

1 Make the following Section a part of the Standard Specifications:
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3 **“SECTION 671 – PROTECTION OF THREATENED AND ENDANGERED**
4 **SPECIES**
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6 **671.01 Description.** The endangered Hawaiian hoary bat or ‘ōpe‘ape‘a
7 (*Lasiurus cinereus semotus*) may roost, forage, and rear young in the general
8 vicinity of the proposed project. The project site is located in a known flight corridor
9 for the endangered Hawaiian petrel or ‘ua‘u (*Pterodroma sandwichensis*), the
10 endangered Hawai‘i distinct population segment (DPS) of the band-rumped storm-
11 petrel or ‘ake‘ake (*Oceanodroma castro*), and the threatened Newell’s shearwater
12 or ‘a‘o (*Puffinus auricularis newelli*), hereinafter referred to as Hawaiian seabirds.
13 Endangered Hawaiian waterbirds, including the Hawaiian stilt or ae‘o (*Himantopus*
14 *mexicanus knudseni*), the Hawaiian coot or ‘alae ke‘oke‘o (*Fulica americana alai*),
15 the Hawaiian gallinule or ‘alae ‘ula (*Gallinula galeata sandvicensis*), and the
16 Hawaiian duck or koloa (*Anas wyvilliana*) are known to be in the general vicinity of
17 the project and may be attracted to the project staging areas even in sub-optimal
18 locations if water is present. Also, to be considered is the threatened Hawaiian
19 goose or nēnē (*Branta sandvicensis*) which may use the construction staging
20 areas or areas adjacent to the roadway.
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22 The Contractor shall protect these threatened and endangered species
23 throughout the construction duration.
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25 **671.02 Materials.** None
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27 **671.03 Construction.**
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29 **(A) Pre-Construction and Construction Requirements.** The
30 Contractor shall comply with the following conditions and notes in the
31 Contract Plans:
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33 **(1) Hawaiian Hoary Bat.** Hawaiian hoary bats nest in both
34 native and non-native woody vegetation. Incorporate these
35 measures to avoid and minimize project-related adverse effects to
36 the Hawaiian hoary bat.
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38 **(a)** There shall be no disturbance, removal, or trimming of
39 woody plants greater than 15 feet (4.6 meters) tall during the
40 bat birthing and pup rearing season (June 1 through
41 September 15).
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43 **(b)** Barbed wire shall not be used for fencing.
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45 **(2) Hawaiian Seabirds.** Hawaiian seabirds may traverse the
46 project area at night during breeding, nesting and fledgling season,
47 which extends from March 1 through December 15. Permanent
48 lighting poses a very high risk of seabird attraction so new highway
49 lighting should not be installed to protect seabird flyways and
50 preserve the night sky. Additional or increased lighting exacerbates
51 the problem of Newell’s shearwater fallout.

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(a) 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.

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

(c) Before beginning any work at the project site, the Contractor shall:

1. Collect information regarding the protection of seabirds and seabird fallout.

2. 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.

3. 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.

4. Furnish the Engineer with evidence that the Contractor has held training classes, including the

101 dates of the classes, identify who conducted the
102 training, and the content and nature of the training.

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104 **(d)** The Contractor shall comply to the following
105 construction requirements:

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107 1. As directed by the Engineer, the Contractor shall
108 conduct additional training classes during the project to
109 update all employees, subcontractors, suppliers, HDOT
110 personnel and other personnel on new and/or updated
111 information regarding the protection of seabirds and
112 seabird fallout.

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114 2. No permanent streetlights shall be installed as part
115 of the project.

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117 3. All temporary lights used for night work (between
118 sunset and sunrise) shall contain less than 2%
119 wavelengths less than 550 nm, and shall be downward-
120 facing and shielded so the bulb can only be seen from
121 below. Temporary lights shall include but are not limited
122 to flood lights, light towers, lights for construction
123 equipment and other lights as determined by the
124 Engineer. All traffic control devices, including warning
125 lights, arrow boards, portable changeable message
126 signs and other lighting device as determined by the
127 Engineer shall be shielded.

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129 4. Lights shall be turned off when human activity is not
130 occurring in the lighted area, or install automatic motion
131 sensor switches and timer controls on all outdoor lights.

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133 5. Nighttime construction and the use of all temporary
134 lights shall cease during the peak seabird fledgling
135 period (September 15 through December 15).

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137 6. Where fences extend above vegetation, durable
138 scare tape or bird deterrent shall be integrated into the
139 fence to increase visibility and minimize fence strikes.

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141 7. For powerlines and other cables, exposure above
142 vegetation height and vertical profile shall be
143 minimized.

