

**Condition:** Good

**Integrity:** Unaltered

**Description:** Site 26903 is a lava tube accessed through a rubble filled sinkhole located in the northeastern portion of the project area at c. 435 ft elevation. This entrance is oval-shaped and is 6.3 m long (northeast by southwest), 3.75 m wide and 1.5 m deep (*Figure 40*). Passages extend to the northeast and west-southwest from this sinkhole. The passage to the northeast is accessed through a 0.5 m tall opening. It is irregularly-shaped and is 6.2 m long (north-south) and 1.3 to 4.0 m wide. A second sinkhole opening (6.4 m long, 3.8 m wide and 1.3 m deep) borders this chamber along the east side. The floor is bare lava and the ceiling height averages 1.0 m. There is a concentration of goat bones present along the northern side wall.

The passage that extends to the west-southwest from the main sinkhole is accessed through a 0.8 m high opening. The tube extends in this direction for 13.1 m then angles to the northwest for 32.9 m. The tube then turns to the west-southwest for an additional 20.6 m where it terminates. This linear chamber is 2.7 to 6.6 m wide and 0.5 to 2.1 m in height. The floor throughout this tube is bare lava. A passage extends to the south-southwest from the western end of this passage. It is 20.3 m long, 1.5 to 3.7 m wide and 0.3 to 0.6 m in height with a bare lava floor.

There is a raised shelf present along the north side of the tube 5.0 to 21.0 m west of the entrance. This shelf is 0.3 to 1.0 m in height above the floor of the passage. There are areas of roof fall to the east and south of this shelf with concentrations of goat bones present in each roof fall area. There is a crab claw present on the tube floor to the northwest of the raised shelf.

There is a large oval-shaped hole in the ceiling of this chamber at the western end that is 7.6 m long (northeast by southwest), 4.8 m wide and 1.9 m in height. This opens onto an upper chamber that is 23.7 m long (northeast by southwest) and 1.95 to 4.0 m wide, with a bare lava floor and ceiling heights that vary from 0.2 to 1.4 m. No cultural remains were present.

Site 26903 is interpreted as a possible temporary habitation shelter. This is based on its formal type and on the presence of the crab claw within the interior. The site contains an overall length of 125.0 m and an area of 461.5 sq m. The site is unaltered and in good condition. It is assessed as significant for its information content.

**State No.:** 26904 (T-90)

**Site Type:** Terrace

**Functional Interpretation:** Temporary Habitation

**Topography:** Soil and outcrops sloping to south and south-southwest

**Elevation:** 341 ft

**Coordinates:** E=186334, N=2176265

**Vegetation:** *Haole koa*, grasses

**Probable Age:** Prehistoric

**Overall Dimensions:** 5.4 m by 2.3 m

**Condition:** Fair

**Integrity:** Unaltered

**Description:** Site 26904 is a small terrace built on top of the northern side of a raised bedrock outcrop in the central portion of the project area. The terrace is rectangular in shape and is 4.5 to 5.4 m long (west-northwest by east-southeast) and from 1.5 to 2.3 m wide (*Figure 41*). There is a roughly stacked and faced cobble and small boulder retaining wall extending along the north side of the structure that is 0.3 to 0.65 m in height. The eastern side has collapsed outward and the western side is level with the surface of the outcrop. The southern side abuts the edge of the raised bedrock outcrop.

The surface of the terrace is a level cobble pavement. A waterworn basalt cobble is situated on the surface along the southern side. A 1.0 by 1.0 m test unit (TU-2a) was excavated into the surface of the terrace revealing two layers over bedrock (see *Figure 41*). Layer I consisted of 0.07 to 0.36 m of tightly packed cobbles and small boulders. Cultural remains from Layer I consisted of a waterworn basalt cobble. Layer II consisted of 0.02 to 0.24 m of a very dark grayish brown (10YR 3/2) silt with 10% pebble inclusions. Cultural remains from this deposit were comprised of charcoal, *kukui* nut shells and marine shell.

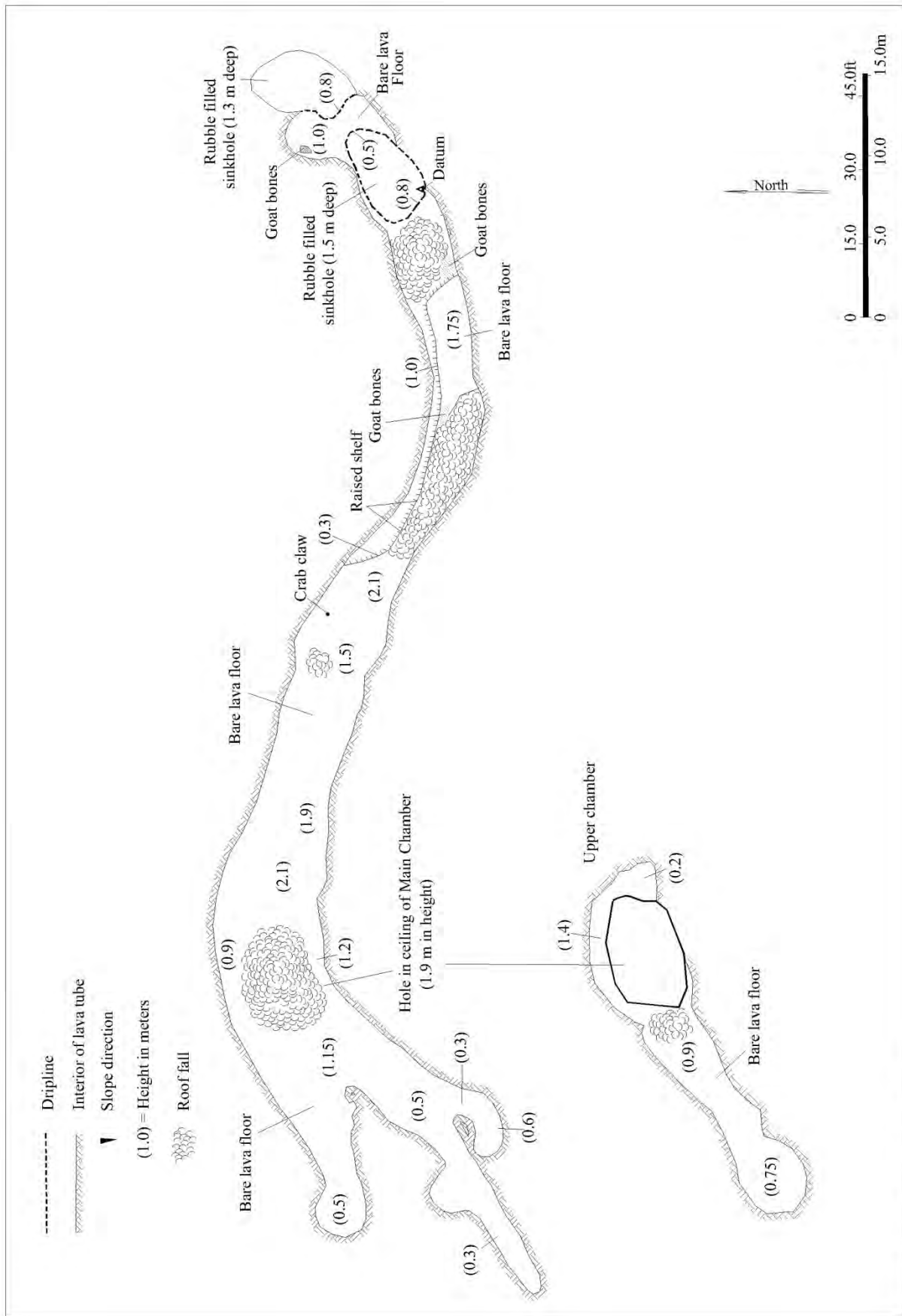


Figure 40. Site 26903 Plan Map

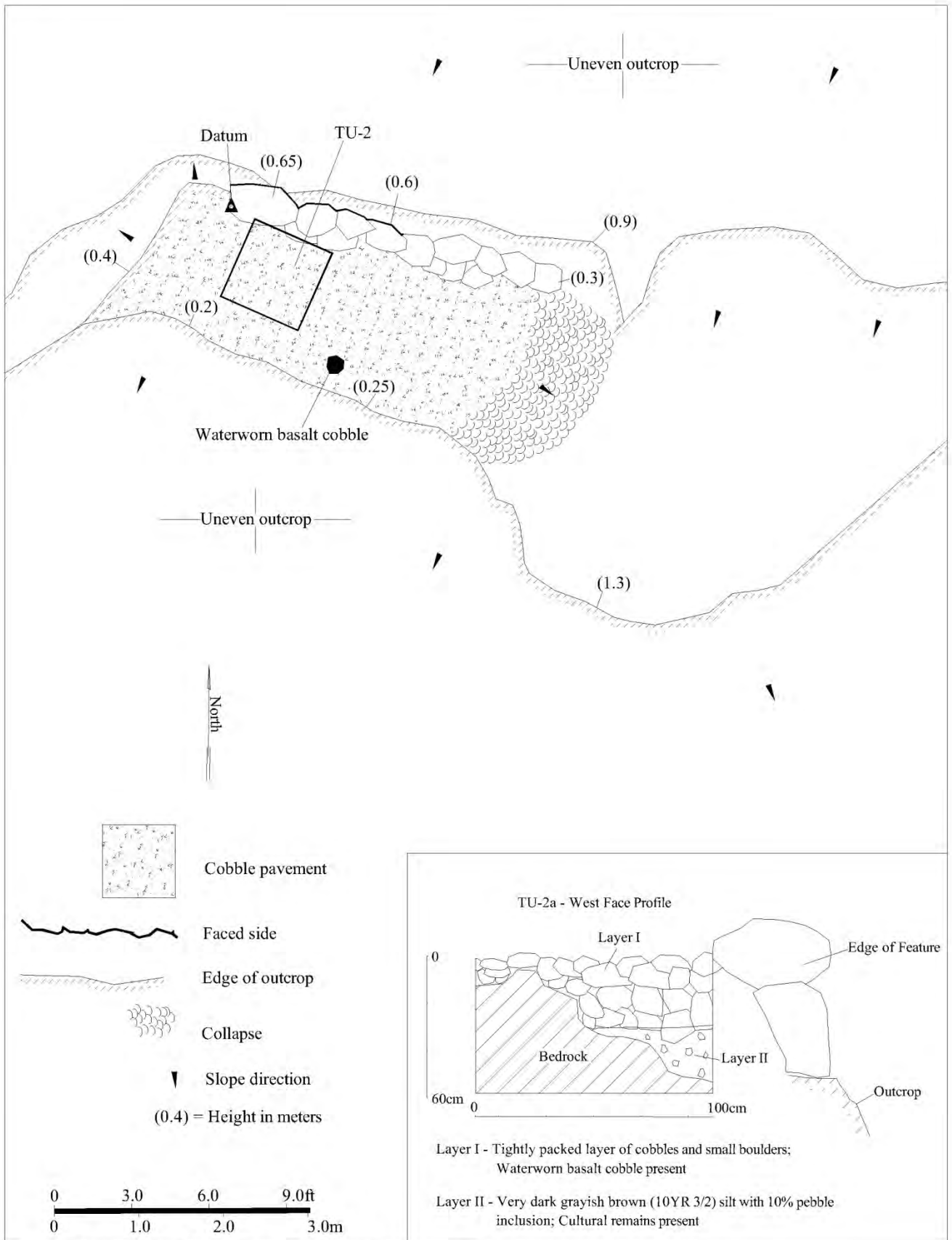


Figure 41. Site 26904 Plan Map and TU-2a West Face Profile

Site 26904 is interpreted as the foundation for a temporary habitation structure. This is based on its formal type and small area (12.4 sq m). The site is unaltered, in fair condition and is assessed as significant for its information content.

**State No.:** 26905 (T-96)

**Site Type:** Lava Blister

**Functional Interpretation:** Temporary Habitation

**Topography:** Soil and outcrops sloping to west

**Elevation:** 383 ft

**Coordinates:** E=186538, N=2176369

**Vegetation:** *Haole koa*, grasses

**Probable Age:** Prehistoric

**Overall Dimensions:** 6.0 m long

**Condition:** Good

**Integrity:** Unaltered

**Description:** Site 26905 is a lava blister accessed through a horizontal opening on the eastern side of a raised bedrock outcrop in the central portion of the project area (*Figure 42*). The site has an overall length of 6.0 m and an area of 15.7 sq m. The entrance is 2.1 m long (north-northeast by south-southwest) and is 0.3 to 0.8 m in height. This opens onto a roughly oval-shaped chamber that is 6.0 m in length (northeast by southwest) and from 1.0 to 3.8 m wide. The ceiling heights range from 0.3 to 1.0 m and the floor is a shallow soil deposit over bedrock with scattered roof fall present at the northeast and southwest ends. Several *kukui* nut shells and a *Cypraea sp.* shell are present on the blister floor.

Site 26905 is interpreted as a temporary habitation shelter. This is based on its formal type and on the presence of the cultural remains in the interior. The site is unaltered and in good condition. It is assessed as significant for its information content.

**State No.:** 26906 (T-31)

**Site Type:** Lava Tube

**Functional Interpretation:** Burial

**Topography:** Soil and outcrops sloping to west

**Elevation:** 421 ft

**Vegetation:** *Haole koa*, grasses

**Probable Age:** Prehistoric

**Overall Dimensions:** 9.0 m long

**Condition:** Good

**Integrity:** Unaltered

**Description:** Site 26906 is a small lava tube situated along the northern side of a raised bedrock outcrop in the southeastern portion of the project area. The site has an overall length of 9.0 m and an area of 18.5 sq m. The main entrance to the tube is through a U-shaped opening that is 0.85 m wide (northwest by southeast) and 0.6 m in height (*Figure 43*). Cobbles and small boulders were piled at the entrance, concealing it. A secondary entrance is located on top of the outcrop, consisting of a vertical hole that is 2.3 m long (north-south), 0.2 to 0.45 m wide and 0.5 to 0.6 m deep. Cobbles, small boulders and slabs concealed this opening.

The interior of the tube was examined by removing several stones from the secondary, vertical entrance. Human remains consisting of a mandible, a tibia, a femur and a concentration of unidentifiable bone fragments were noted on the floor of the lava tube below the entrance to the northeast. The interior of the tube is 0.35 to 0.55 m in height. The floor is level soil. No cultural remains were noted on the surface. After identification of the human remains and site documentation, the stones removed from the vertical entrance were carefully re-positioned.

Site 26906 is interpreted as a burial site based the presence of the human remains. The absence of any additional cultural remains suggests that the tube did not function as a temporary habitation shelter. The site is unaltered and in good condition. The site is assessed as significant for its information content and for its cultural value.

