

FIELD RECONNAISSANCE OF TMT DEVELOPMENT SITE

At the request of the TMT Observatory Corporation, ASM Affiliates conducted a thorough reconnaissance of the 5-acre development site and graded access road associated with the proposed construction of the Thirty Meter Telescope (TMT) within the astronomy precinct of the Mauna Kea Science Reserve (MKSRR), in TMK: (3) 4-4-015:009, Ka'ōhe Ahupua'a, Hāmākua District, Island of Hawai'i. Fieldwork for the current study was conducted on July 7, 2015 by Robert B. Rechtman, Ph.D., and Lauren Kepa'a. The purpose of the reconnaissance was to identify any constructions that could be interpreted as recent find spots within the proposed development site. The boundaries of the study area were identified using GPS coordinates provided by TMT Observatory Corporation, and were clearly marked by pins in the field. As a result of the survey, five constructions were identified (Ahu 1, Ahu 2, Ho'okupu Spot 1, Ho'okupu Spot 2, and Rock Stack), four of which appear to have been constructed recently and could be interpreted as potential new find spots, while the fifth is likely associated with the former location of a meteorological station. The locations of the five identified constructions are shown on Figure 1 (and attached .kmz file) and descriptions and GPS coordinates of each are presented below.



Figure 1. Google Earth™ image showing locations of the five identified constructions relative to the development site.

AHU 1

Ahu 1 was constructed in the middle of the graded access road leading to the development site (Figure 2). A variety of *ho'okupu* (offerings), both traditional and “new age,” were placed on top of this construction. It was reportedly built with a core of local basalt and a facing of water rounded beach boulders.

GPS Coordinates (UTM Zone 5N NAD 83)

Easting: 0240202

Northing:

2194475



Figure 2. Ahu 1, view to the northwest.

AHU 2

Ahu 2 was constructed in the graded area (Figure 3) that was prepared for the ground-breaking ceremony, within the 5-acre development site. Along with the three upright stones, there a few traditional *ho'okupu* placed on top of the construction. This *ahu* was built entirely of local rocks.

GPS Coordinates (UTM Zone 5N NAD 83)

Easting: 0240061

Northing: 2194837



Figure 3. Ahu 2, view to the west.

HO'OKUPU SPOT 1

On the ridge to the west of Ahu 1 was a small *ho'okupu* (ti leaf wrapped offering) placed on an angular boulder and held down with a smaller rock (Figure 4).

GPS Coordinates (UTM Zone 5N NAD 83)

Easting: 0240173

Northing: 2194471



Figure 4. *Ho'okupu* spot, view to the west.

HO'OKUPU SPOT 2

Located adjacent to the graded road in the northern portion of the development area, a second *ho'okupu* spot was identified that consists of a ti leaf held down by two small cobbles (Figure 5).

GPS Coordinates (UTM Zone 5N NAD 83)

Easting: 0240096

Northing: 2194881



Figure 5. Ho'okupu Spot 2, overview.

ROCK STACK

A few stacked rocks were observed in the northwestern portion of the development area in the immediate vicinity of a metal anchor bolt (Figure 6) that was likely placed in association with a former meteorological station. The rock stack was likely also associated with the former placement of the scientific equipment, and does not appear to have been related to recent cultural activity.

GPS Coordinates (UTM Zone 5N NAD 83)

Easting: 0240025

Northing: 2194864



Figure 6. Rock stack, view to the southeast.