

SPECIAL CONDITIONS
PROJECT – CONTRACTOR PROVISIONS
Attachment 4

1. This contract includes, and applies to, all provisions contained in the Contract Agreement, the Contract Attachments (1, 1A, 1B, 2, 3, and 4), the original IFB UHM-000-014-12, and the CONTRACTOR response to the IFB UHM-000-014-12 (CONTRACTOR bid). Where provisions in this Contract Agreement (including Attachments 1, 1A, 1B, 2, 3, and 4) represent changes to those contained in IFB UHM-000-014-12 and the CONTRACTOR bid, the provisions in the Contract Agreement (including Attachments 1, 1A, 1B, 2, 3, and 4) supersede those in IFB UHM-000-014-12 and the CONTRACTOR bid.

2. Environmental and Cultural Site Restrictions
 - a. Training: All CONTRACTOR personnel working at the Haleakala Observatories or the Air Force leased site must receive environmental training from IfA or from the Air Force, respectively, prior to beginning work. Both organizations offer training programs, which explain and amplify the specifications that are required of all construction projects within Haleakala Observatories boundaries. For environmental protection, the specifications to protect vital environmental resources are as follows:

 - b. Protection of Native Plants and Insects: Haleakala National Park has experienced the introduction of destructive non-native species that compete with and have in some cases displaced native plants and insects. These introductions threaten the ecological balance at the site, and in cooperation with Haleakala National Park, IfA requires any contractor to take the following measures at Haleakala Observatories to prevent construction or repair activities from introducing new species:
 - i. Any equipment, supplies, and containers with construction materials that originate from elsewhere, i.e., the other islands or the mainland, must be checked for infestation by unwanted species by a qualified biologist or agricultural inspector prior to being transported from Kahului. Specimens of non-native species found in these inspections are to be offered to the state for curation, and those not wanted are to be destroyed. All construction vehicles must be steam cleaned before they are transported through the National Park. The contractor shall provide certification attesting to compliance with this paragraph for inspection and steam cleaning. Contractors shall also notify IfA a week prior to their initial entry into Haleakala National Park, so that arrangements can be made with the Park Service or other provider of inspection services. After the initial entry, coordination shall be directly between the inspectors and the contractor.

 - ii. Importation of fill material to the site is prohibited, unless such fill (e.g., sand) is sterilized to remove seeds, larvae, insects, and other biota that could survive at the site and propagate. All material obtained from excavation is to remain on Haleakala. Surplus excavated cinders, soil, etc.,

is to be offered to other agencies located at the summit or the National Parks Service.

- iii. Contractors are required to participate in IfA pre-construction briefings to inform workers of the damage that can be done by unwanted introductions. Satisfactory fulfillment of this requirement would be evidenced by a signed declaration from each worker who drives a construction vehicle into the site.
 - iv. Parking of heavy equipment and storage of construction materials outside the immediate confines of Haleakala Observatories property is prohibited.
 - v. Contractors are required to remove construction trash frequently, particularly materials that could serve as a food source that would increase the population of mice and rats that prey on native species.
- c. Protection of `Ua`u (Dark-rumped Petrel): The endangered `Ua`u, or Dark-rumped Petrel, occupies burrows on the upper slopes of Haleakala from February to October. The burrows are located in cinder and are active year after year, since the birds return to the site of their birth. Petrels are night flying birds, leaving their burrows to search for food during nesting and fledgling seasons. The nearest burrows are located on the south slopes below Mees Solar Observatory and on the north slopes below the Maui Space Surveillance Complex. The following seven requirements are in place to ensure that the `Ua`u habitat will be protected during any construction activities:
- i. During the months when birds are present on Haleakala, care must be exercised to ensure that the birds will not be disturbed. Therefore, vibration and noise from heavy construction equipment or activities must not impact the normal life cycle of resident birds. If heavy construction equipment will be necessary at the site, consultation with IfA and avifaunal experts will be required to determine feasibility.
 - ii. Haleakala Observatories personnel will notify HNP of any `Ua`u mortalities. Contractor personnel will report mortalities to IfA immediately.
 - iii. Contractors will be given current maps of locations of `Ua`u burrows to assist with `Ua`u conservation. HNP biologists are continuously finding and mapping new `Ua`u burrows, and these maps will be made available to the Haleakala Observatories for planning purposes.
 - iv. Construction of fences will be avoided, if possible, to avoid `Ua`u mortality from collisions.
 - v. To avoid attracting `Ua`u, contractors will make every effort not to use lighting the same color as stars. Other colors, such as red, blue, or orange or similar colors, should be considered.
 - vi. Lighting for construction hazards or night work must be approved by IfA prior to installation. All lighting must be shielded from above, so that night flying birds will not be disoriented by upward projecting lights that are mistaken for natural sources of navigable lighting.
 - vii. Workers at the site must be informed of vibration, noise, and lighting hazards to endangered species, and must be informed that their activities are to be confined to the construction site to minimize risk to birds in adjacent areas.