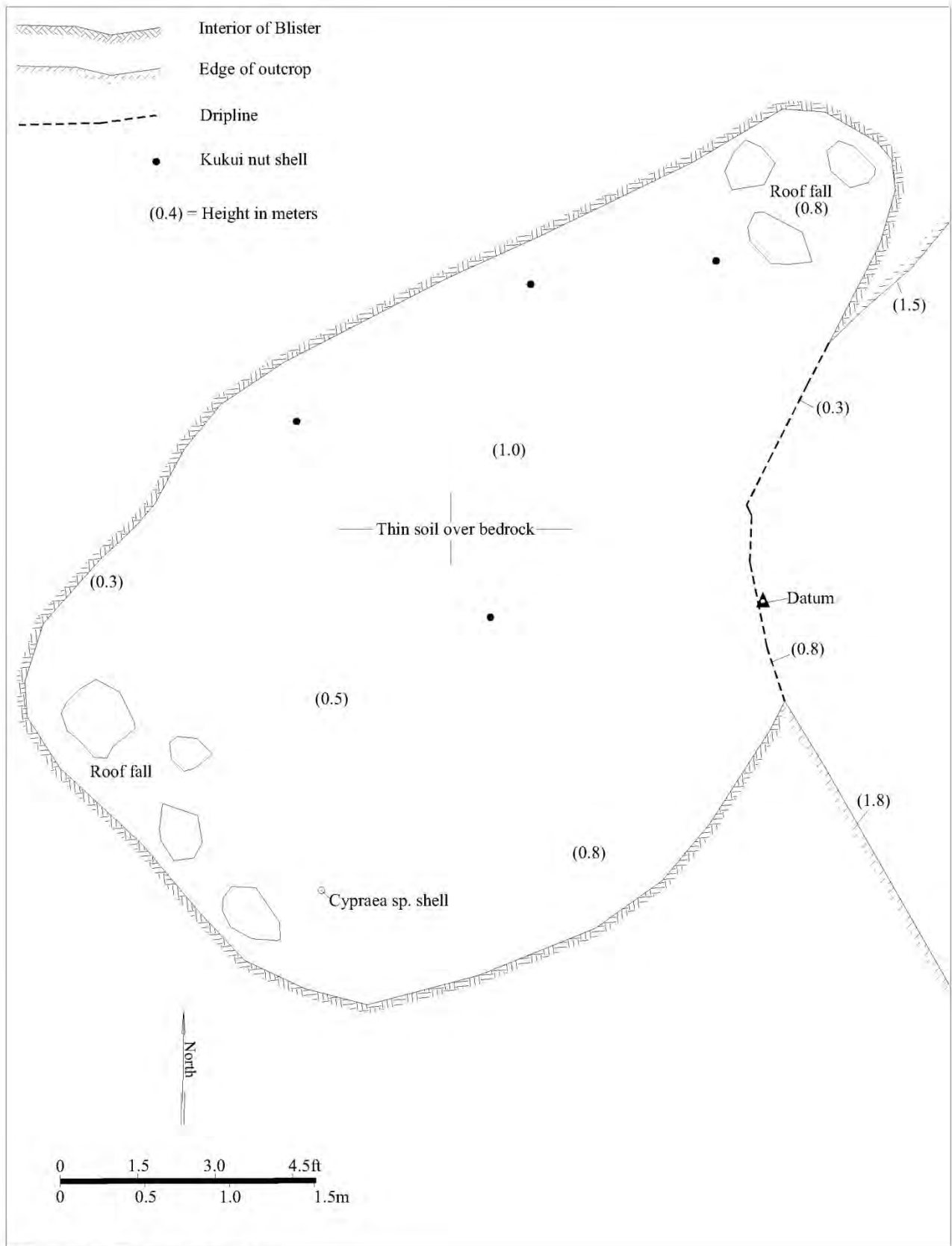


Figure 42. Site 26905 Plan Map

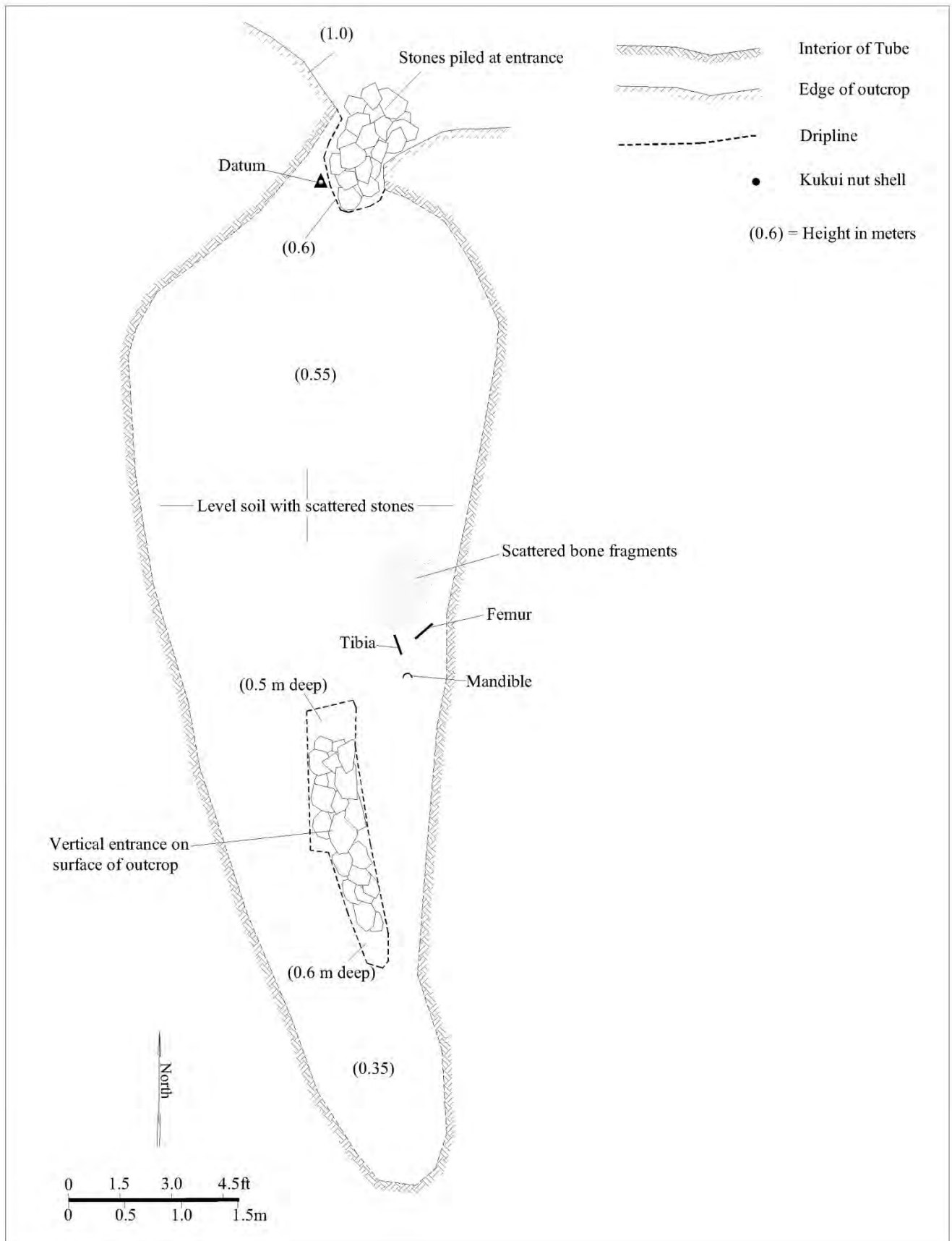


Figure 43. Site 26906 Plan Map

**State No.:** 26907 (T-31)  
**Site Type:** Lava Tube  
**Functional Interpretation:** Temporary Habitation  
**Topography:** Soil and outcrops sloping to west  
**Elevation:** 415 ft  
**Coordinates:** E=186954, N=2176040  
**Vegetation:** *Haole koa*, grasses  
**Probable Age:** Prehistoric  
**Overall Dimensions:** 9.2 m long  
**Condition:** Good  
**Integrity:** Unaltered

**Description:** Site 26907 is a lava blister accessed through a vertical opening on top of a bedrock outcrop in the southeastern portion of the project area (*Figure 44*). The blister has an overall length of 9.2 m and an area of 22.7 sq m. The entrance is roughly oval-shaped and is 1.05 m long (east-west), 0.75 m wide and 1.2 m deep. There is a stacked and roughly faced cobble and small boulder wall built on top of the outcrop along the north side of the entrance. This wall is slightly curved and is 1.3 m long (east-west), 0.2 to 0.3 m wide and 0.5 m in height.

The interior of the blister is irregular in shape and measures 9.2 m long (west-northwest by east-southeast) and from 0.5 to 5.0 m wide. Areas of roof fall are present at the east and west ends, potentially deposited there in an effort to remove surface stones from the central floor area. There is an area of level soil along the southwest side of the interior, with the remainder of the floor consisting of bare lava. A small area of roof fall is present in the northern portion. No cultural remains were present inside the interior.

Site 26907 is interpreted as a possible temporary habitation shelter. Although no cultural remains were present inside the blister, the structural modifications consisting of the wall on the surface of the site and the cleared interior floor, suggest it may have functioned in this capacity. The site is unaltered, in good condition and is assessed as significant for its information content.

**State No.:** 26908 (T-51)  
**Site Type:** Lava Tube  
**Functional Interpretation:** Temporary Habitation  
**Topography:** Soil and outcrops sloping to west  
**Elevation:** 386-389 ft  
**Coordinates:** E=186876, N=2175988  
**Vegetation:** *Haole koa*, grasses  
**Probable Age:** Prehistoric  
**Overall Dimensions:** 8.9 m long  
**Condition:** Good  
**Integrity:** Unaltered

**Description:** Site 26908 is a small lava tube accessed through a vertical opening outcrop in the southeastern portion of the project area (*Figure 45*). The site has an overall length of 8.9 m and an area of 11.8 sq m. The opening is oval-shaped and is 1.5 m long (northeast by southwest), 1.1 m wide and 0.9 m deep. The interior of the tube extends to the northeast from the entrance. It is a linear chamber that is 8.9 m long (northeast by southwest) and from 0.65 to 2.0 m wide. The ceiling heights range from 0.6 to 0.7 m. There are areas of level soil present just inside the entrance and at the northeastern end of the tube. The remainder of the tube's floor consists of bare lava. Roof fall has been cleared from the soil area by the entrance and placed along the north and south sides of the tube. Scattered roof fall is also present in the central portion of the tube.

A fragment of charcoal was noted on the bare lava floor in the approximate center of the tube. No other cultural remains were present. Site 26908 is interpreted as a possible temporary habitation shelter. This is based on its formal type, on the presence of the charcoal and on the cleared soil area in the interior. The site is unaltered, in good condition and is assessed as significant for its information content.

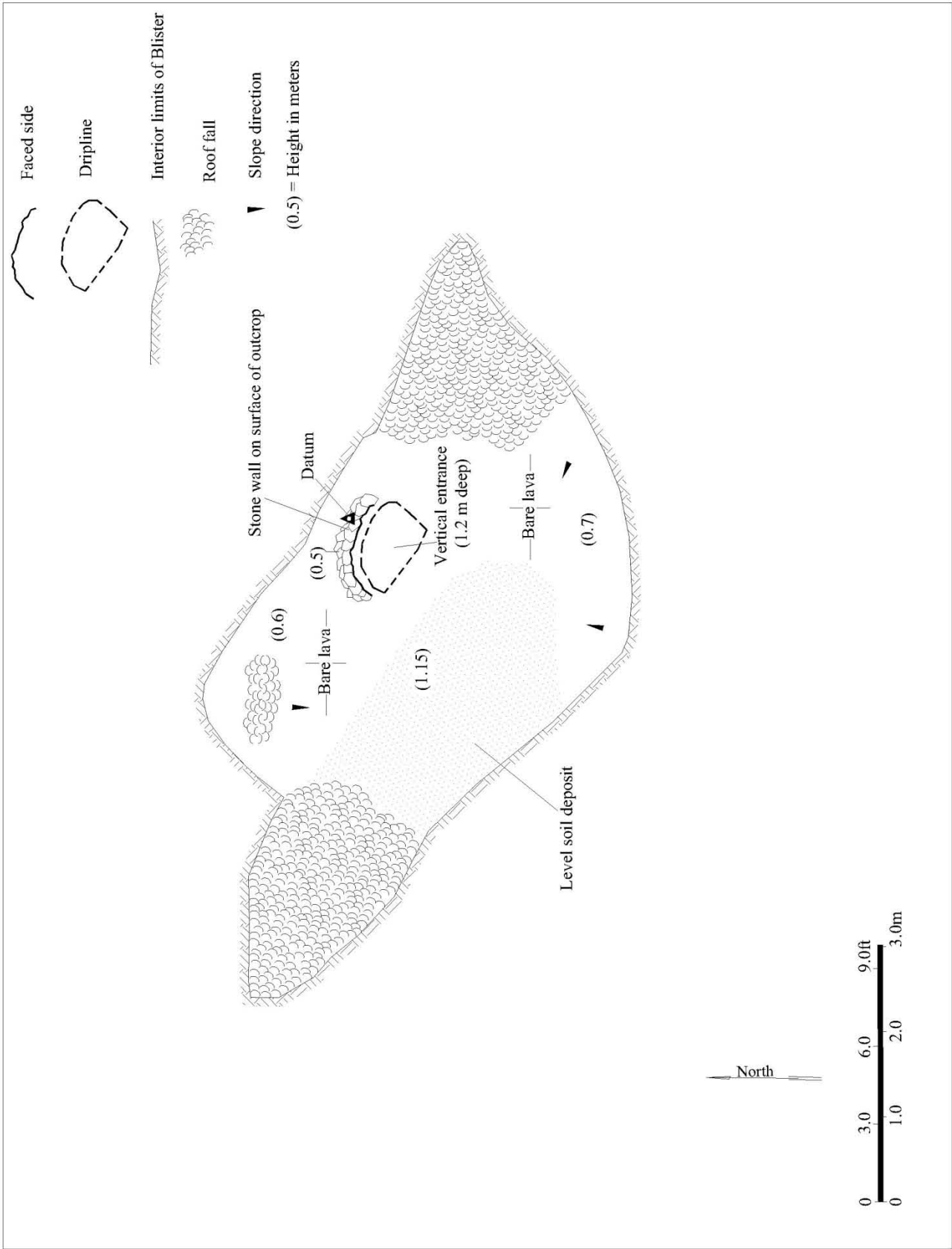


Figure 44. Site 26907 Plan Map



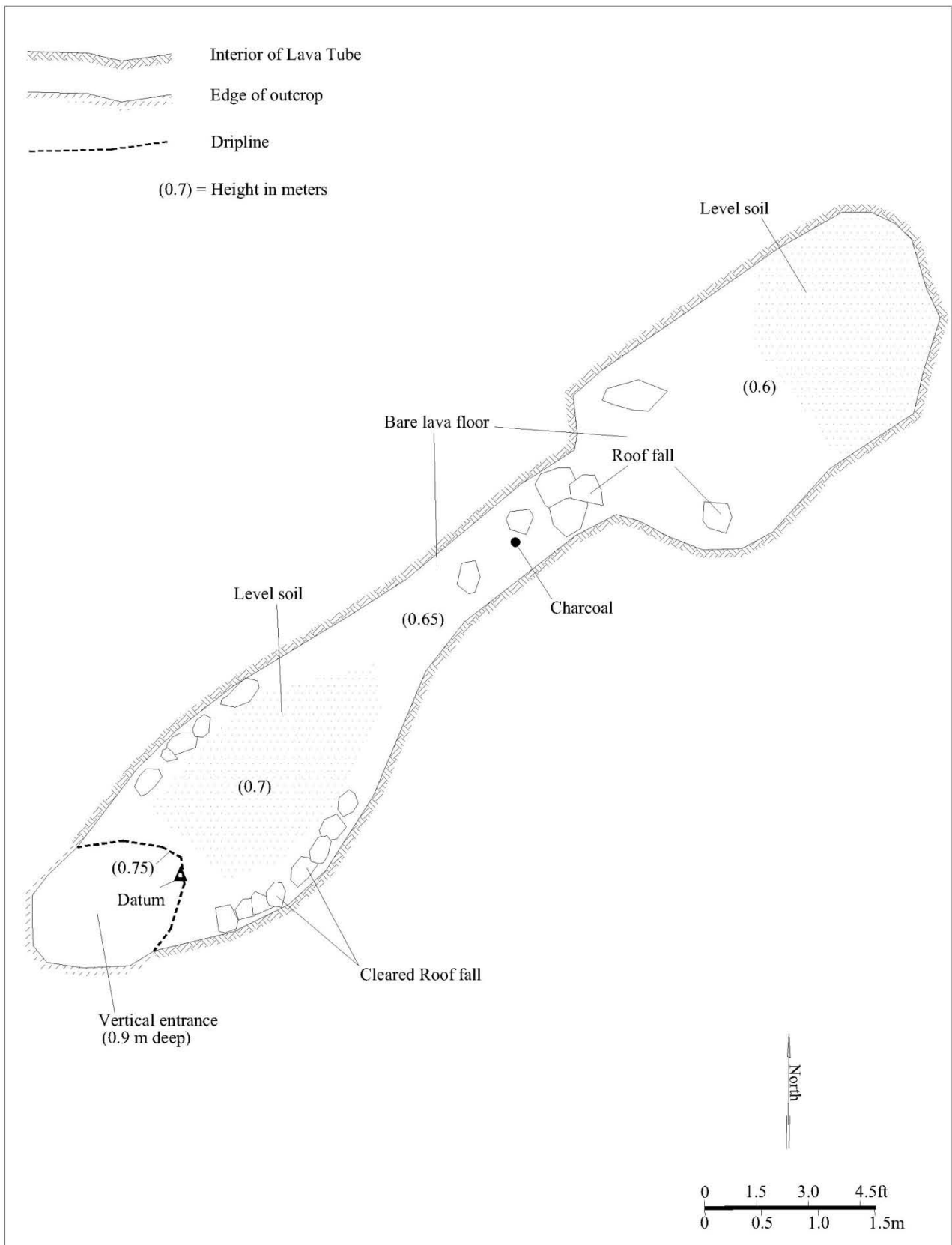


Figure 45. Site 26908 Plan Map

**State No.:** 26909 (Numerous)  
**Site Type:** Complex (2,725)  
**Functional Interpretation:** Agriculture  
**Topography:** Soil and outcrops sloping to west, south and southwest  
**Elevation:** 300-555 ft  
**Coordinates:** See Appendix A and Table 7  
**Vegetation:** Various  
**Probable Age:** Prehistoric  
**Overall Dimensions:** 1650.0 by 990.0 m  
**Condition:** Poor to good  
**Integrity:** Unaltered

**Description:** Site 26909 is a complex of 2,725 agricultural features that extend throughout the project area. The site is comprised of 2,621 modified outcrops, 85 mounds, 15 filled cracks, three walls and one enclosure. The distribution of the features is presented in *Figure 46* (in pocket at end). These features are interpreted as components of the Kona Field System, a vast agricultural area that was intensively cultivated and served as the resource base for the large number of chiefs and retainers that occupied the Kailua-Keauhou coast. The Kona Field System has been assigned SIHP Site 6601 (Newman 1970, Kelly 1983, Schilt 1984, Cordy 1995). However, the portion within the boundaries of the current project area has been designated as Site 26909 for discussion purposes. The four formal feature identified within the site are discussed below. The site is assessed as significant for its information content. It is unaltered and in fair condition.

### **Mounds and Modified Outcrops**

As stated, 2,706 agricultural mounds and modified outcrops were identified during the project. These features are interpreted as clearing piles that were created by consolidating surface stones from adjacent planting areas. Typically these features are comprised of piles of basalt cobbles and small boulders, with uneven sides and surfaces and no cultural remains. The mounds (N=85) are comprised of stone piles situated on the ground surface and the modified outcrops (2,621) consist of stones that have been placed on and adjacent to outcrops. No cultural remains were found in association with the clearing piles. These features are described below and their physical characteristics are presented in *Appendix A*.

The 2,621 modified outcrops range in length from 0.15 to 15.5 m (average 2.3 m) and in width from 0.1 to 8.0 m (average 1.39 m). The modified outcrops vary in height from 0.25 to 2.0 m with an average height of 0.5 m. The majority of these features are constructed of piled cobbles and small boulders (n=2,523) with the remaining features built of piled boulders (72), stacked and piled cobbles and small boulders (19), aligned cobbles and small boulders (4) and stacked and faced cobbles and small boulders (3). Most of the modified outcrops are irregular in shape (n=2,376), with the remaining feature shapes consisting of linear (222), oval (13), circular (9) and rectangular (1).

