attraction and the resulting collision with structure associated with or near the light sources; or, 3) the exhaustion from circling the light source.

If nighttime work will be required in conjunction with the development of the project, the Contractor shall incorporate these measures to avoid and minimize project-related adverse effects to Hawaiian seabirds:

- (a) Before beginning any work at the project site, the Contractor shall:
  - i. Collect information regarding the protection of seabirds and seabird fallout.
  - ii. Submit to the Engineer for acceptance a protection of seabirds training plan including a detailed description of information and materials the Contractor intends to use in the training classes. The training plan shall be submitted to the Engineer for acceptance at least fifteen (15) days in advance of the class. If the Engineer rejects the training plan, the Contractor shall revise and promptly propose another training plan.
  - iii. Disseminate information regarding the protection of seabirds and seabird fallout by conducting training classes for all employees, subcontractors, suppliers and other personnel working on the project, including HDOT personnel, on such topics as the Save Our Shearwater (SOS) program, proper use of temporary lighting, procedures to store and report downed seabirds, and the consequences of non-compliance with the laws regarding threatened and endangered seabirds. The Engineer may request for additional topics related to seabirds to be included in the training classes.

Training classes shall be taught by authorized representatives of the U.S. Fish and Wildlife Service (USFWS), the Department of Land and Natural Resources, the SOS program or other qualified personnel accepted by the Engineer.

100	iv.	Furnish the Engineer with evidence that the
101		Contractor has held training classes, including the
102		dates of the classes, identify who conducted the
103		training, and the content and nature of the training.
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105	<b>(b)</b> Th	e Contractor shall comply to the following
106	` '	ion requirements:
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108	i.	As directed by the Engineer, the Contractor shall
109	••	conduct additional training classes during the
110		project to update all employees, subcontractors,
111		suppliers, HDOT personnel and other personnel on
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		new and/or updated information regarding the
113		protection of seabirds and seabird fallout.
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115	ii.	No permanent streetlights shall be installed as part
116		of the project.
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118	iii.	All temporary lights used for night work (between
119		sunset and sunrise) shall contain less than 2%
120		wavelengths less than 550 nm, and shall be
121		downward-facing and shielded so the bulb can only
122		be seen from below. Temporary lights shall include
123		but are not limited to flood lights, light towers, lights
124		for construction equipment and other lights as
125		determined by the Engineer. All traffic control
126		devices, including warning lights, arrow boards,
127		portable changeable message signs and other
128		lighting device as determined by the Engineer shall
129		be shielded.
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131	iv	Nighttime construction and the use of all temporary
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132		lights shall cease during the peak seabird fledgling
133		period (September 15 through December 15).
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135	٧.	The Contractor shall furnish and maintain a small
136		(approximately 10" x 12" x 19"), portable cat kennel
137		on site to temporarily hold a downed seabird. The
138		Contractor shall obtain acceptance of the cat
139		kennel from the Engineer prior to use.
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141	vi.	If a downed dead seabird is found, the Contractor
142		shall contact the Division of Forestry and Wildlife
143		(DOFAW) at (808) 274-3433 or SOS at (808) 635-
144		5117 within 24 hours.
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146	vii.	If the downed seabird is alive, the Contractor shall:
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- I. Pick up the seabird from behind as soon as possible using a clean towel, t-shirt or cloth by gently wrapping it around its back and wings.
- II. Place the seabird in the cat kennel and immediately contact the SOS Program Coordinator at 808-635-5117 for further instructions on where to deliver the seabird.
- III. Deliver the seabird to the location determined by the coordinator of the SOS program and as directed by the Engineer.
- IV. Keep the seabird in a cool, quiet location and out of direct sunlight with adequate ventilation.
- V. The Contractor and any personnel onsite shall not feed, provide water, handle or release the seabird.
- viii. The Contractor shall maintain records of all downed seabirds for the duration of the project. The records shall include the date, time, location and condition (dead or alive) the seabird was found and delivered. Submit a copy of the records to the Engineer after finding each and every downed seabird.
- (3) Hawaiian Waterbirds. Hawaiian waterbirds occupy fresh and brackish water marshes, coastal estuaries and natural or manmade ponds. Hawaiian stilts also occupy areas with ephemeral or persistent standing water, conditions of which can be found in culverts and drainage structures. Because this project occurs near water, threats to these species from this project may include predation, reduced reproductive success, disturbance from human activity and injury or mortality from vehicle strikes.

The Contractor shall incorporate these measures to avoid and minimize project-related adverse effects to Hawaiian waterbirds:

- (a) In areas where known presence of Hawaiian waterbirds occurs, post, implement and enforce reduced speed limits, and inform project personnel and Contractors of the presence of these endangered species on-site.
- **(b)** If water resources are located within or adjacent to the project site, incorporate the applicable best management

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practices (BMPs) regarding work in aquatic environments to the project design.

- (c) Where appropriate habitat occurs within the vicinity of the project area, survey for Hawaiian waterbirds and nests prior to initiation of project work using survey biologists familiar with the species' biology. Survey biologists should be trained and capable of identifying adults and juveniles of each species, nesting behaviors, and nests. Repeat surveys again within three (3) days of project initiation during which the birds may attempt to nest.
  - Surveys for species and nests should be repeated when a delay of work occurs that is three (3) days or more (during which the birds may attempt to nest).
  - **ii.** If a nest or active brood is found, contact the Kauai Branch DOFAW Office at (808) 274-3433 within 24 hours for further guidance.
  - iii. Establish and maintain a 100-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.
  - iv. A biological monitor that is familiar with the species' biology shall be 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 affected.
  - v. Additionally for projects that include cleaning of existing culverts, a biological monitor that is familiar with the Hawaiian stilt's biology is required during Hawaiian stilt nesting season from February through August 31.
    - A biological monitor that is familiar with the species' biology will conduct Hawaiian stilt nest surveys where appropriate habitat occurs within the proposed maintenance site prior to cleaning of culverts and drainage structures.

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- II. Surveys will take place within three (3) days of project initiation and after any subsequent delay of work of three (3) or more days (during which time the birds may attempt to nest).
- (4) Hawaiian Goose. Hawaiian goose or nēnē uses various habitat types. Threats to the species from this project include disturbance from human presence, and injury and mortality from vehicle strikes. An increased human presence at the project site could disturb nēnē nesting, foraging, or loafing in the area.

The Contractor shall incorporate these measures to avoid and minimize project-related adverse effects to the nēnē:

- (a) Nēnē in or near the project area shall not be approached, fed, or disturbed in any way.
- (b) All food and or beverage waste shall be disposed of in appropriate, covered trash receptacles.
- (c) If nēnē are observed loafing, foraging, or otherwise present within the project area during the breeding season (September 1 through April 30), a trained biologist familiar with nēnē nesting behavior will survey the area in and around the project area for nests prior to work each day. Surveys will be repeated after any subsequent delay of work of three (3) or more days (during which the birds may attempt to nest).
- (d) If a nest is identified within a radius of 150 feet of the project area, or a previously undiscovered nest is found within the 150-foot radius after work begins, all work shall cease and the Kauai Branch DOFAW Office will be contacted immediately at (808) 274-3433 for further guidance.
- (e) Reduced speed limits shall be posted and implemented in areas where nēnē are known to be present, and project personnel and Contractors will be informed of the presence of endangered species onsite.
- (f) There shall be no feeding of birds or dogs on the project site.
- (B) Compliance Requirements. The Contractor shall protect all species noted above for the duration of construction. Failure to comply with the construction requirements, harm or a taking of an individual during the construction duration shall be enforceable by

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