

1 Amend **Section 201 – Clearing and Grubbing** to read as follows:
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3 **“SECTION 201 – CLEARING AND GRUBBING**
4

5 **201.01 Description.** This section describes clearing, grubbing, protecting trees,
6 vegetation, and objects designated to remain, removing and disposing of
7 vegetation, debris, and unwanted material from right-of-way, easements, road
8 approaches, project and borrow pit sites, and other areas designated in the
9 contract documents or by the Engineer.

10
11 Clearing is defined as removing and disposing of all unwanted surface
12 material, such as trees, brush, grass, weeds, downed trees, and other material.

13
14 Grubbing is defined as removing and disposing of all unwanted vegetative
15 matter from underground, such as stumps, roots, buried logs, and other debris.

16
17 Debris is defined as unusable or unwanted material produced by clearing
18 and grubbing.

19
20 **201.02 Materials.** None

21
22 **201.03 Construction.**
23

24 **(A) Vector Control.** Prior to starting site clearing or structure removal,
25 comply with rodent control requirements of Title 11, Chapter 26, Section
26 11-26-35, HAR. Contact the Kauai District Health Office, Vector control
27 unit at 808-241-3306.

28
29 **(B) Best Management Practices (BMP).** Ensure that all BMP
30 measures are in place before clearing and grubbing starts. If BMP
31 measure is removed temporarily to accommodate construction
32 operations, reinstall before end of workday.

33
34 **(C) Limits.** Clear entire length of project within limits specified in the
35 contract documents.

36
37 **(D) Access.** The Engineer will consider arrangements made by the
38 Contractor for alternative access to the state right of way through private
39 property that will reduce lane closures.

40
41 **(E) Clearing.** Contract tree work to an ISA Certified Arborist with a
42 minimum of 3 years of continuous certification and experience in Hawaii.
43 Two ISA Certified Tree Workers with 1 year of continuous certification
44 and experience in Hawaii shall be on site during all tree work operations.
45 Perform tree work in accordance with ANSI A300 and ANSI Z133.
46
47

48 The Engineer will provide the affected landowner names and
49 contact information to the Contractor. Coordinate with the various
50 affected landowners for the areas within the construction easement
51 above the slope; identify and tag trees that are not to be removed per
52 landowner direction and State concurrence.
53

54 Contractor shall maintain a written log of all communications with
55 landowners, and shall furnish the Engineer copy of this log upon request.
56

57 Begin with the removal and herbiciding of six (6) inch diameter or
58 less trees, followed by the removal of larger trees. After all invasive
59 trees are removed, remove and herbicide all invasive tree saplings.
60 Within stream banks only use herbicide approved for use in waterways.
61

62 1. Contractor shall close Kuhio Highway for as short a duration
63 as possible during the act of felling trees that pose a risk to road
64 users, and for clearing the fallen tree from the travel lanes.
65

66 2. Remove and herbicide trees 6 inches or less in diameter.
67 Cut all trees as close to the finish grade as possible. For trees
68 being removed, climbing with spikes will be allowed. Stumps of
69 trees removed shall be herbicided within 30 minutes of cutting with
70 Pathfinder II or approved equal, with a red dye using the cut stump
71 method per manufacturer's directions.
72

73 3. No herbicide shall be applied on or in any waters of the US.,
74 as currently defined.
75

76 4. Contractor may chip the logs on site and spread to a
77 maximum depth of 4 inches bark mulch on slopes of lesser
78 steepness than 2:1 slope (horizontal:vertical). Chips shall be 6
79 inches or less in size. Remove and properly dispose of logs
80 unable to be chipped on the project site.
81

82 5. Contractor may leave fallen debris that has been secured in
83 place for removal within a day.
84

85 6. Removal and herbiciding of invasive tree saplings. Remove
86 and herbicide all found Albizia tree saplings (*Falcataria moluccana*),
87 African Tulip Tree saplings (*Spathodea campanulata*), Octopus
88 Tree saplings (*Schefflera actinophylla*), Parasol leaf tree
89 (*Macaranga tanarius*), and Bingabing tree saplings (*Macaranga*
90 *mappa*); and any other invasive tree species saplings as
91 determined by Hawaii Weed Risk Assessment, within the project
92 limits.
93

7. Protect remaining trees and shrubbery from injury or damage. Cut trees to be removed without injuring trees and shrubbery that are to remain. Preserve trees, shrubs, plants, and other objects to remain within the established limits.

8. No night work shall take place from September 15th to December 15th due to the endangered seabird fallout season. Refer to **Section 671 – Protection of Seabirds** in these Special Provisions for additional requirements.