The 85 mounds vary in length from 0.8 to 5.0 m (average 2.2 m long) and from 0.8 to 3.0 m wide (average 1.56 m wide). The features range in height from 0.35 to 1.2 m, with an average height of 0.62 m. The majority of the mounds are irregularly-shaped (n=75), with the remainder consisting of linear (3), oval (3), circular (3) and square (1). The 2,706 clearing pile features evidence areas that vary from 0.02 sq m to 96.0 sq m (average 3.96 sq m) and in volume from 0.01 to 131.2 cu m (average 2.45 cu m). Examples of the Site 26909 clearing piles are depicted in *Figures 47* and *48*.

Twelve of the 2,706 clearing piles that are more formally constructed than the majority of the features were subjected to subsurface testing during the project because of the potential presence of burials (Features 119, 258, 382, 550, 612, 750, 871, 1204, 1389, 1570, 1680 and 1732). These features and the test unit results are presented below.

Feature 119 is a mound situated in the northeastern portion of the project area at c. 482 ft elevation. The mound is oval-shaped and is built adjacent to the south side of a raised bedrock outcrop (*Figure 49*). The mound is 1.65 m long (east-west), 1.4 m wide and 0.44 to 0.88 m high. It is constructed of stacked and faced cobbles and small boulders. The eastern side has collapsed outward and the surface is level but unpaved. No cultural remains were present on the surface.



Figure 47. Site 26909, Feature 37.2 Mound, view to south



Figure 48. Site 26909, Feature 18.2 Modified Outcrop, view to southeast

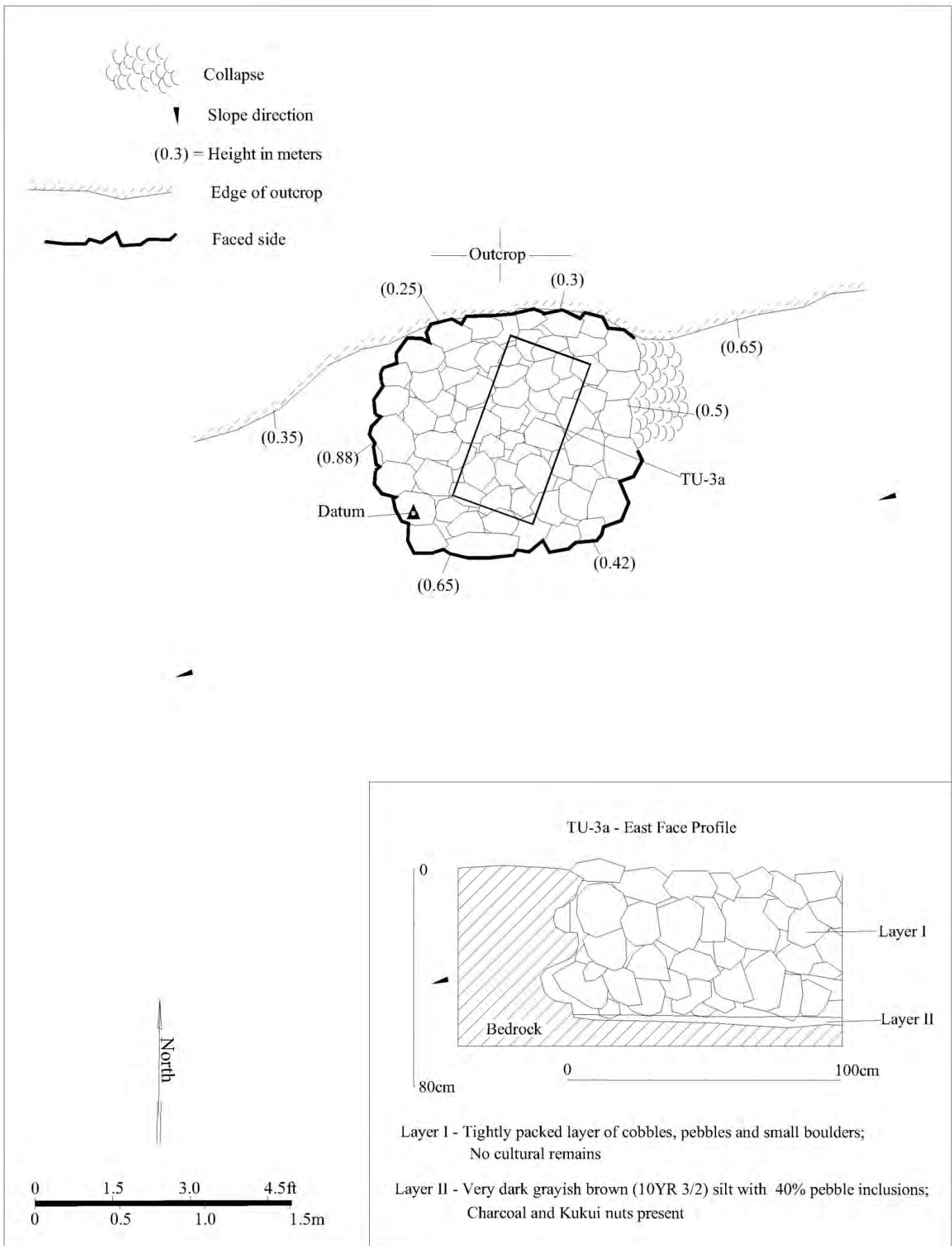


Figure 49. Site 26909, Feature 119 Plan Map and TU-3a East Face Profile

A 0.5 by 1.0 m test unit (TU-3a) was excavated into the Feature 119 mound during the initial phase of the present project to determine its function. The excavation revealed two layers over bedrock (see *Figure 49*). Layer I consists of 0.52 to 0.58 m of tightly packed pebbles, cobbles and small boulders with no cultural remains present. Layer II consists of 0.01 to 0.05 m of a very dark grayish brown (10YR 3/2) silt with 40% pebble inclusions. A fragment of charcoal and an unburned *kukui* nut shell was recovered from Layer II.

Feature 258 is a mound situated in the southwestern portion of the project area at c. 433 ft elevation. The feature is irregular in shape and is 4.8 m long (north-south) by 0.45 to 1.8 m wide (*Figure 50*). The sides are built of stacked and piled cobbles and small boulders. The feature is 0.1 to 0.9 m in height. The western side of the feature is faced and the surface is level but unpaved. No cultural remains were present on the surface. A small Christmas berry tree is growing at the southern end of the mound.

A 1.0 by 1.0 m test unit (TU-50) was excavated into the center of the mound, revealing two layers over bedrock (see *Figure 50*). Layer I consists of 0.57 to 0.67 m of tightly packed pebbles, cobbles and small boulders with one *kukui* nut shell present (3.5g). Layer II is 0.45 to 0.53 m of a very dark brown (7.5YR 2.5/2) silt with 40% gravel and pebble inclusions. No cultural remains were present.

Feature 382 is a low oval-shaped modified outcrop located on the surface of a raised pahoehoe outcrop in the southwestern portion of the project area at c. 290 ft elevation. The feature is 2.5 m long (north-south) by 2.4 m wide and is bordered around its perimeter by cobbles and small boulders (*Figure 51*). The surface is a rough cobble pavement with no cultural remains present. The feature abuts a low outcrop to the north.

A 1.0 by 1.0 m test unit (TU-65) was excavated into the northern portion of the feature adjacent to the low outcrop. The excavation revealed a stone layer (Layer I) that concealed a low blister (see *Figure 51*). Layer I consists of 0.53 to 0.66 m of tightly packed cobbles and small boulders with no cultural remains present. The blister extends to the north from the unit beneath the adjacent outcrop and is 1.85 m wide, 0.5 m wide and 0.25 m in height. The floor of the blister is soil-covered with no cultural remains on the surface. This soil was excavated as Layer II, a 0.26 to 0.28 m thick deposit of very dark brown (7.5YR 2.5/2) silt with 40% gravel and pebble inclusions. No cultural remains were present.

Feature 550 is a modified outcrop built against the southeastern side of a raised bedrock outcrop in the southeastern portion of the project area at c. 398 ft. The feature is roughly oval in shape and is 2.7 m long (northeast by southwest) by 0.4 to 0.8 m wide (*Figure 52*). The southeastern side is stacked and roughly faced cobbles and small boulders. The feature's surface slopes to the southeast. The southeast side ranges in height from 0.3 to 0.8 m and the remaining sides abut the edge of the adjacent outcrop. Several scattered boulders are located on the east side of the feature. No cultural remains were present on the surface.

A 1.0 by 1.0 m test unit (TU-41) was excavated into the center of the feature revealing two layers over bedrock (see *Figure 52*). Layer I consists of 0.36 to 0.69 m of loosely packed cobbles and small boulders with no cultural remains present. Layer II is a 0.37 to 0.4 m thick deposit of very dark brown (10YR 2/2) silt with 50% gravel and pebble inclusions. No cultural remains were present.

Feature 612 is a crude modified outcrop built on a raised bedrock outcrop in the south-central portion of the project area. The feature is irregular in shape and encompasses an area 7.3 m long (northeast by southwest) and 0.9 to 2.1 m wide (*Figure 53*). The feature is constructed of roughly stacked and piled cobbles and small boulders. It is 0.2 to 0.4 m in height. The surface is uneven and irregular with no cultural remains present. There is a void at the eastern end of the feature between the rocks and the edge of the adjacent outcrop.

A 1.0 by 1.0 m test unit (TU-35) was excavated into the surface of the feature, in the area of the void (see *Figure 53*). This excavation revealed a stone layer (Layer I) that concealed a very low linear lava blister. Layer I consists of 0.15 to 0.65 m of loosely packed cobbles and small boulder with no cultural remains present. The blister was inaccessible due to its low ceiling height (0.1 to 0.15 m), but measurements made with a laser distance meter indicate it is 16.2 m long (north-northeast by south-southwest) and 1.3 to 1.75 m wide. The floor of the blister is level soil. The soil at the base of TU-35 was excavated as Layer II and consists of 0.06 to 0.08 m of a very dark brown (10YR 2/2) silt with 60% gravel and pebble inclusions. Cultural remains from Layer II consist of a small amount of charcoal (0.1 g).

