

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 [=Nesochen] sandvicensis*) which may use the construction
20 staging areas or areas adjacent to the roadway. The endangered Hawaiian monk
21 seal or ‘īlio holo i ka uaua (*Neomonachus schauinslandi*) and sea turtles, including
22 the endangered Hawksbill Sea Turtle or ‘ea (*Eretmochelys imbricate*), and the
23 threatened Central North Pacific DPS of the Green Sea Turtle or honu (*Chelonia*
24 *mydas*) are in the general vicinity of the proposed project and may transit or visit
25 the proposed project area.

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

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30 **671.02 Materials.** None

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32 **671.03 Construction.**

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34 **(A) Pre-Construction and Construction Requirements.** Comply with
35 the following conditions and the notes in the Contract Plans:

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37 **(1) Hawaiian Hoary Bat.** Hawaiian hoary bats nest in both
38 native and non-native woody vegetation.

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

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43 **(a)** There shall be no disturbance, removal, or trimming of
44 woody plants greater than 15 feet (4.6 meters) tall
45 during the bat birthing and pup rearing season (June 1
46 through September 15).

47
48 **(b)** Barbed wire shall not be used for fencing.

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50 **(2) Hawaiian Seabirds.** Hawaiian seabirds may traverse the
51 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 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 USFWS, the

Department of Land and Natural Resources, the SOS program or other qualified personnel accepted by the Engineer.

- iv. Furnish the Engineer with evidence that the Contractor has held training classes, including the dates of the classes, identify who conducted the training, and the content and nature of the training.

(b) The Contractor shall comply to the following construction requirements:

- i. As directed by the Engineer, the Contractor shall conduct additional training classes during the project to update all employees, subcontractors, suppliers, HDOT personnel and other personnel on new and/or updated information regarding the protection of seabirds and seabird fallout.
- ii. No permanent streetlights shall be installed as part of the project.
- iii. All temporary lights used for night work (between sunset and sunrise) shall contain less than 2% wavelengths less than 550 nm, and shall be downward-facing and shielded so the bulb can only be seen from below. Temporary lights shall include but are not limited to flood lights, light towers, lights for construction equipment and other lights as determined by the Engineer. All traffic control devices, including warning lights, arrow boards, portable changeable message signs and other lighting device as determined by the Engineer shall be shielded.
- iv. Nighttime construction and the use of all temporary lights shall cease during the peak seabird fledgling period (September 15 through December 15).
- v. The Contractor shall furnish and maintain a small (approximately 10" x 12" x 19"), portable cat kennel on site to temporarily hold a downed seabird. The Contractor shall obtain acceptance of the cat kennel from the Engineer prior to use.

146 vi. If a downed dead seabird is found, the Contractor
147 shall contact the USFWS (Ms. Megan Laut at 808-
148 792-9400) within 24 hours.

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150 vii. If the downed seabird is alive, the Contractor shall:

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

155
156 II. Place the seabird in the cat kennel and
157 immediately contact the SOS Program
158 Coordinator at 808-635-5117 for further
159 instructions on where to deliver the seabird.

160
161 III. Deliver the seabird to the location
162 determined by the coordinator of the SOS
163 program and as directed by the Engineer.

164
165 IV. Keep the seabird in a cool, quiet location
166 and out of direct sunlight with adequate
167 ventilation.

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169 V. The Contractor and any personnel on-
170 site shall not feed, provide water, handle or
171 release the seabird.

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173 viii. The Contractor shall maintain records of all downed
174 seabirds for the duration of the project. The records
175 shall include the date, time, location and condition
176 (dead or alive) the seabird was found and delivered.
177 Submit a copy of the records to the Engineer after
178 finding each and every downed seabird.

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180 **(3) Hawaiian Waterbirds.** Hawaiian waterbirds occupy fresh
181 and brackish water marshes, coastal estuaries and natural or
182 manmade ponds. Hawaiian stilts also occupy areas with ephemeral
183 or persistent standing water, conditions of which can be found in
184 culverts and drainage structures. Because this project occurs near
185 water, threats to these species from this project may include
186 predation, reduced reproductive success, disturbance from human
187 activity and injury or mortality from vehicle strikes.