(F) Grubbing. Refrain from ground-disturbing work activities as much as possible. Leave in place, stumps and nonperishable solid objects that extend less than 6 inches above the ground line or low water level when they are outside the excavation and embankment areas. Cut stumps flush or as close as possible to finish grade.

(G) Removal and Disposal of Material. Remove material and debris, and dispose of at an authorized disposal site. Obtain written authorization from property owners and governmental authorities for disposal locations outside highway right-of-way limits and provide copy to Engineer.

When accepted by the Engineer, reduce degradable materials to mulch or chips of a maximum size of 6 inches. Spread mulch and chips uniformly on ground surface to a maximum depth of 4 inches.

Leave roadway and adjacent areas with neat and finished appearance. Dispose of slash, flammable material, and other debris within or adjacent to highway right-of-way. Burning of tree material and debris is prohibited.

(H) Hawaiian Hoary Bat. The Hawaiian Hoary Bat (*Lasiurus cinereus semotus*) is listed as Endangered Species and protected under the Endangered Species Act. No clearing or pruning of trees taller than 15 feet shall be allowed from June 1st to September 15th. Contractor shall be responsible for conducting annual training in May of each year of all tree workers on identification of the Hawaiian Hoary Bat. If the Hawaiian Hoary Bat is observed at the project site, notify the Engineer.

If an injured threatened or endangered Hawaii Hoary Bat is found in the rights-of-way, the Contractor shall notify the Engineer immediately and cease all construction and maintenance work in the vicinity of the downed bat. If DOFAW officers arrange to come on site to pick up the bat, do not resume construction or maintenance in the vicinity of the bat until it is removed. If advised by the local DOFAW office to pick up an injured bat, then follow these guidelines:

1. Cease all construction and maintenance work in the vicinity of downed bat.
2. Carefully pick up the bat from behind using a towel, t-shirt or cloth by gently wrapping it around its back and wings.
3. Place the bat in a ventilated cardboard box, pet carrier, or other container. Keep the bat covered and in a quiet, shaded location.
4. Do not feed, water, handle or release the bat.
5. The Engineer shall contact the local DOFAW office to find out where to deliver the injured bat.

If a dead threatened or endangered bat is found within the rights-of-way, the Contractor shall report this to the Engineer who will contact the local DOFAW office.

Required guidelines for the Hawaiian Hoary Bat shall be strictly enforced. This work shall be considered incidental to the various contract items.

(I) Project Arborist. The Project Arborist provided by the Contractor shall be an International Society of Arboriculture (USA) Certified Arborist with 3 years of continuous certification and experience in Hawaii.

The Project Arborist is responsible for providing the Engineer technical expertise during construction, when requested. The duties of the Project Arborist shall include attending construction meetings, inspection of work, reviewing submittals and technical consultation.

(J) Work Plan. Contract shall include a written plan of the clearing methods, personnel qualifications, lane closures, number of crews, access arrangements, night work and equipment type and quantity to perform the scope of work. The work plan shall include plans to minimize quantity and duration of lane closures. Maximum effort shall be directed at removing felled trees from the highway travelway in an expeditious manner. The work plan shall be submitted at or before the preconstruction meeting, for review and acceptance by the Engineer.

201.04 Measurement.

(A) The Removal and Disposal of Trees will be paid on a lump sum basis. Measurement for payment will not apply.

(B) The coordination with the various affected landowners for the areas within the construction easement above the slope, and identifying and tagging trees that are not be removed shall be included in the work of the various pay items in this Section.

(C) The Removal and Herbiciding of Invasive Tree Saplings will be paid on a lump sum basis. Measurement for payment will not apply.

(D) The work of the Project Arborist shall be included in the work of the various pay items in this Section.

(E) The Engineer will only measure additional tree removal required and requested by the Engineer on a force account basis in accordance with Subsection 109.06 – Force Account Provisions and Compensation.

201.05 Payment. The Engineer will pay for each of the following pay items when included in the proposal schedule:

Pay Item	Pay Unit
Removal and Disposal of Trees	Lump Sum
Removal and Herbiciding of Invasive Tree Saplings	Lump Sum
Additional Tree Removal	Force Account

An estimated amount for force account is allocated in proposal schedule under 'Additional Tree Removal', but actual amount to be paid will be the sum shown on accepted force account records, whether this sum be more or less than estimated amount allocated in proposal schedule. The Engineer will pay for Additional Tree Removal requested by the Engineer that are beyond scope of accepted Removal and Disposal of Trees on a force account basis."

END OF SECTION 201