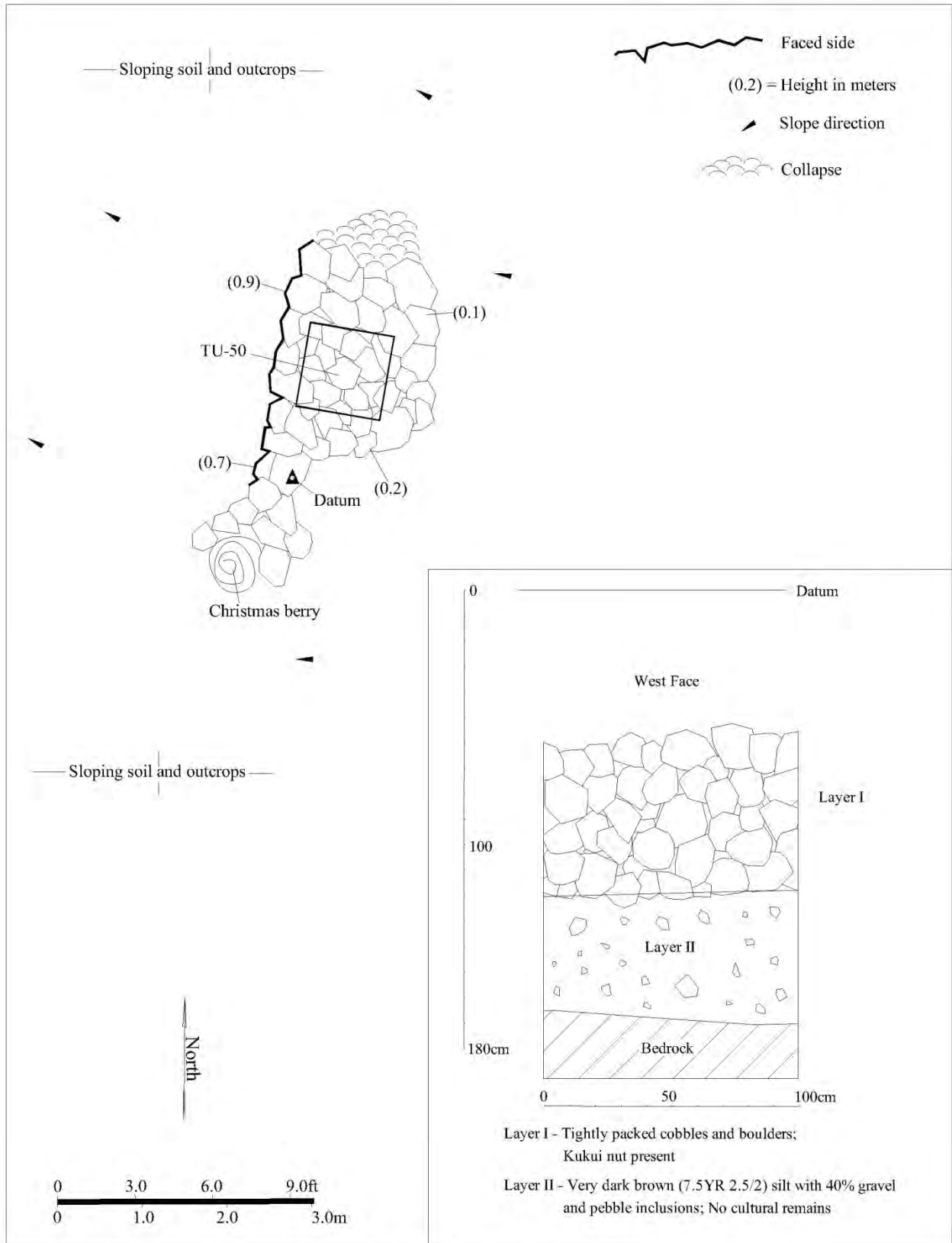


Figure 50. Site 26909, Feature 258 Plan Map and TU-50 West Face Profile

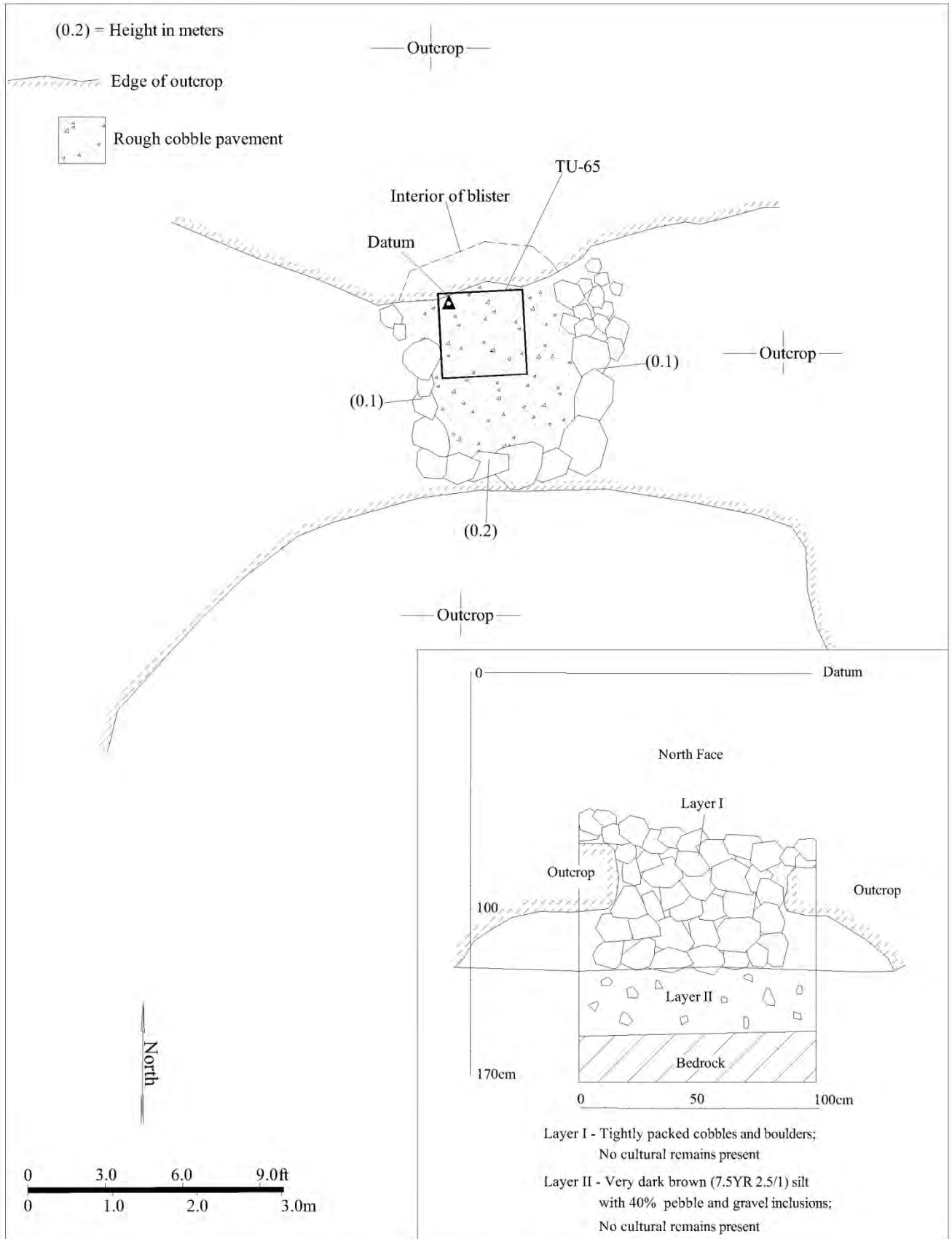


Figure 51. Site 26909, Feature 382 Plan Map and TU-65 North Face Profile

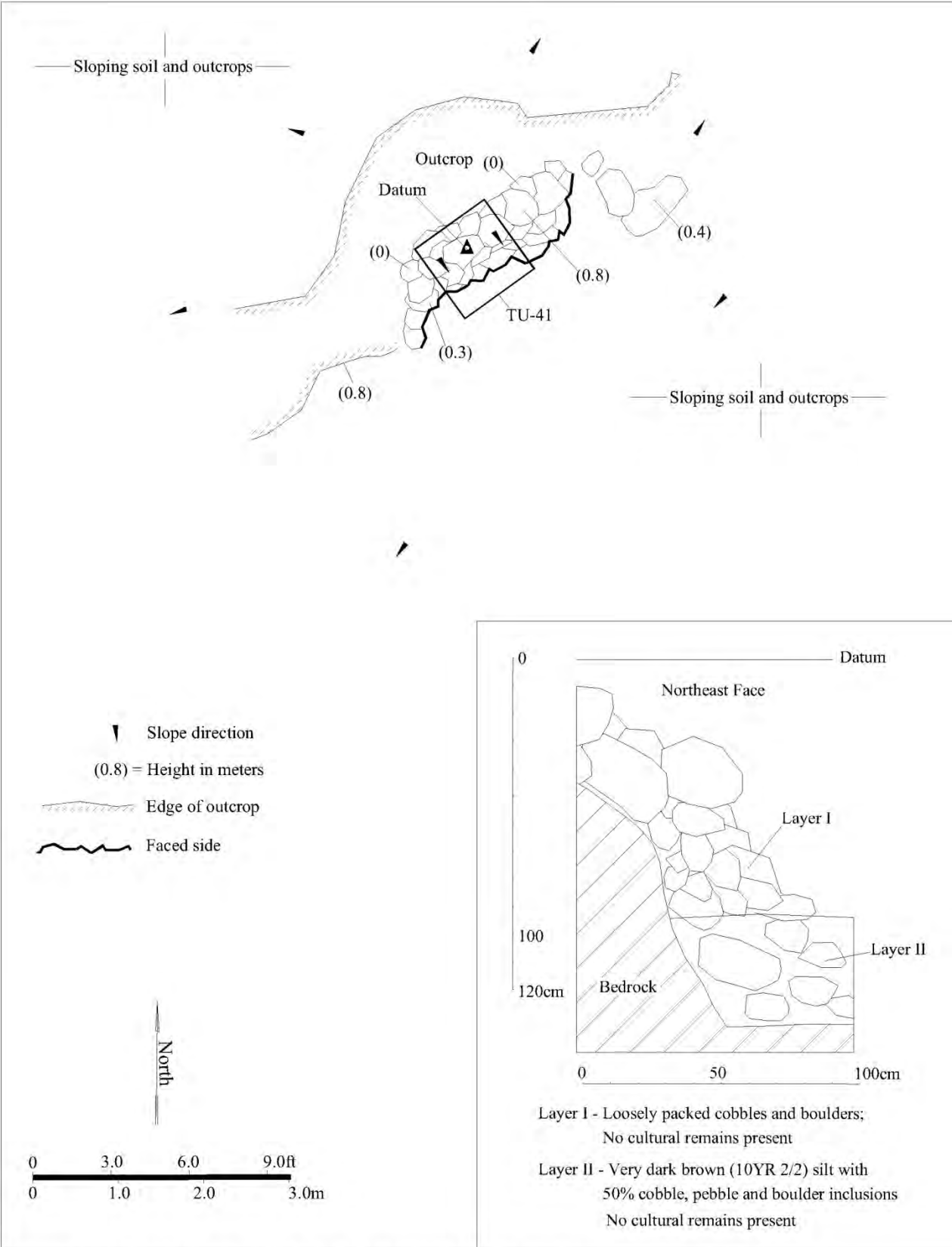


Figure 52. Site 26909, Feature 550 Plan Map and TU-41 Northeast Face Profile



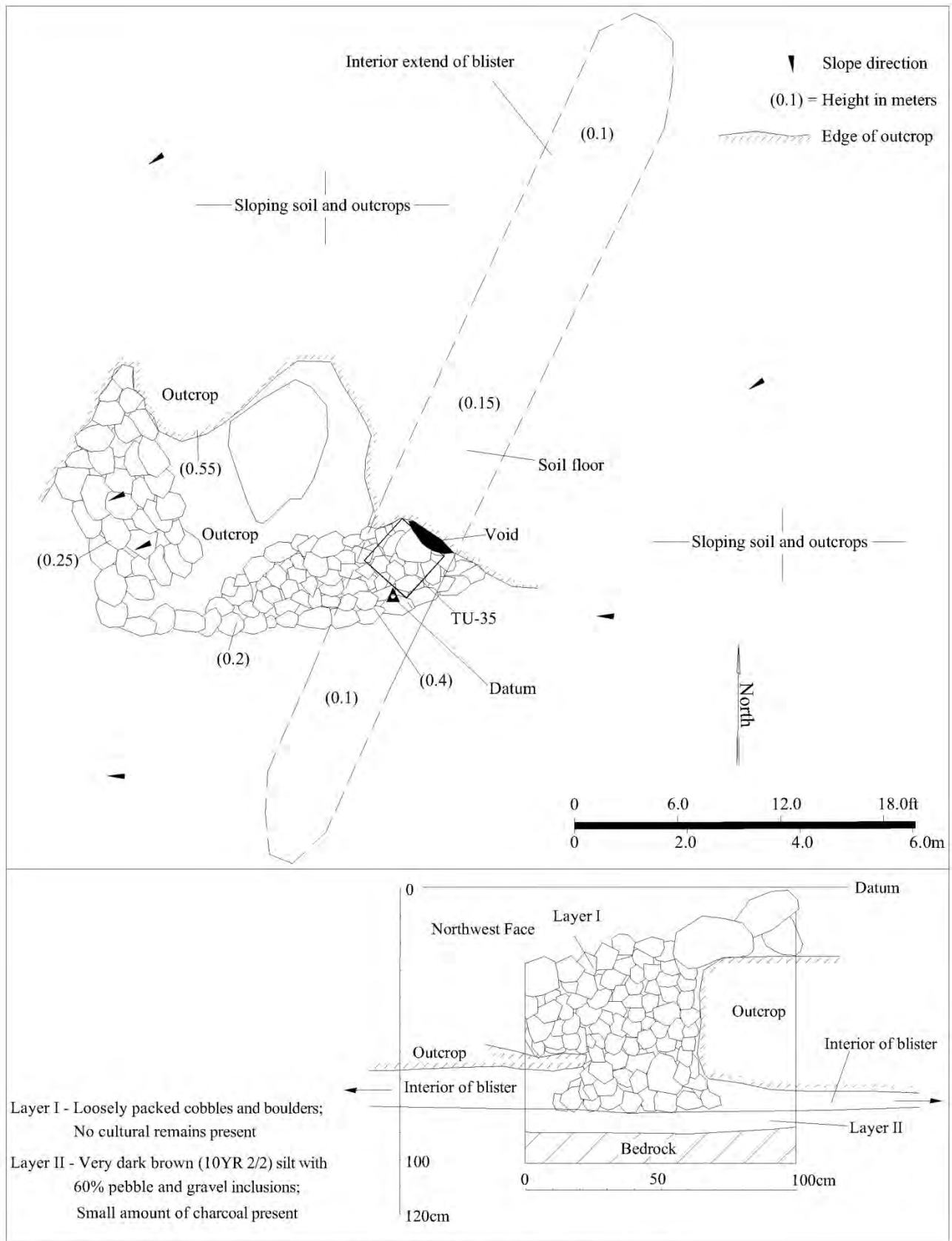


Figure 53. Site 26909, Feature 612 Plan Map and TU-35 Northwest Face Profile

Feature 750 is a roughly circular-shaped modified outcrop located in an area of sloping pahoehoe lava in the southeastern portion of the project area at c. 400 ft elevation (*Figure 54*). The feature is 3.2 m long (north-south) and 2.9 to 3.3 m wide. It is constructed of stacked and piled cobbles and small boulders and ranges in height from 0.25 to 0.5 m. The east side abuts the edge of a raised bedrock outcrop. A portion of the north side is faced and the northwestern corner has collapsed. The surface is level but unpaved cobbles and small boulders. A waterworn basalt cobble is present on the surface (not collected).

A 1.0 by 1.0 m test unit (TU-36) was excavated into the center of the feature revealing a single stone layer over bedrock (see *Figure 54*). Layer I consists of 0.08 to 0.33 m of tightly packed cobbles and small boulders. Two waterworn vesicular basalt cobble manuports (Acc. 29.001, 136.0g; Acc. 30.001, 549.0g) were recovered from Layer I.

Feature 871 is a roughly rectangular-shaped modified outcrop located in an area of sloping pahoehoe lava in the southwestern portion of the project area at c. 330 ft elevation. The feature is 4.25 m long (north-northwest by south-southeast) and from 1.4 to 2.7 m wide (*Figure 55*). The sides of the feature are comprised of aligned boulders that are 0.1 to 0.6 m in height. A pahoehoe slab (0.3 m high) set on edge is incorporated into the feature at the southeastern end. The surface is level, roughly paved cobbles with no cultural remains.

A 1.0 by 1.0 m test unit (TU-55) was excavated into the center of the feature revealing two layers over bedrock (see *Figure 55*). Layer I consists of 0.32 to 0.38 m of tightly packed pebbles, cobbles and small boulders with no cultural remains present. Layer II consists of 0.01 to 0.04 m of a dark reddish brown (5YR 2.5/2) silt with 20% pebble and gravel inclusions. No cultural remains were present in Layer II.

Feature 1204 is a mound located on top of a low oval-shaped outcrop in the southeastern portion of the project area at c. 452 ft elevation. The mound is oval in shape and is 3.2 m long (northeast-southwest) by 2.85 m wide built of stacked cobbles and small boulders (*Figure 56*). The sides range in height from 0.4 to 0.85 m above the surface of the outcrop. The northern side is faced and pahoehoe slabs set on edge are incorporated into the west and south sides. The surface is relatively level but unpaved and no cultural remains were present.

A 1.0 by 1.0 m test unit (TU-20) was excavated into the center of the feature revealing two layers over bedrock (see *Figure 56*). Layer I consists of 0.42 to 0.82 m of tightly packed cobbles and small boulders with no cultural remains present. Layer II is a 0.01 to 0.03 m thick deposit of very dark brown (10YR 2/2) silt with 10% gravel inclusions. No cultural remains were present in Layer II.

Feature 1389 is a low modified outcrop built on top of a pahoehoe ridge in the north-central portion of the project area. The feature is situated on a natural bench on the eastern side of the ridge and is roughly oval in shape. It is 2.45 m long (north-south), 1.45 m wide and 0 to 0.1 m in height above the surface of the pahoehoe bench (*Figure 57*). The surface is level and roughly paved with cobbles and small boulders. No cultural remains were present.

A 1.0 by 1.0 m test unit (TU-16) was excavated into the surface of the feature, revealing a single layer over bedrock (see *Figure 57*). Layer I consists of 0.1 to 0.26 m of tightly packed cobbles and small boulders with no cultural remains.

Feature 1557 is a mound located on top of a level, soil-covered knoll in the northeastern portion of the project area at c. 465 ft elevation. The feature is 2.25 m long (northeast by southwest) and 2.1 m wide with sides built of aligned and stacked cobbles and small boulders (*Figure 58*). The sides are 0.1 to 0.35 m in height and remnant facing is present along the northwest and southwest sides. The remaining sides of the mound have collapsed outward. The surface is level but unpaved cobbles with no cultural remains present.

A 1.0 by 1.0 m test unit (TU-8) was excavated into the center of the mound revealing two layers over bedrock (see *Figure 58*). Layer I consists of 0.17 to 0.25 m of tightly packed pebbles, cobbles and small boulders with no cultural remains present. Layer II is a 0.09 to 0.12 m thick deposit of dark brown (7.5 YR 3/4) silt with 80% gravel and pebble inclusions. No cultural remains were present.

Feature 1680 is an irregularly-shaped modified outcrop located in the north-central portion of the project area at c. 403 ft elevation. The feature is built against the southern side of a raised bedrock outcrop and is 3.25 m long (north-