- d. Pollution Control: Haleakala Observatories is located in a cinder cone in a State Conservation District. Construction at the site requires special care to maintain the unpolluted environment.
 - i. No hazardous waste is to be released at the site. Surplus or used paint, oil, solvents, cleaning chemical, etc., must be removed from the area and disposed of by an EPA- approved Transport Storage Disposal Facility.
 - ii. Accidental spills of any hazardous material during the execution of a contractor's project at the site must be reported immediately to the on-site IfA supervisor. Spill containment will be supervised by UH personnel at the site.
 - iii. Spill remediation methods must be approved by the University of Hawai'i's Environmental Health and Safety Office (EHSO) prior to clean up, and all costs incurred for clean-up will be assigned to the contractor. In the event of a reportable release, the construction contractor will be liable for any federal or state imposed non-compliance penalties.
 - iv. Washing and curing water used for aggregate processing, concrete curing, clean up, etc., cannot be released into the soil at the site. A recovery process is required by the contractor to capture wastewaters.
- e. Dust Control: It is of particular importance to maintain a dust free environment at Haleakala Observatories. Telescope mirrors, lenses, and sensors can be quickly damaged by wind born dust. Haleakala Observatories is located at 10,000 feet, and is often exposed to winds in excess of 30 mph. Before, during, and after winter storms, winds can exceed 50 mph. The natural substrate at the site is a mixture of fine volcanic sand and cinders. Fugitive dust from the finer material can be released when the substrate is disturbed.
 - i. Contractors will adhere strictly to the requirement that dust be controlled at all times, including non-working hours, weekends, and holidays. Sprinkling or similar methods will be required to keep disturbed finer material from becoming airborne.
 - ii. Dust control must be accomplished by equipment that the Contractor keeps on site, and sprinkling or similar activities must result in less than 10 pounds of fugitive dust released into the atmosphere per 24-hour period, as measured by standard collection methods.
 - iii. No oil or chemical treating shall ever be used at the site for dust control.
 - iv. Dust resulting from surface preparation of surfaces to be painted by sanding, power tools, or scraping and brushing shall be controlled by the Contractor by use of catchments and filtering systems/devices to prevent damage to the telescope mirrors, lenses and sensors.
- f. Waste management: Construction or refurbishing of existing facilities will result in quantities of solid waste, and remnants of food and packaging that construction crews may bring for consumption at the site.
 - i. Only materials that are not EPA "Listed" or "Characteristic" wastes can be managed as solid waste at the site.
 - ii. Solid waste cannot be stockpiled or dumped at the site or on the slope below the Haleakala Observatories facilities.

- iii. Solid waste and debris must be secured such that strong winds cannot disperse materials. This is particularly important during weekends, holidays, and other non-working hours.
 - iv. No food is to be left on the ground or in Haleakela Observatories solid waste storage areas to prevent attraction of rats and other pests.
 - g. Protection of Historic and Cultural Resources: For the kanaka maoli, the lava, cinders, dust, rocks and boulders are all sacred to Pele, the goddess of the volcano. In fact, Pele means lava in Hawaiian. Workers at Haleakala Observatories need to be culturally sensitive to the fact that they are in a place still considered sacred by Native Hawaiians. As the responsible agency, UH IfA is committed to preserving the cultural resources at the site and has sought advice from the native Hawaiian community on Maui concerning the best methods to use to achieve that objective. One outcome of those consultations and the cultural resource evaluations of Haleakala Observatories is that the IfA has adopted rules for the long-term preservation of archaeological and cultural resources for all facilities, past, present, and future, based on recommendations in the Cultural Resources Assessment contained in the Haleakala High Altitude Observatory Site Management Plan. The preservation of cultural resources is defined as an IfA policy as follows:
 - i. Any construction within Haleakala Observatories requiring a permit from the Department of Land and Natural Resources shall require the consultation and monitoring of a Cultural Specialist.
 - ii. The Cultural Specialist will be engaged at the earliest stages of the planning process, monitor the construction process, and consult with and advise the on-site Project Manager with regard to any cultural or spiritual correction. For the purposes of this section, a Cultural Specialist must be a kanaka maoli, preferably a kupuna (elder), and a kahu (clergyman) as well, and one who has personal knowledge of the spiritual and cultural significance and protocol of Haleakala.
 - iii. All cultural and archaeological sites and features identified in the Haleakala Observatories Archaeological Inventory Survey shall be protected and preserved per Hawai'i Administrative Rules, Title 13, Sub-Title 13, Chapter 277 "Rules Governing Requirements for Archaeological Site Preservation Development". Protection shall include the establishment of clearly marked buffer zones and periodic monitoring by both the project Archaeologist and Cultural Specialist throughout any future construction process.
 - h. "Sense of Place": All construction crewmembers shall attend UH-approved "Sense of Place" training prior to working at projects within Haleakala Observatories.
- 3. Normal driving access to the Pan-STARRS PS2 Observatory site requires driving on a road that includes going through Haleakala National Park which is governed by the United States National Park Service. The Park Service requires that all commercial vehicles passing through the Park have a Special Use Permit. The CONTRACTOR shall be responsible for obtaining from the Park Service a Special Use Permit for all commercial vehicles passing through Haleakala National Park. All liability resulting from failure to obtain a Special Use Permit resides with the CONTRACTOR.