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145 8. The Contractor shall furnish and maintain a small
146 (approximately 10" x 12" x 19"), portable cat kennel on
147 site to temporarily hold a downed seabird. The

148 Contractor shall obtain acceptance of the cat kennel
149 from the Engineer prior to use.

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151 9. If a downed dead seabird is found, the Contractor
152 shall contact the USFWS (Ms. Megan Laut at 808-792-
153 9400), the Kauai Branch Division of Forestry and
154 Wildlife (DOFAW) Office at (808) 274-3433 or SOS at
155 (808) 635-5117 within 24 hours.

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157 10. If the downed seabird is alive, the Contractor shall:

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159 a. Pick up the seabird from behind as soon
160 as possible using a clean towel, t-shirt or cloth by
161 gently wrapping it around its back and wings.

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163 b. Place the seabird in the cat kennel and
164 immediately contact the SOS Program
165 Coordinator at 808-635-5117 for further
166 instructions on where to deliver the seabird.

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168 c. Deliver the seabird to the location
169 determined by the coordinator of the SOS
170 program and as directed by the Engineer.

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172 d. Keep the seabird in a cool, quiet location
173 and out of direct sunlight with adequate
174 ventilation.

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176 e. The Contractor and any personnel on-
177 site shall not feed, provide water, handle or
178 release the seabird.

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180 **(e)** The Contractor shall maintain records of all downed
181 seabirds for the duration of the project. The records shall
182 include the date, time, location and condition (dead or alive)
183 the seabird was found and delivered. Submit a copy of the
184 records to the Engineer after finding each and every downed
185 seabird.

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187 **(3) Hawaiian Waterbirds.** Hawaiian waterbirds occupy fresh
188 and brackish water marshes, coastal estuaries and natural or
189 manmade ponds. Hawaiian stilts also occupy areas with ephemeral
190 or persistent standing water, conditions of which can be found in
191 culverts and drainage structures. Threats to these species from this
192 project may include predation, reduced reproductive success,
193 disturbance from human activity and injury or mortality from vehicle
194 strikes.

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196 The Contractor shall incorporate these measures to avoid and
197 minimize project-related adverse effects to Hawaiian waterbirds:
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199 (a) In areas where known presence of Hawaiian
200 waterbirds occurs, post, implement and enforce reduced
201 speed limits, and inform project personnel and Contractors of
202 the presence of these endangered species on-site.
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204 (b) If water resources are located within or adjacent to the
205 project site, employ applicable best management practices
206 (BMPs) regarding work in aquatic environments.
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208 (c) Where appropriate habitat occurs within the vicinity of
209 the project area, survey for Hawaiian waterbirds and nests
210 prior to initiation of project work using survey biologists familiar
211 with the species' biology. Survey biologists should be trained
212 and capable of identifying adults and juveniles of each species,
213 nesting behaviors, and nests. Repeat surveys again within
214 three (3) days of project initiation and after any subsequent
215 delay of work of three (3) or more days (during which the birds
216 may attempt to nest).
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218 (d) If a nest of active brood is found, the Contractor shall:
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220 1. Contact the USFWS (Ms. Megan Laut at 808-792-
221 9400) or the Kauai Branch DOFAW Office at (808) 274-
222 3433 within 24 hours for further guidance.
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224 2. Establish and maintain a 100-ft buffer around all
225 active nests and/or broods until the chicks/ducklings
226 have fledged. Do not conduct potentially disruptive
227 activities or habitat alteration within this buffer.
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229 3. A biological monitor that is familiar with the species'
230 biology shall be present on the project site during all
231 construction or earth moving activities until the
232 chicks/ducklings fledge to ensure that Hawaiian
233 waterbirds and nests are not adversely affected.
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235 (4) **Hawaiian Goose.** Hawaiian goose or nēnē uses various
236 habitat types. Threats to the species from this project include
237 disturbance from human presence, and injury and mortality from
238 vehicle strikes. An increased human presence at the project site
239 could disturb nēnē nesting, foraging, or loafing in the area.
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241 The Contractor shall incorporate these measures to avoid and
242 minimize project-related adverse effects to the nēnē:

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(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 shall survey for nests in and around the project area prior to resumption of any work. Surveys shall 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 immediately, and the Contractor shall contact the USFWS (Ms. Megan Laut at 808-792-9400) or the Kauai Branch DOFAW Office 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 on-site.

(f) There shall be no feeding of birds or dogs on the project site.