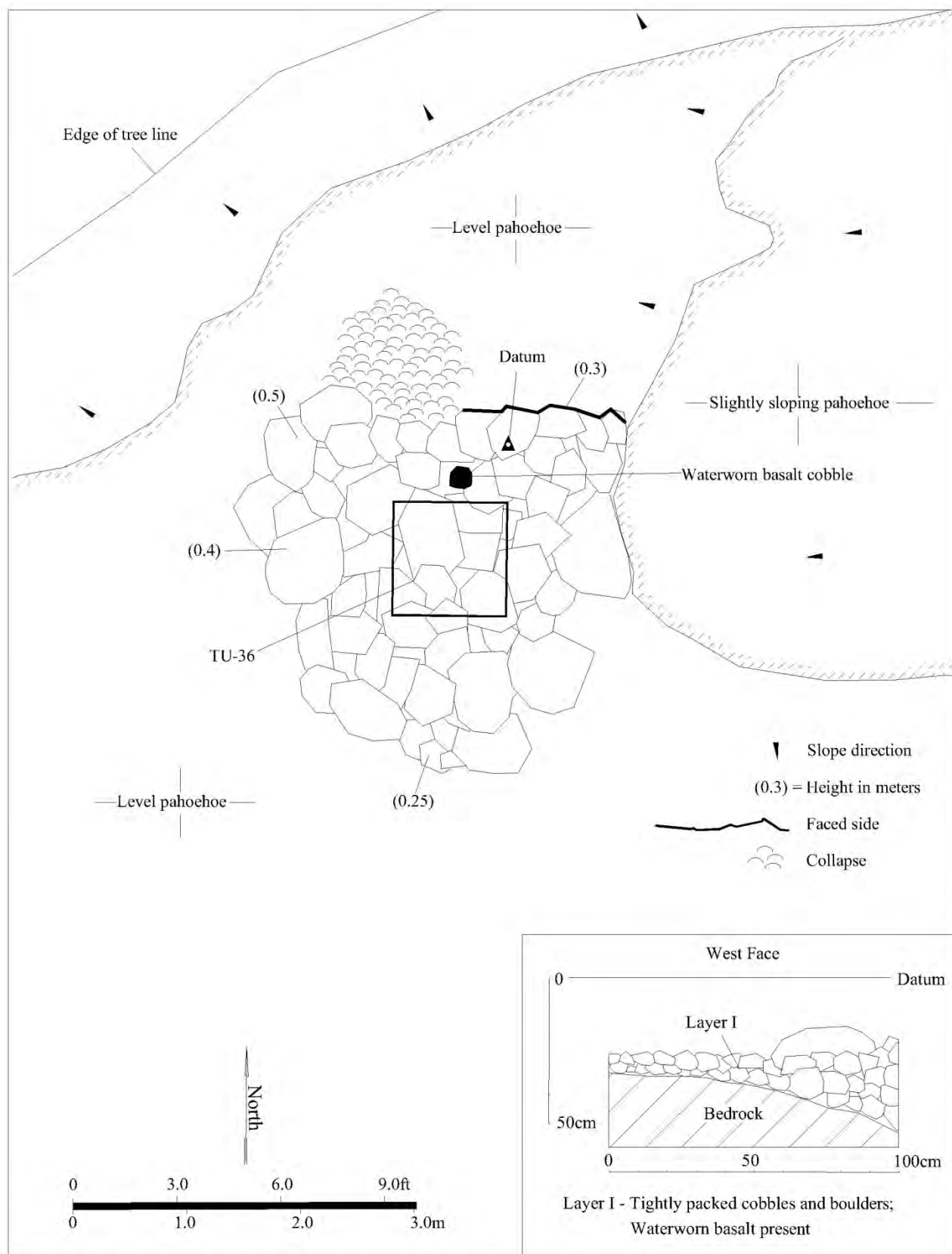


Figure 54. Site 26909, Feature 750 Plan Map and TU-36 West Face Profile

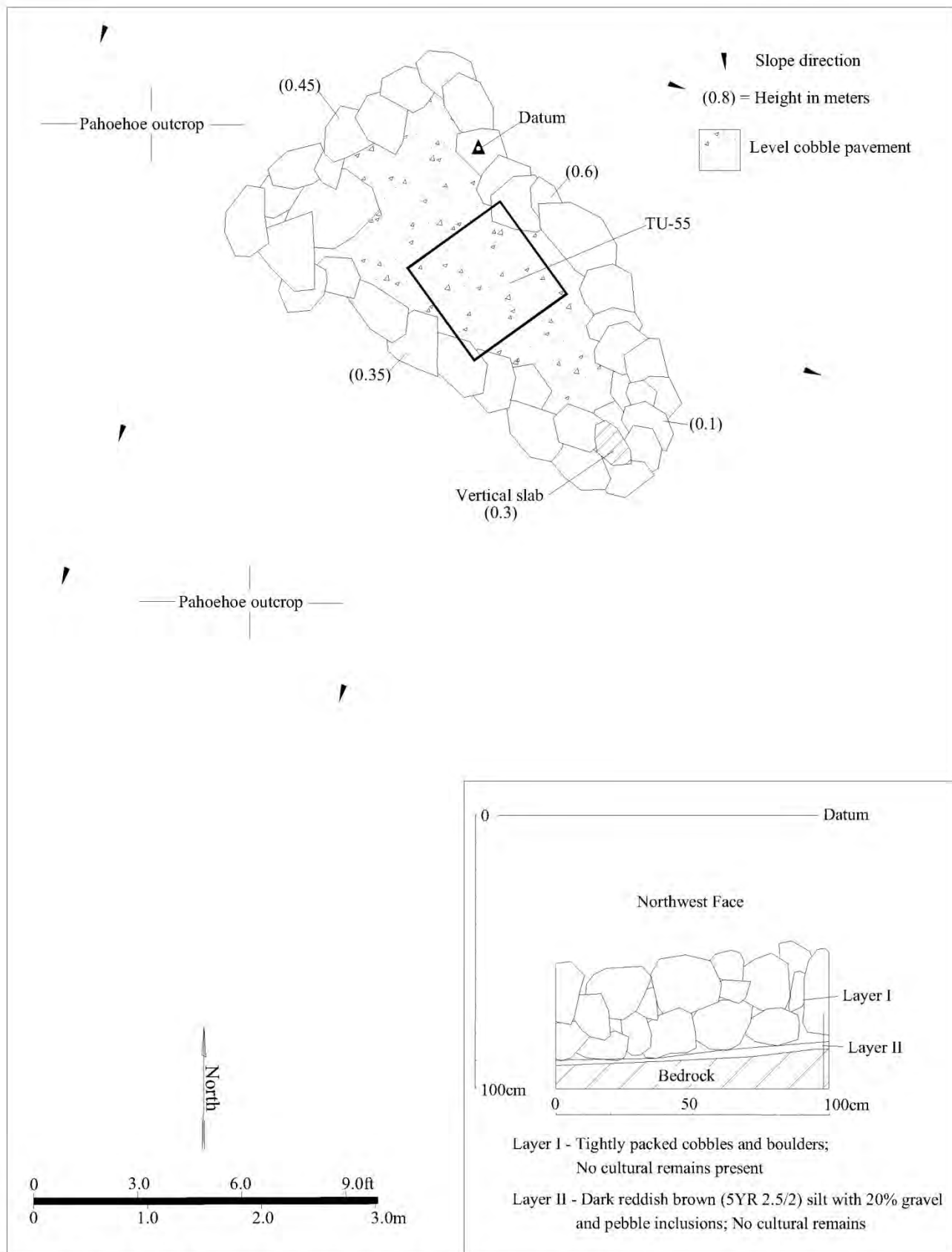


Figure 55. Site 26909, Feature 871 Plan Map and TU-55 Northwest Face Profile

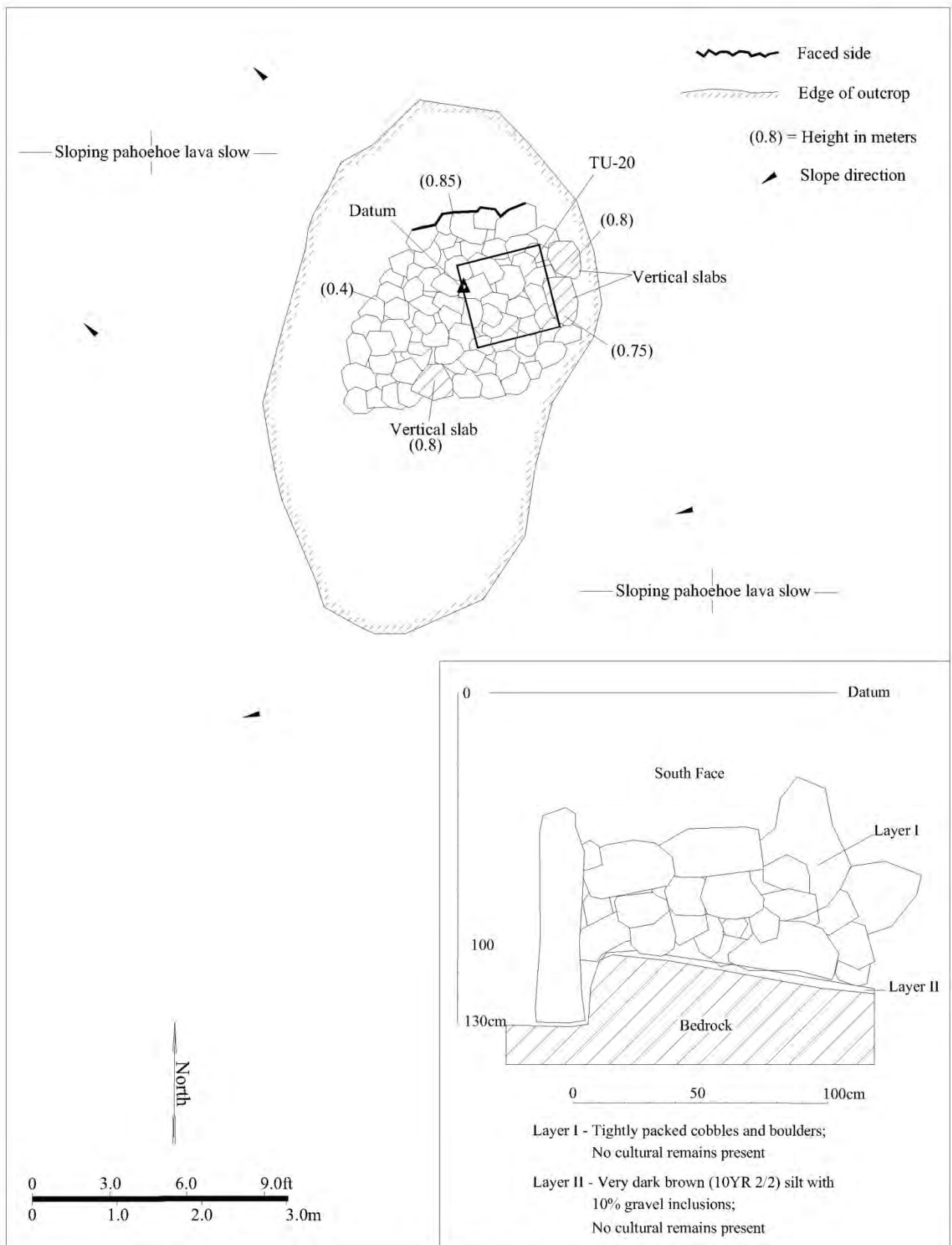


Figure 56. Site 26909, Feature 1204 Plan Map and TU-20 South Face Profile

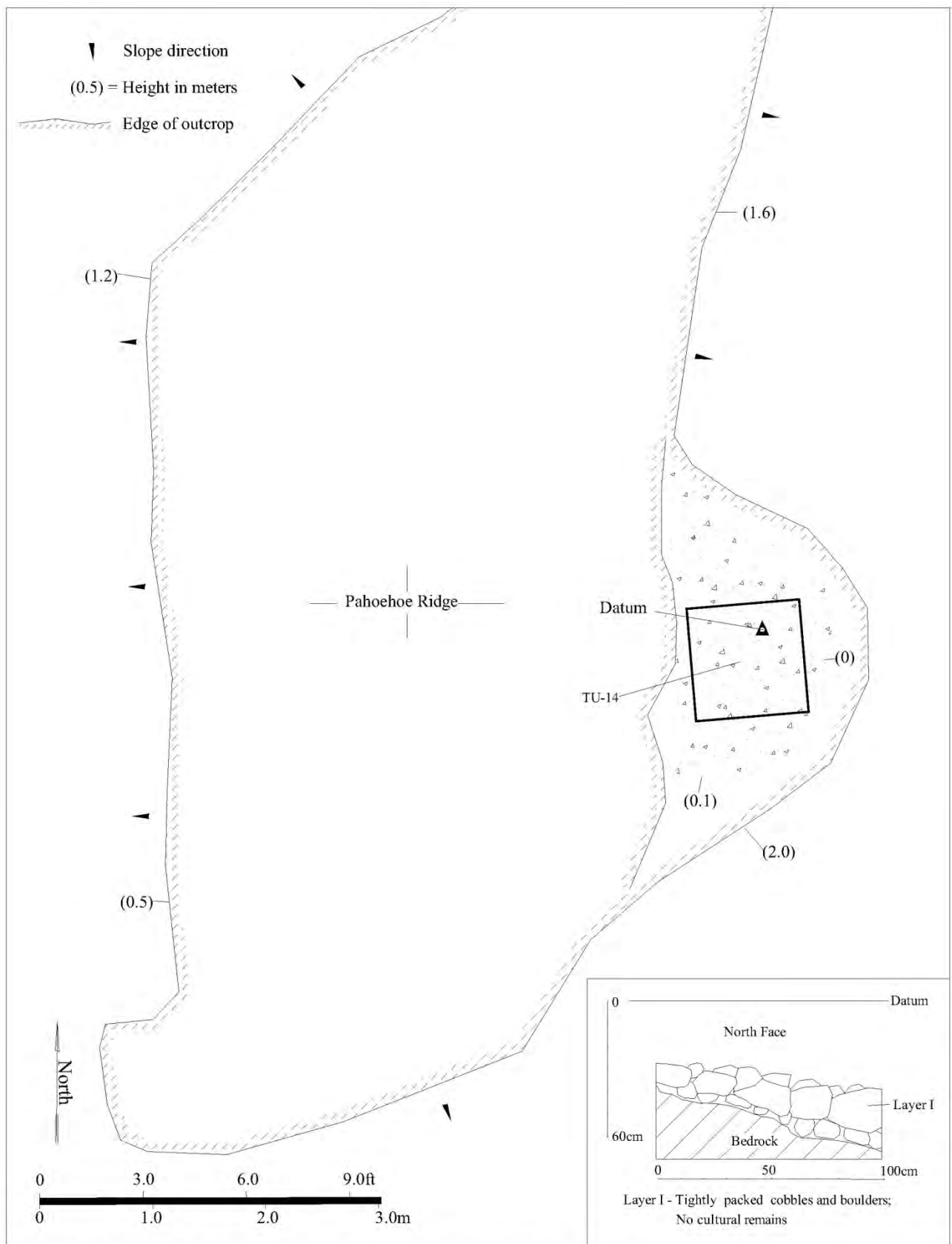


Figure 57. Site 26909, Feature 1389 Plan Map and TU-14 North Face Profile

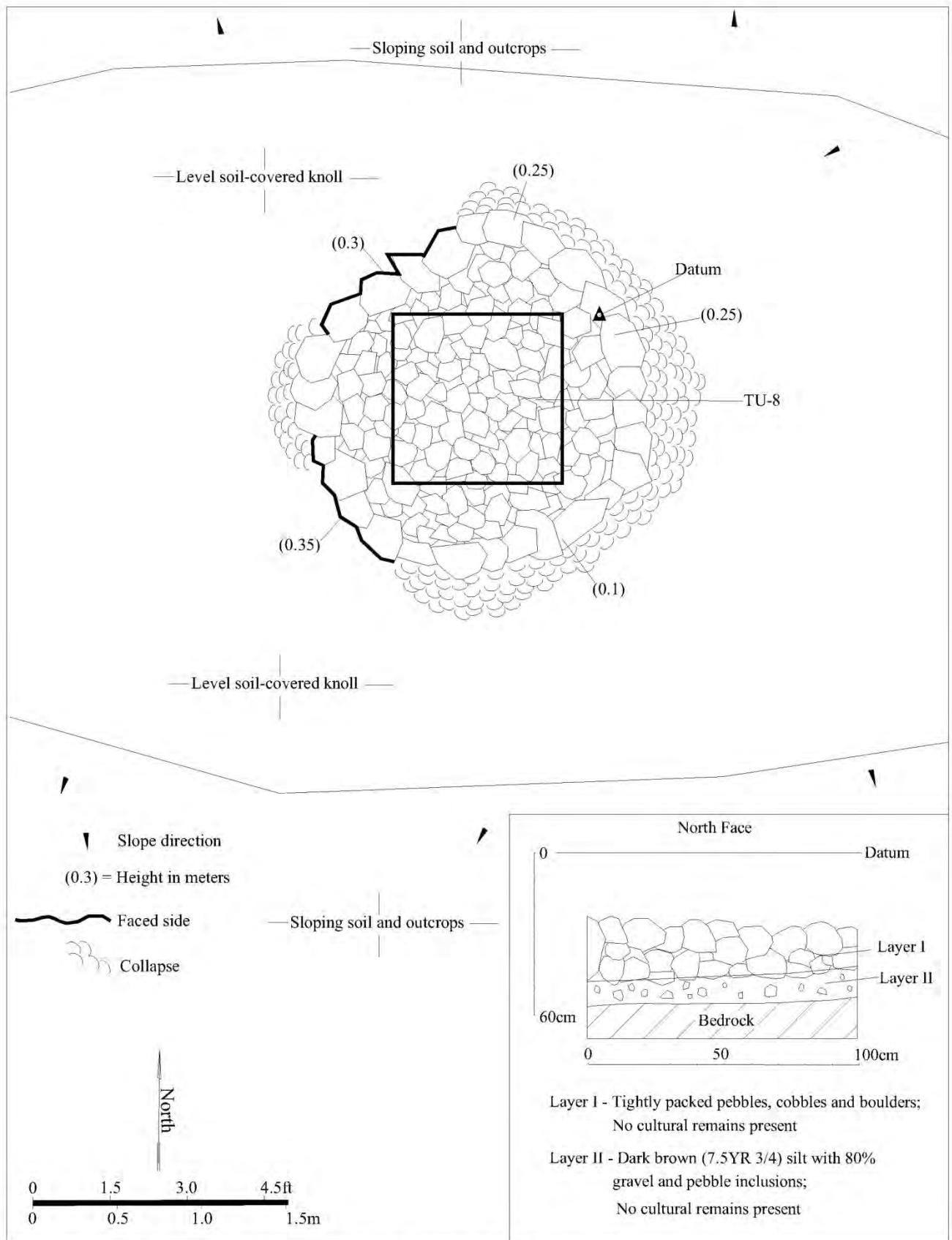


Figure 58. Site 26909, Feature 1557 Plan Map and TU-8 North Face Profile

south) and 1.6 to 2.95 m wide (*Figure 59*). The west and southeast sides of the feature are constructed of stacked and roughly faced cobbles and small boulders. These sides range from 0.5 to 0.75 m in height. The south side is collapsed and is 0.3 m in height. The north side abuts the outcrop. The surface of the feature is relatively level but unpaved cobbles and small boulders. No cultural remains were present on the surface.

A 1.0 by 1.0 m test unit (TU-1) was excavated into the surface of the feature revealing two layers over bedrock (see *Figure 59*). Layer I consists of 0.14 to 0.26 m of loosely packed cobbles and small boulders with no cultural remains present. Layer II is a 0.01 to 0.03 m thick deposit of very dark brown (10YR 2/2) silt with 30% gravel and pebble inclusions. No cultural remains were present.

Feature 1732 is an oval-shaped mound located in an area of sloping soil and outcrops the north-central portion of the project area at c. 423 ft elevation. The feature 4.8 m long (north-south) and 2.6 m wide with pahoehoe slabs set on edge incorporated into all four sides (*Figure 60*). The sides are 0.3 to 1.0 m in height and the surface is level but unpaved cobbles, small boulders and slabs. No cultural remains present on the surface.

A 1.0 by 1.0 m test unit (TU-3) was excavated into the center of the feature revealing two layers over bedrock (see *Figure 60*). Layer I consists of 0.32 to 0.49 m of tightly packed pebbles, cobbles and small boulders with no cultural remains present. Layer II is a 0.1 to 0.24 m thick deposit of very dark brown (10YR 2/2) silt with 80% gravel and pebble inclusions. A small quantity of charcoal (0.2 grams) was recovered from this deposit.

### **Filled Cracks**

The survey identified 15 filled cracks (see *Figure 46*). These features consist of stones placed within natural fissures and blisters in lava outcrops. All 15 features were tested during the project to determine feature function. These excavations revealed small, concealed blisters in seven of the features (Features 198, 375, 781, 1169, 1309, 1441 and 1832). Very small quantities of charcoal recovered from two of the features (Features 1276 and 1373) and a waterworn basalt boulder was present in the fill from one feature (Feature 781). The filled cracks are interpreted as additional clearing features based on their informal construction and paucity of cultural remains. The physical characteristics of the filled cracks are presented in *Table 7*. The features are described below with the results of the test excavations.

Feature 172 is an irregularly-shaped filled crack located in the southwestern portion of the project area at c. 321ft elevation. The feature consists of a low pile of cobbles and small boulders that have been placed within a natural crevice in a pahoehoe flow that is 4.5 m long (north-south) and 0.75 to 2.1 m wide (*Figure 61*). The majority of the feature is level with the surface of the surrounding outcrop. No cultural remains were present on the surface.

A 1.0 by 1.0 m test unit (TU-59) was excavated into the surface of the feature at the southern end revealing two layers over bedrock (see *Figure 61*). Layer I consists of 0.08 to 0.19 m of loosely packed cobbles and small boulders with no cultural remains present. Bedrock was encountered below Layer I though a pocket of soil was present in the center. This Layer II soil is a 0.02 to 0.06 m thick deposit of very dark brown (7.5YR 2.5/2) silt with 5% gravel inclusions. No cultural remains were present.

Feature 184 is a large, irregularly-shaped filled crack located on a level pahoehoe lava flow in the southwestern portion of the project area at c. 322 ft elevation. The feature is 8.6 m long (east-west) and 0.55 to 1.6 m wide (*Figure 62*). It is a depression in the outcrop that has been filled with cobbles and small boulders. The fill ranges in height from 0.2 to 0.6 m above the surface of the outcrop. The surface is uneven and irregular with voids between the rocks and no cultural remains were present.

A 1.0 by 1.0 m test unit (TU-58) was excavated into the center of the feature revealing two layers over bedrock (see *Figure 62*). Layer I consists of 0.11 to 0.14 m of loosely packed cobbles and small boulders with no cultural remains present. Bedrock was present below Layer I in the southeast portion of the unit with Layer II present throughout the remainder. Layer II is a 0.02 to 0.14 m thick deposit of very dark brown (7.5YR 2.5/2) silt with 50% gravel and pebble inclusion. No cultural remains were present.

Feature 198 is an irregularly-shaped filled crack located on a level pahoehoe lava flow in the southwestern portion of the project area at c. 330 ft elevation. The feature is 2.35 m long (east-west) and 0.45 to 1.05 m wide (*Figure 63*).