188
189 The Contractor shall incorporate these measures to avoid and
190 minimize project-related adverse effects to Hawaiian waterbirds:

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192 **(a)** In areas where known presence of Hawaiian
193 waterbirds occurs, post, implement and enforce reduced

194 speed limits, and inform project personnel and Contractors of
195 the presence of these endangered species on-site.

196
197 **(b)** Because water resources occur in the project site,
198 employ U.S. Fish and Wildlife Service (USFWS) Best
199 Management Practices for Work in Aquatic Environments.

200
201 **(c)** Where appropriate habitat occurs within the vicinity of
202 the project area, survey for Hawaiian waterbirds and nests
203 prior to initiation of project work using survey biologists
204 familiar with the species' biology. Survey biologists should be
205 trained and capable of identifying adults and juveniles of each
206 species, nesting behaviors, and nests. Repeat surveys again
207 within 3 days of project initiation and after any subsequent
208 delay of work of 3 or more days (during which the birds may
209 attempt to nest).

210
211 i. Surveys for species and nests should be repeated
212 when a delay of work occurs that is three days or
213 more (during which the birds may attempt to nest).

214
215 ii. If a nest or active brood is found, contact USFWS
216 within 24 hours for further guidance.

217
218 iii. Establish and maintain a 100-ft buffer around all
219 active nests and/or broods until the
220 chicks/ducklings have fledged. Do not conduct
221 potentially disruptive activities or habitat alteration
222 within this buffer.

223
224 iv. A biological monitor that is familiar with the species'
225 biology shall be present on the project site during
226 all construction or earth moving activities until the
227 chicks/ducklings fledge to ensure that Hawaiian
228 waterbirds and nests are not adversely affected.

229
230 **(d)** A biological monitor is required during Hawaiian stilt
231 nesting season from February 15 through August 31.

232
233 i. A biological monitor that is familiar with the species
234 biology and approved by the Federal Highways
235 Administration will conduct Hawaiian stilt nest
236 surveys where appropriate habitat occurs within the
237 proposed maintenance site prior to cleaning
238 culverts and drainage structures.

- 240 ii. Surveys will take place within three days of project
241 initiation and after any subsequent delay of work of
242 three or more days (during which the birds may
243 attempt to nest).

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245 **(4) Hawaiian Goose.** Hawaiian goose or nēnē uses various
246 habitat types. Threats to the species from this project include
247 disturbance from human presence, and injury and mortality from
248 vehicle strikes. An increased human presence at the project site
249 could disturb nēnē nesting, foraging, or loafing in the area.

250
251 The Contractor shall incorporate these measures to avoid and
252 minimize project-related adverse effects to the nēnē:

- 253
254 (a) Nēnē in or near the project area shall not be
255 approached, fed, or disturbed in any way.
256
257 (b) All food and or beverage waste shall be disposed of in
258 appropriate, covered trash receptacles.
259
260 (c) If nēnē are observed loafing, foraging, or otherwise
261 present within the project area during the breeding
262 season (September 1 through April 30), a trained
263 biologist familiar with nēnē nesting behavior will survey
264 the area in and around the project area for nests prior
265 to work each day. Surveys will be repeated after any
266 subsequent delay of work of three or more days (during
267 which the birds may attempt to nest).
268
269 (d) If a nest is identified within a radius of 150 feet of the
270 project area, or a previously undiscovered nest is found
271 within the 150-foot radius after work begins, all work
272 shall cease and the USFWS will be contacted
273 immediately for further guidance.
274
275 (e) Reduced speed limits shall be posted and
276 implemented in areas where nēnē are known to be
277 present, and project personnel and Contractors will be
278 informed of the presence of endangered species on-
279 site.
280
281 (f) There shall be no feeding of birds or dogs on the
282 project site.

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284 **(5) Hawaiian Monk Seal.** The Contractor shall incorporate these
285 measures to avoid and minimize project-related adverse effects to
286 the Hawaiian monk seal:

- 287
288 (a) All regular on-site staff shall be trained to identify the
289 Hawaiian monk seal and trained on appropriate steps to
290 take if this species is present on-site.