(5) Pueo (Hawaiian Short-Eared Owl). The endemic pueo could potentially nest in the project area. Before any potential vegetative alteration, especially ground-based disturbance, conduct a line transect survey during crepuscular hours through the project area. If a pueo nest is discovered, a minimum buffer distance of 200 meters from the nest shall be established until chicks are capable of flight.

(6) Hawaiian Monk Seal and Green Sea Turtle. The Hawaiian Monk Seal and Hawaiian Green Sea turtle could potentially occur or haul out onshore within the vicinity of the project area. If either species is detected within 100 meters of the project area all nearby construction operations should cease and not continue until the focal animal has departed the area on its own accord.

(7) Best Management Practices (BMPs) Regarding Work in Aquatic Environments. Where work may affect aquatic environments, the Contractor shall incorporate these measures to avoid or minimize impacts to fish and wildlife:

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- (a)** Authorized dredging or filling-related activities that may result in the temporary or permanent loss of aquatic habitats will be designed to avoid direct, negative impacts to aquatic habitats beyond the planned project area.
- (b)** Dredging or filling in the marine environment should be scheduled to avoid coral spawning and recruitment periods, and sea turtle nesting and hatching periods. Because these periods are variable throughout the Pacific Islands, the relevant local, state, or federal fish and wildlife resource agency will be contacted for site specific guidance.
- (c)** Turbidity and siltation from project-related work will be minimized and contained within the project area by silt containment devices and curtailing work during flooding or adverse tidal and weather conditions. BMPs will be maintained for the life of the construction period until turbidity and siltation within the project area is stabilized. All project construction-related debris and sediment containment devices will be removed and disposed of at an approved site.
- (d)** All project construction-related materials and equipment (dredges, vessels, backhoes, silt curtains, etc.) to be placed in an aquatic environment will be inspected for pollutants including, but not limited to; marine fouling organisms, grease, oil, etc., and cleaned to remove pollutants prior to use. Project related activities should not result in any debris disposal, non-native species introductions, or attraction of non-native pests to the affected or adjacent aquatic or terrestrial habitats. Implementing both a litter-control plan and a Hazard Analysis and Critical Control Point plan (HACCP – see <https://www.fws.gov/policy/A1750fw1.html>) can help to prevent attraction and introduction of non-native species.
- (e)** Project construction-related materials (fill, revetment rock, pipe, etc.) should not be stockpiled in, or in close proximity to aquatic habitats and should be protected from erosion (e.g., with filter fabric, etc.), to prevent materials from being carried into waters by wind, rain, or high surf.
- (f)** Fueling of project-related vehicles and equipment will take place away from the aquatic environment and a contingency plan to control petroleum products accidentally spilled during the project will be developed. The plan will be retained on site with the person responsible for compliance with the plan. Absorbent pads and containment booms will be stored on-site to facilitate the clean-up of accidental petroleum releases.
- (g)** All deliberately exposed soil or under-layer materials used in the project near water will be protected from erosion

345 and stabilized as soon as possible with geotextile, filter fabric
346 or native or non-invasive vegetation matting, hydro-seeding,
347 etc.

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349 **(B) Compliance Requirements.** The Contractor shall protect all
350 species noted above for the duration of construction. Failure to comply with
351 the construction requirements, harm or a taking of an individual during the
352 construction duration shall be enforceable by the USFWS as set forth by
353 the Endangered Species Act and the DOFAW as set forth under the
354 provisions of the Hawaii Revised Statutes, Chapter 195D, Conservation of
355 Aquatic Life, Wildlife, and Land Plants. Resultant penalties and/or fines shall
356 be at the Contractor's expense without cost or liability to the State.

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358 **671.03 Measurement.** The Engineer will measure the work required for the
359 protection of threatened and endangered species on a force account basis in
360 accordance with Subsection 109.06 – Force Account Provisions and
361 Compensation and as ordered by the Engineer.

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363 **671.04 Payment.** The Engineer will pay for the accepted protection of
364 threatened and endangered species on a force account basis in accordance with
365 Subsection 109.06 – Force Account Provisions and Compensation. Payment will
366 be full compensation for the work prescribed in this section, by the Engineer, and
367 in the contract documents.

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369 The Engineer will pay for the following pay item when included in the
370 proposal schedule:

371	372 Pay Item	373 Pay Unit
374	Protection of Threatened and Endangered Species	Force Account

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376 An estimated amount may be allocated in the proposal schedule under
377 "Protection of Threatened and Endangered Species", but the actual amount to be
378 paid will be the sum shown on the accepted force account records, whether this
379 sum be more or less than the estimated amount allocated in the proposal
380 schedule."

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END OF SECTION 671