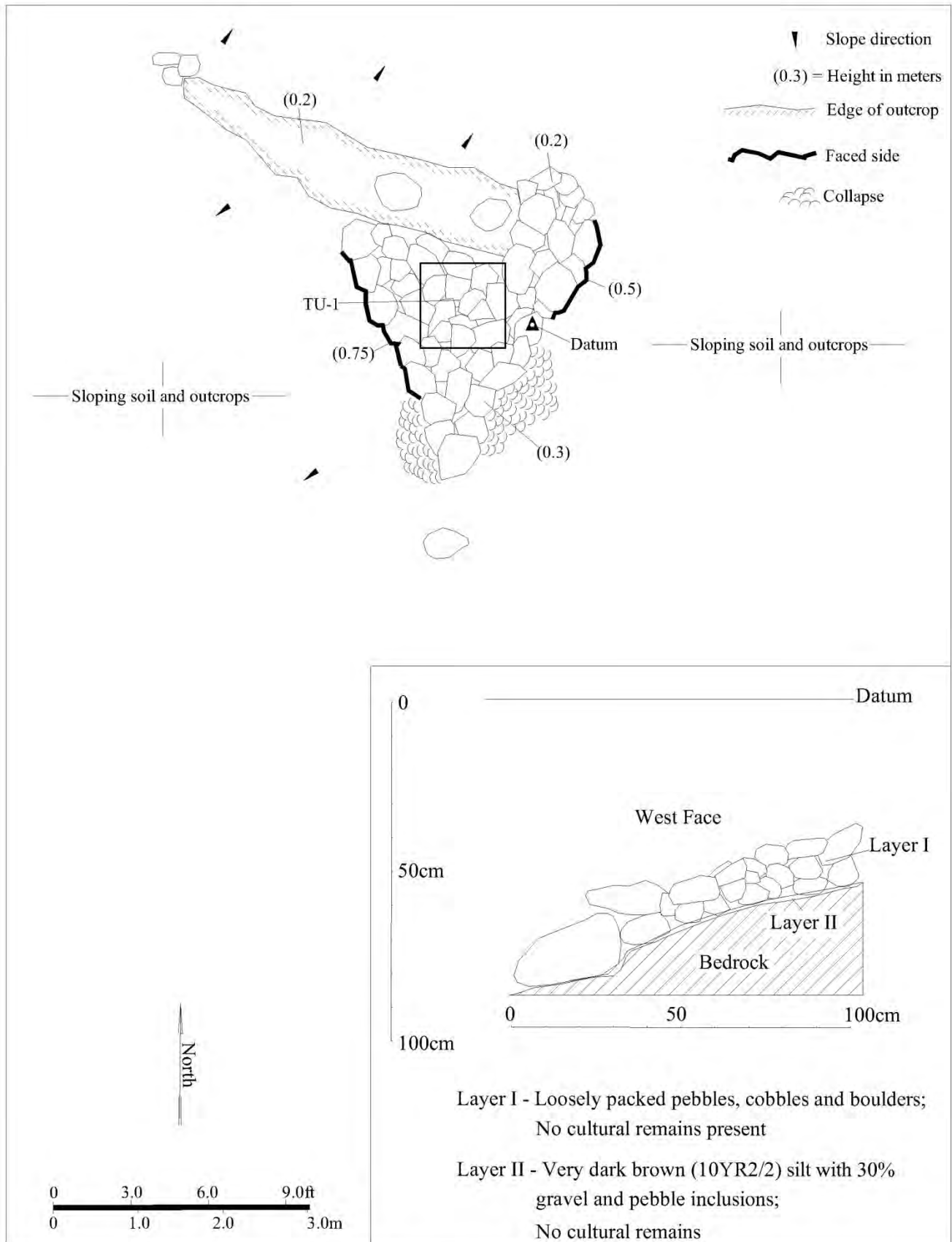


Figure 59. Site 26909, Feature 1680 Plan Map and TU-1 West Face Profile

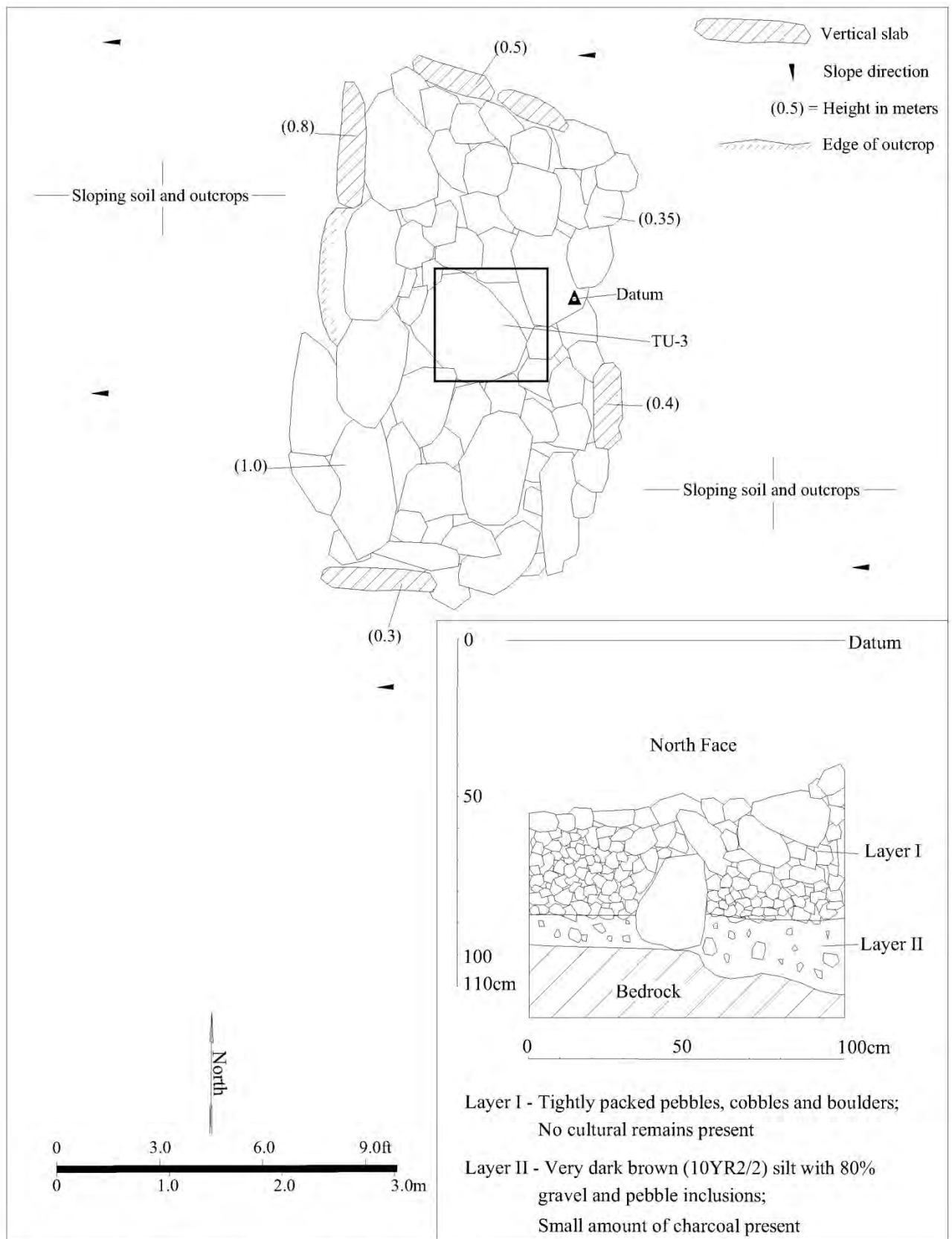


Figure 60. Site 26909, Feature 1732 Plan Map and TU-3 North Face Profile

*Table 7. Summary of Site 26909 Agricultural Filled Cracks*

<b>Feature</b>	<b>Length (m)</b>	<b>Width (m)</b>	<b>Surface Height (m)</b>	<b>Maximum Depth (m)</b>	<b>Shape</b>	<b>Comments</b>	<b>Easting</b>	<b>Northing</b>
172	4.50	2.10	0.2	0.23	Irregular	No blister present - No cultural remains	186546	2175783
184	8.60	1.60	0.6	0.28	Irregular	No blister present - No cultural remains	186562	2175800
198	2.35	1.05	0.5	0.70	Irregular	Two small blisters present - No cultural remains	186732	2175838
375	4.65	3.30	0.3	0.55	Irregular	Small blister with no cultural remains	186474	2175712
379	2.65	2.50	0.3	0.81	Circular	No blister present - No cultural remains	186470	2175680
770	1.55	1.35	0.1	0.33	Oval	No blister present - No cultural remains	186699	2176004
781	5.60	2.10	0.3	0.50	Oval	Small blister with no cultural remains though waterworn basalt boulder in stone fill	186548	2175957
1169	3.65	1.15	0.2	0.68	Irregular	Small blister with no cultural remains	186651	2176140
1276	1.95	1.35	0.3	0.70	Oval	No blister present - Small amount of charcoal present	186693	2176386
1309	1.80	1.35	0.2	0.61	Oval	Small blister with no cultural remains	186330	2176218
1344	2.90	1.00	0.1	1.00	Linear	No blister present - No cultural remains	186411	2176373
1373	4.20	1.95	0.0	0.92	Irregular	No blister present - Small amount of charcoal present	186426	2176543
1441	1.60	0.90	0.3	0.65	Irregular	Small blister with no cultural remains	186607	2176798
1832	6.20	5.30	0.0	0.75	Oval	Small blister with no cultural remains	186226	2177082
1847	2.10	1.65	0.1	0.21	Irregular	No blister present - No cultural remains	186509	2176472