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- (b) Construction activities shall not take place if a Hawaiian monk seal is in the construction area or within 150 feet of the construction area. Construction can only begin after the animal voluntarily leaves the area. If a monk seal/pup pair is present a minimum 300-foot buffer shall be observed. If a Hawaiian Monk Seal is noticed after work has already begun, that work may continue only if, in the best judgment of the Biological Monitor, that there is no way for the activity to adversely affect the animal(s).
 - (c) Any construction-related debris that may pose an entanglement threat to Hawaiian monk seals shall be removed from the construction area at the end of each day and at the conclusion of the construction project.
 - (d) Workers shall not attempt to feed, touch, ride, or otherwise intentionally interact with any listed species.

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(6) Sea Turtles. Sea turtles may nest on any sandy beach in the Pacific Islands. Nesting occurs on beaches from May through September, peaking in June and July, with hatchlings emerging through November and December. Construction can compact and erode sand and sediments, destroy sea turtle nests, erode beaches, create runoff of contaminants, and create light that disorients hatchlings and deters nesting. Off-road vehicle traffic on beaches, including construction equipment, directly affecting sea turtles and their nests by crushing individuals and degrading habitat with erosion and compacting sand and sediment.

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To avoid and minimize project-related adverse effects to sea turtles and their nests, incorporate these conservation measures:

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- (a) No vehicle use or modifying the beach/dune environment during the sea turtle nesting or hatching season, which extends from May through December.
 - (b) Employ U.S. Fish and Wildlife Service Recommended Standard Best Management Practices when working in aquatic environments.
 - (c) Remove any project-related debris, trash, and equipment from the beach or dune if not actively in use.
 - (d) Do not stockpile project-related materials in the intertidal zone, reef flats, stream channels, or river channels.

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Optimal turtle nesting habitat is a dark beach, free of barriers that could restrict sea turtle movement. Lighting and human

341 presence deters nesting turtles from approaching, laying eggs, and
342 successfully nesting. Artificial light disorients sea turtles and they
343 become exhausted, causing them to nest in inappropriate locations,
344 such as at or below the high tide line. Artificial lighting also disorients
345 hatchlings as they emerge from nests. Sea turtles need darkness on
346 beaches so they can successfully navigate back to the ocean. In-
347 water work at night shall be avoided, unless emergency maintenance
348 and repair of erosion and sediment controls are necessary to meet
349 permit conditions.

350
351 The Contractor shall incorporate these measures to avoid and
352 minimize project-related adverse effects to sea turtles and their
353 young from lighting:
354

355 (a) Avoid nighttime work during the nesting and hatching
356 season, which extends from May through December.

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358 (b) Minimize the use of lighting and shield all project-
359 related lights to ensure this light is not visible from any beach.

360
361 (c) If full shielding of light is not possible, or if you require
362 the use of headlights, fully enclose the light source using light
363 filtering tape or filters.
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365 **(7) Essential Fish Habitat.** The Contractor shall incorporate
366 these measures to avoid and minimize project-related adverse
367 effects to essential fish habitat:
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369 (a) Contractor shall conduct a pre-construction biological
370 survey to determine whether infrastructure materials (e.g,
371 riprap, piles, boulders) are colonized with benthic
372 communities. If infrastructure materials (e.g, riprap, piles,
373 boulders) that are colonized with benthic communities will be
374 removed or destroyed as part of permitted activities,
375 Contractor shall prepare relocation plan for HDOT approval,
376 and relocate these materials to an appropriate receiving site.

377
378 (b) The Contractor shall prevent debris from falling into the
379 water.
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381 **(B) Compliance Requirements.** The Contractor shall protect all
382 species noted above for the duration of construction. Failure to
383 comply with the construction requirements, harm or a taking of an
384 individual during the construction duration shall be enforceable by
385 the USFWS as set forth by the Endangered Species Act. Resultant
386 penalties and/or fines shall be at the Contractor's expense without
387 cost or liability to the State.

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

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

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

Pay Item	Pay Unit
Protection of Threatened and Endangered Species	Force Account

An estimated amount may be allocated in the proposal schedule under “Protection of Threatened and Endangered Species”, 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 671