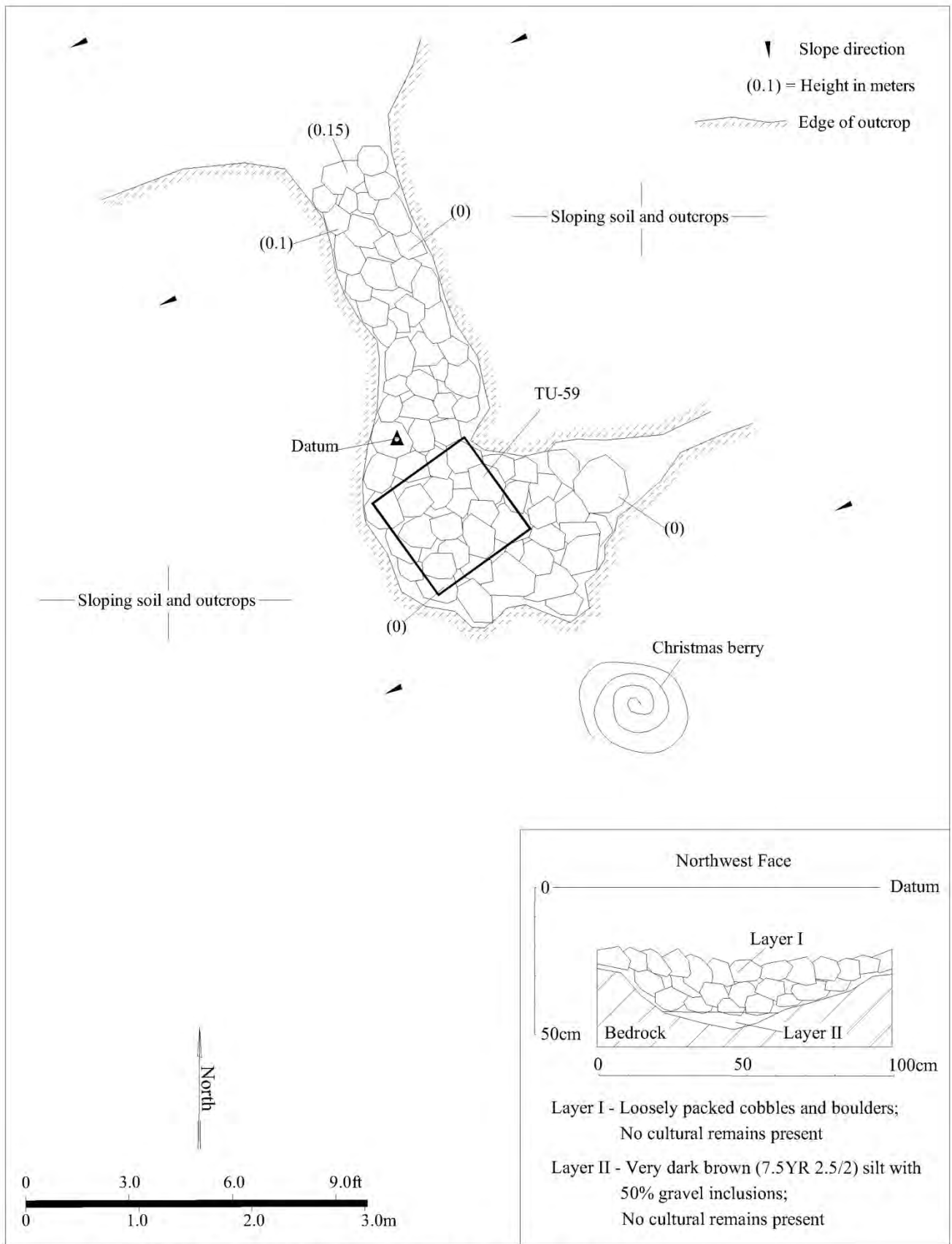


Figure 61. Site 26909, Feature 172 Plan Map and TU-59 Northwest Face Profile

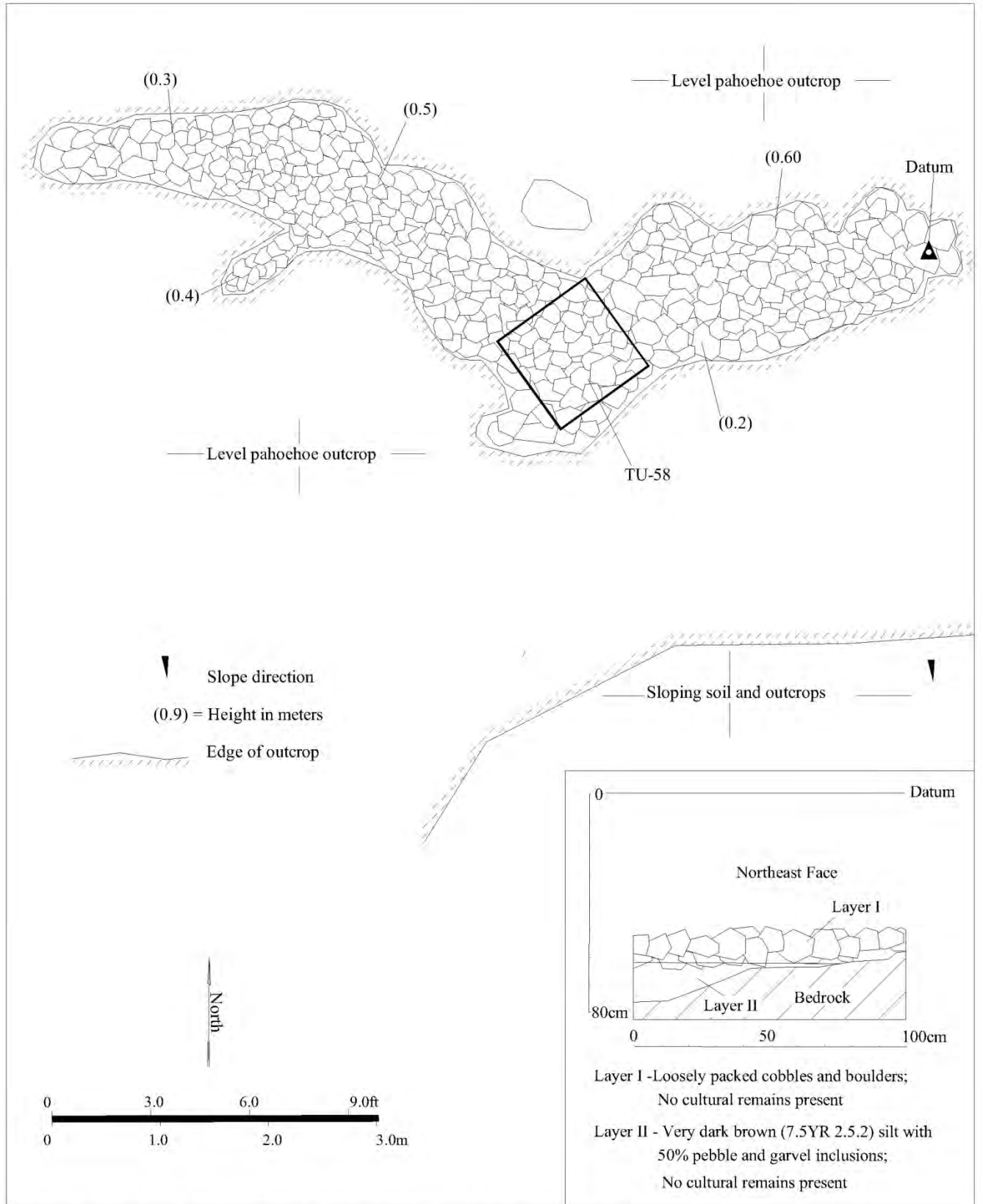


Figure 62 Site 26909, Feature 184 Plan Map and TU-58 East Face Profile

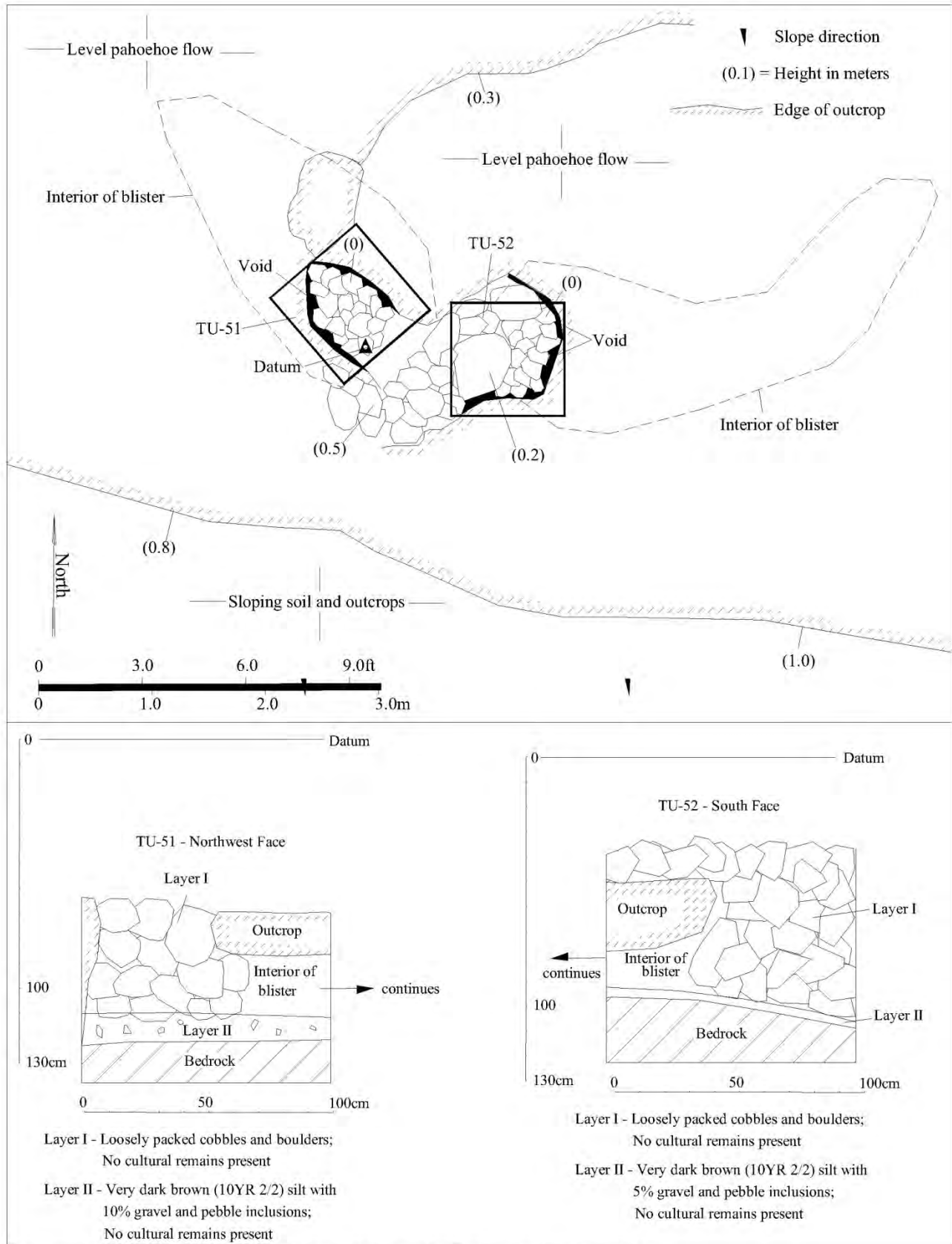


Figure 63. Site 26909, Feature 198 Plan Map and Profiles of TUs 51 and 52

The fill stones are generally level with the surface of the outcrop. There are voids between the stones and the edge of the outcrop along the east and west sides of the feature. The surface is uneven and irregular and no cultural remains were present.

Two 1.0 by 1.0 m test units were excavated into the feature to examine the voids along the east and west sides. TU-51 was excavated at the east end of the feature adjacent to the outcrop (see *Figure 63*). This excavation revealed a stone layer that concealed a lava blister with a very low (0.15 m) ceiling. Layer I consists of 0.4 to 0.46 m of loosely packed cobbles and small boulders with no cultural remains present. Once Layer I was removed, observations made from the entrance revealed a small blister that is 3.15 m long (northwest by southeast) and 0.5 to 1.5 m wide. The floor of the blister is level soil and with no cultural remains. This soil deposit within TU-51 was excavated as Layer II, a 0.1 to 0.13 m thick deposit of very dark brown (10YR 2/2) silt with 10% gravel and pebble inclusions. No cultural remains were present.

TU-52 was excavated into the surface of the feature at the west end. This excavation also revealed a low blister with stones piled in the entrance (see *Figure 63*). Layer I consists of 0.15 to 0.7 m of loosely packed cobbles and small boulders with no cultural remains present. These stones were removed to reveal a blister that is 3.9 m long (east-west) and 0.85 to 1.4 m wide. The ceiling heights average 0.2 m and the floor is level soil with no cultural remains present. This soil deposit within TU-52 was excavated as Layer II, a 0.03 to 0.05 m thick deposit of very dark brown (10YR 2/2) silt with 5% gravel and pebble inclusions. No cultural remains were present.

Feature 375 is an irregularly-shaped filled crack located in the southwestern portion of the project area at c. 298 ft elevation. The feature consists of a low pile of cobbles and small boulders that have been placed within a natural depression in a surface outcrop. The depression is 4.65 m long (northeast by southwest) and 2.7 to 3.3 m wide (*Figure 64*). The fill stones are generally level with the surface of the surrounding outcrop. There is a void between the rocks and the edge of the outcrop at the southwest end of the feature that is 0.4 m deep. No cultural remains were present on the surface.

A 1.0 by 1.0 m test unit (TU-63) was excavated into the surface of the feature at the southern end revealing two layers over bedrock (see *Figure 64*). Layer I consists of 0.31 to 0.54 m of loosely packed cobbles and small boulders with no cultural remains present. This was underlain by a 0.02 to 0.05 m thick deposit of very dark brown (7.5YR 2.5/2) silt with 40% gravel and pebble inclusion. A small, low blister (1.0 m long, 0.9 m wide, by 0.1 m in high) extends to the southwest from the unit. No cultural remains were present in Layer II or the blister.

Feature 379 is a circular-shaped filled depression located in the southwestern portion of the project area at c. 315 ft elevation. The feature consists of a low pile of cobbles and small boulders that have been placed within a natural depression in an outcrop that is 2.65m long (north-south) and 2.5 m (*Figure 65*). The stones of the feature range in height from 0.1 to 0.3 m above the surface of the surrounding outcrop. There are voids visible between the rocks and the surface is irregular and uneven. No cultural remains were present on the surface.

A 1.0 by 1.0 m test unit (TU-64) was excavated into the center of the feature revealing two layers over bedrock (see *Figure 65*). Layer I consists of 0.57 to 0.67 m of loosely packed cobbles and small boulders with no cultural remains present. Layer II is a 0.11 to 0.14 m thick deposit of very dark brown (10YR 2/2) silt with 70% gravel and pebble inclusion. A small quantity of charcoal (0.4 grams) was present.

Feature 770 is an oval-shaped filled crack located in an area of sloping soil and outcrops in the southwestern portion of the project area at c.352 ft elevation. The feature is a low pile of cobbles and small boulders placed within a depression in an outcrop that is 155 m long (north-northwest by south-southeast) and 1.35 m wide (*Figure 66*). The stones are generally level with the surface of the outcrop. There are voids between the stones and the edge of the outcrop. The surface is level but unpaved and no cultural remains were present.

A 1.0 by 1.0 m test unit (TU-31) was excavated into the center of the feature revealing two layers over bedrock (see *Figure 66*). Layer I consisted of 0.15 to 0.26 m of tightly packed cobbles and small boulders with no cultural remains present. Layer II was comprised of 0.05 to 0.07 m of a very dark brown (10YR 2/2) silt with 20% gravel and pebble inclusion. No cultural remains were present.

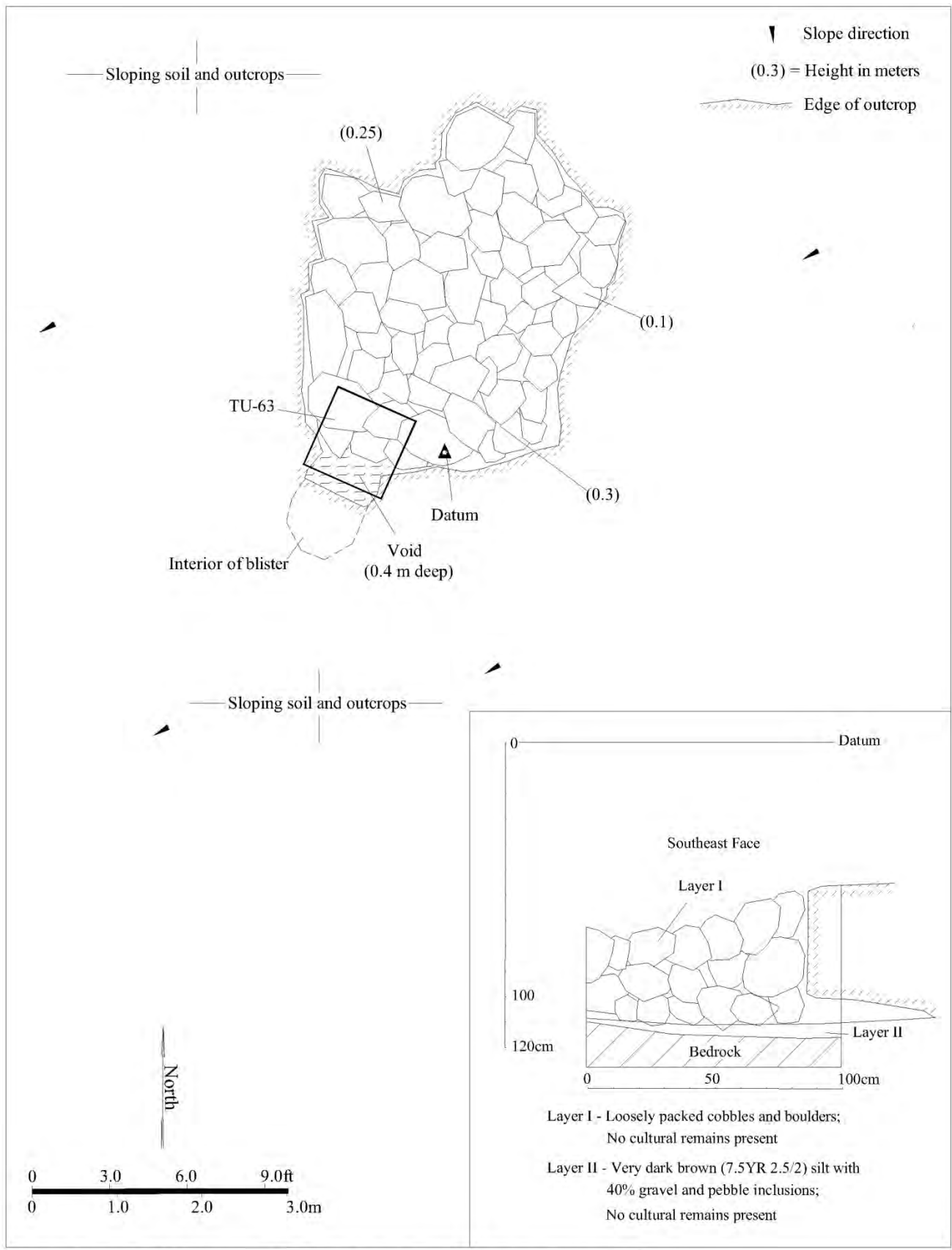


Figure 64. Site 26909, Feature 375 Plan Map and TU-63 Southeast Face Profile



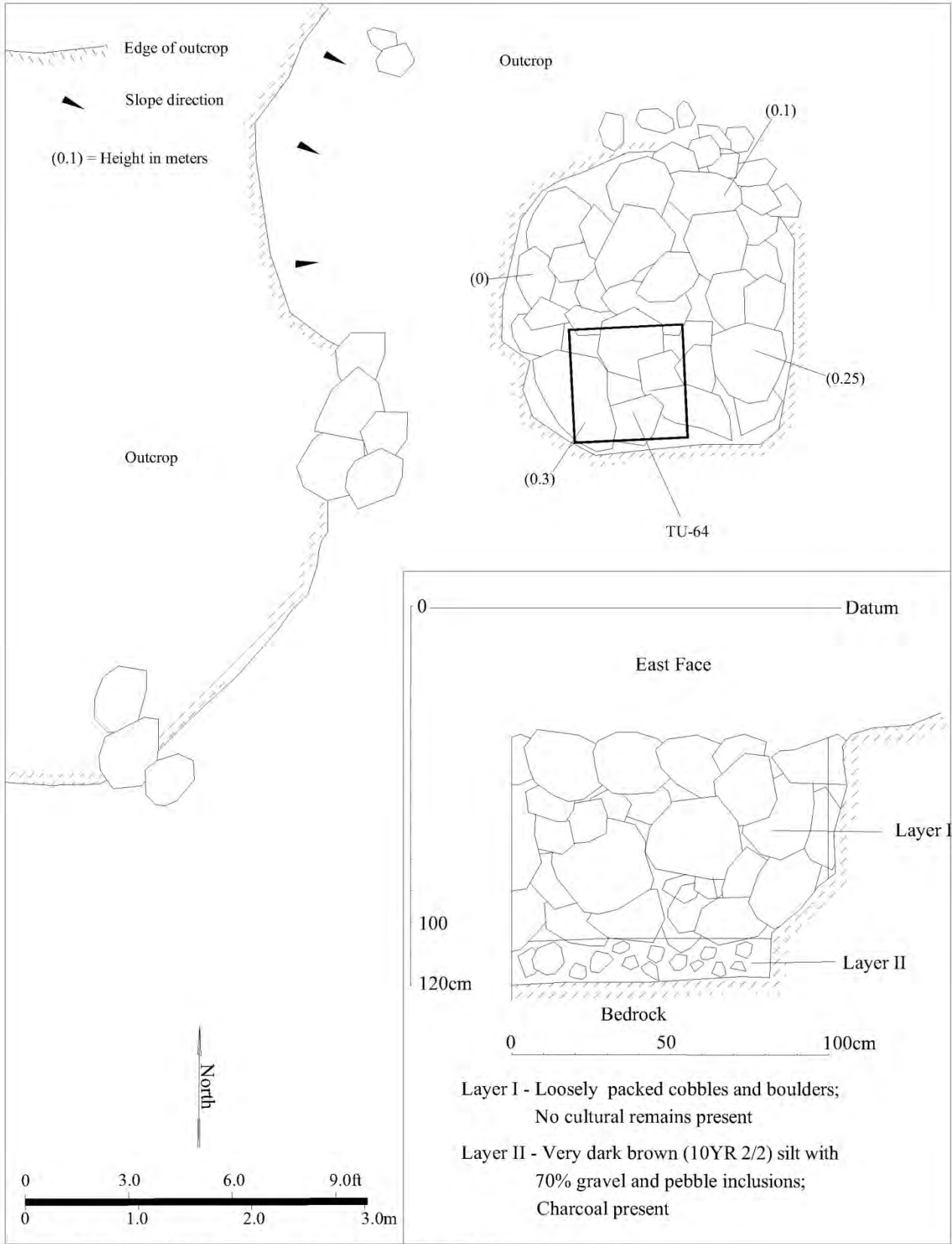


Figure 65. Site 26909, Feature 379 Plan Map and TU-64 East Face Profile

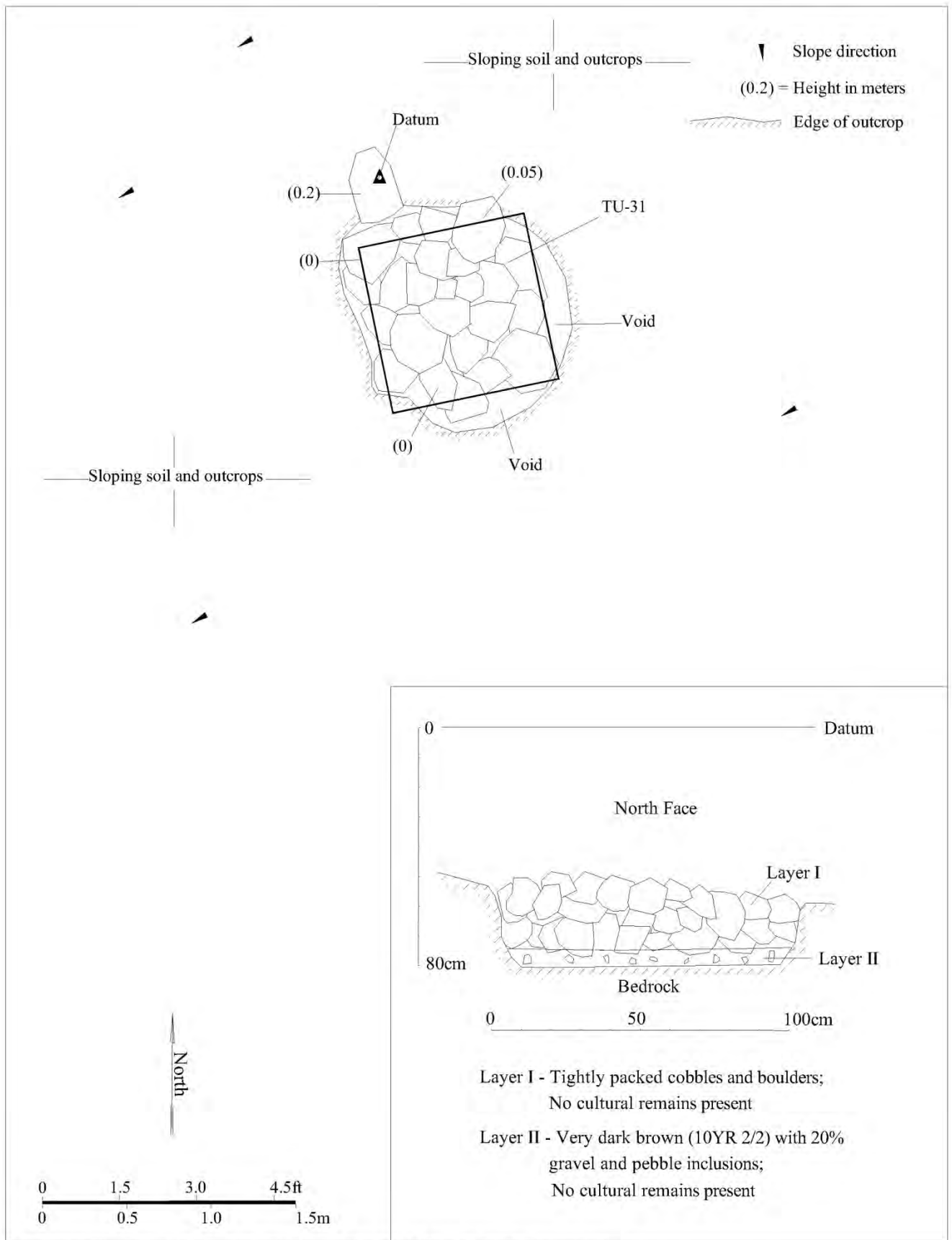


Figure 66. Site 26909, Feature 770 Plan Map and TU-31 North Face Profile

Feature 781 is a roughly oval filled crack located in an area of level pahoehoe lava in the southwestern portion of the project area at c. 336 ft elevation. The feature is a low pile of cobbles and small boulders placed within a depression in an outcrop that is 5.6 m long (east-northeast by west-southwest), 0.45 to 2.1 m wide and 0.1 to 0.3 m high (*Figure 67*). The surface is level but unpaved cobbles and small boulders with no cultural remains present.

A 1.0 by 1.0 m test unit (TU-27) was excavated into the feature at the western end (see *Figure 67*). This excavation revealed a stone layer (Layer I) concealing a low blister with a soil floor (Layer II). Layer I consists of 0.09 to 0.5 m of tightly packed cobbles and small boulders. A small waterworn basalt boulder (not collected) was recovered from Layer I. The removal of the stone layer revealed a low blister that is 1.7 m long (north-south) and 1.3 m wide. Layer II is a 0.01 to 0.3 m thick deposit of very dark brown (10YR 2/2) silt with 40% gravel and pebble inclusions. Two charcoal fragments (0.1g) were recovered from Layer II.

Feature 1169 is an irregularly-shaped filled crack located in the south-central portion of the project area at c. 368 ft elevation. The feature consists of a low pile of cobbles and small boulders situated on a bare pahoehoe lava flow that slopes gently to the west-southwest (*Figure 68*). The feature is 3.65 m long (north-south) and 0.5 to 1.15 m wide. The stones range in height from 0.0 to 0.2 m above the pahoehoe surface. Several voids ranging from 0.4 to 0.6 m in depth are visible in the stones in the southern portion. No cultural remains were present on the surface.

A 1.0 by 1.0 m test unit (TU-23) was excavated into the center of the feature. The excavation revealed a layer of loosely packed cobbles and small boulders (Layer I) situated over the entrance to a low lava blister (see *Figure 68*). Layer I varied in thickness from 0.2 to 0.68 m and contained no cultural remains. The lava blister is roughly oval in shape. It is 3.4 m long (east-west), 1.0 to 1.5 m wide and 0.1 to 0.5 m in height. The floor in the western portion of the blister is bare lava. A soil deposit (Layer II) is present in the eastern portion. An area of Layer II soil was excavated in TU-23. The layer is a 0.01 to 0.05 m thick deposit of very dark brown (7.5YR 2.5/2) silt with 10% gravel and pebble inclusions and no cultural remains.

Feature 1276 is a roughly oval-shaped filled crack located in an area of sloping soil and outcrops in the southeastern portion of the project area at c. 410 ft elevation. The feature is a low pile of cobbles and small boulders placed within a depression in an outcrop. The depression is 1.95 m long (north-northwest by south-southeast), 1.35 m wide and 0.1 to 0.25 m deep (*Figure 69*). The surface is uneven and irregular with no cultural remains present.

A 1.0 by 1.0 m test unit (TU-18) was excavated into the center of the feature revealing two layers over bedrock (see *Figure 69*). Layer I consists of 0.49 to 0.65 m of loosely packed cobbles and small boulders with no cultural remains present. Layer II is a 0.01 to 0.12 m thick deposit of very dark brown (10YR 2/2) silt with 10% gravel and pebble inclusions. A small quantity of charcoal (0.3g) was recovered from Layer II.

Feature 1309 is a roughly oval-shaped filled depression located in an area of level pahoehoe lava in the central portion of the project area at c. 339 ft elevation. The feature is a low pile of cobbles and small boulders adjacent to a outcrop. The feature is 1.8 m long (northwest by southeast), 0.45 to 1.35 m wide and 0.1 to 0.15 m high (*Figure 70*). There is a gap (0.3 m deep) between the stone fill and the edge of the outcrop. No cultural remains were present.

A 1.0 by 1.0 m test unit (TU-19) was excavated into the feature adjacent to the gap, revealing two layers over bedrock (see *Figure 70*). Layer I consists of 0.13 to 0.54 m of loosely packed cobbles and small boulders with no cultural remains present. Layer II is a 0.05 to 0.07 m thick deposit of very dark brown (10YR 2/2) silt with 10% gravel and pebble inclusions. A low blister (0.2 m high) extends to the northeast from the gap for 0.25 m. The Layer II soil in TU-19 yielded 3 charcoal fragments (0.3g).

Feature 1344 is a linear filled crack located in the central portion of the project area at c. 359 ft elevation. The feature is a low pile of cobbles and small boulders placed within a depression in an outcrop. The depression is 2.9 m long (north-south) by 0.6 to 1.0 m (*Figure 71*). The stones of the feature are generally level with the surface of the surrounding outcrop. There are voids visible between the rocks and the surface is irregular and uneven. No cultural remains were present on the surface.

A 1.0 by 1.0 m test unit (TU-15) was excavated into the surface of the feature at the northern end revealing two layers over bedrock (see *Figure 71*). Layer I consists of 0.75 to 0.9 m of loosely packed cobbles and small boulders

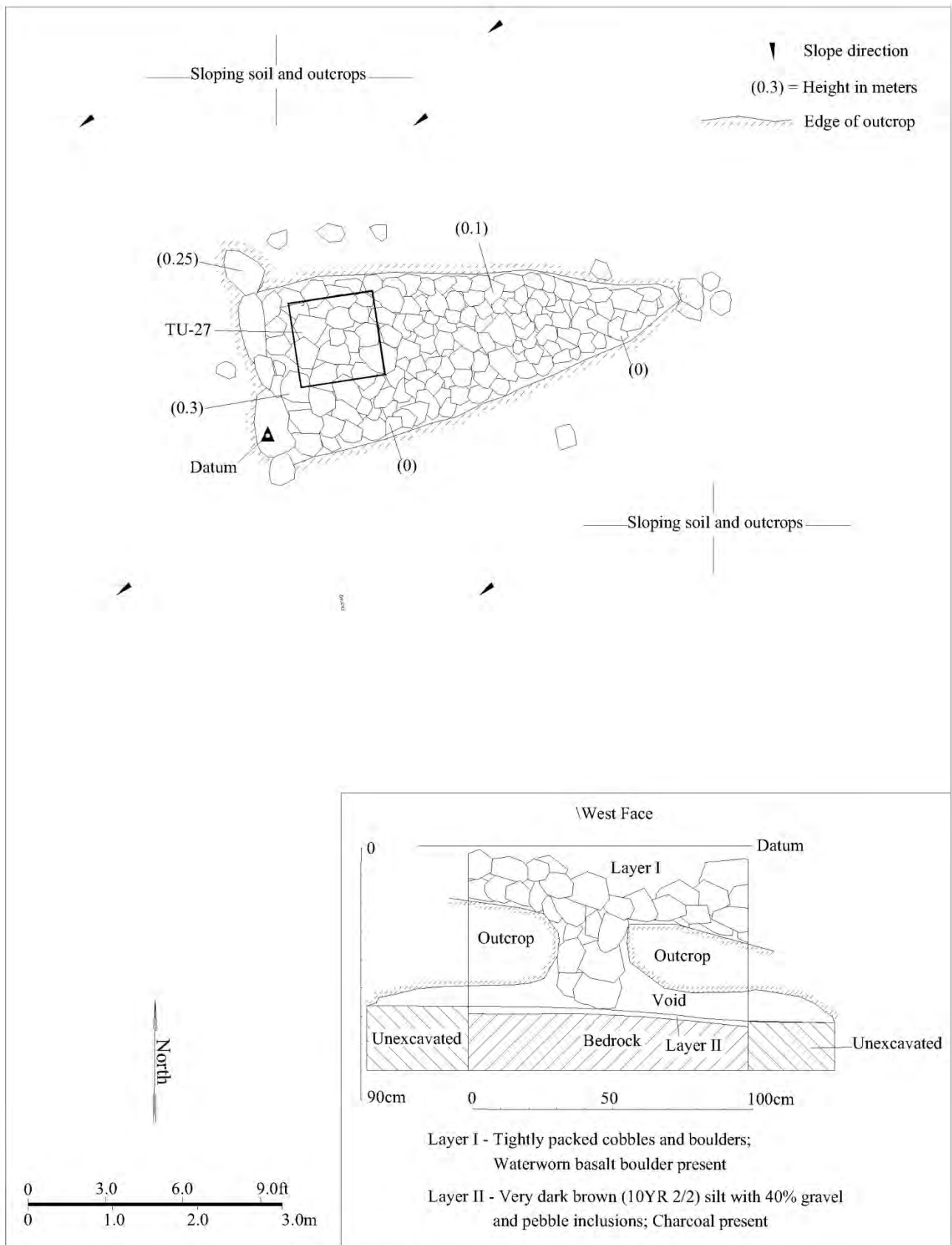


Figure 67. Site 26909, Feature 781 Plan Map and TU-27 West Face Profile

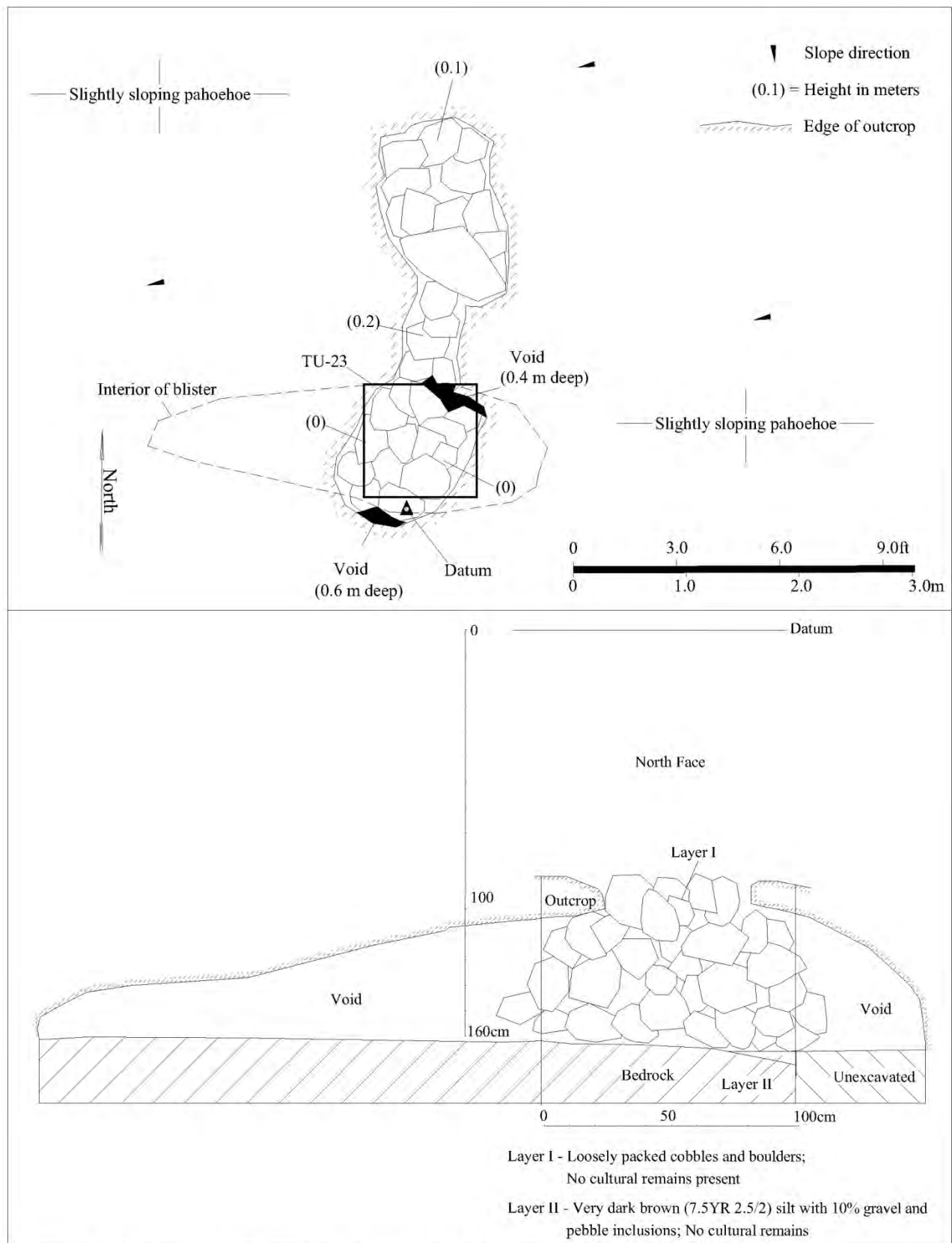


Figure 68. Site 26909, Feature 1169 Plan Map and TU-23 North Face Profile

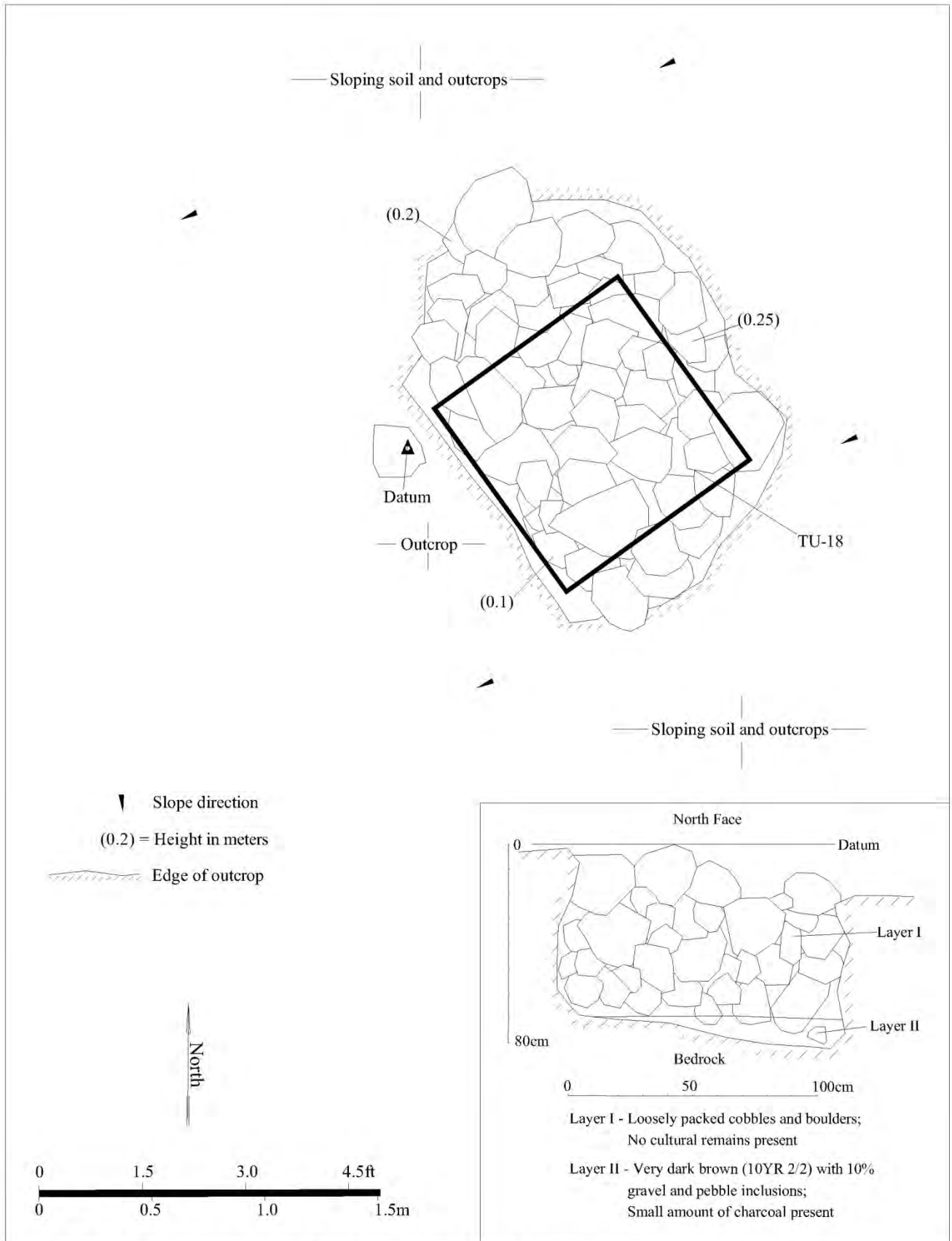


Figure 69. Site 26909, Feature 1276 Plan Map and TU-18 North Face Profile

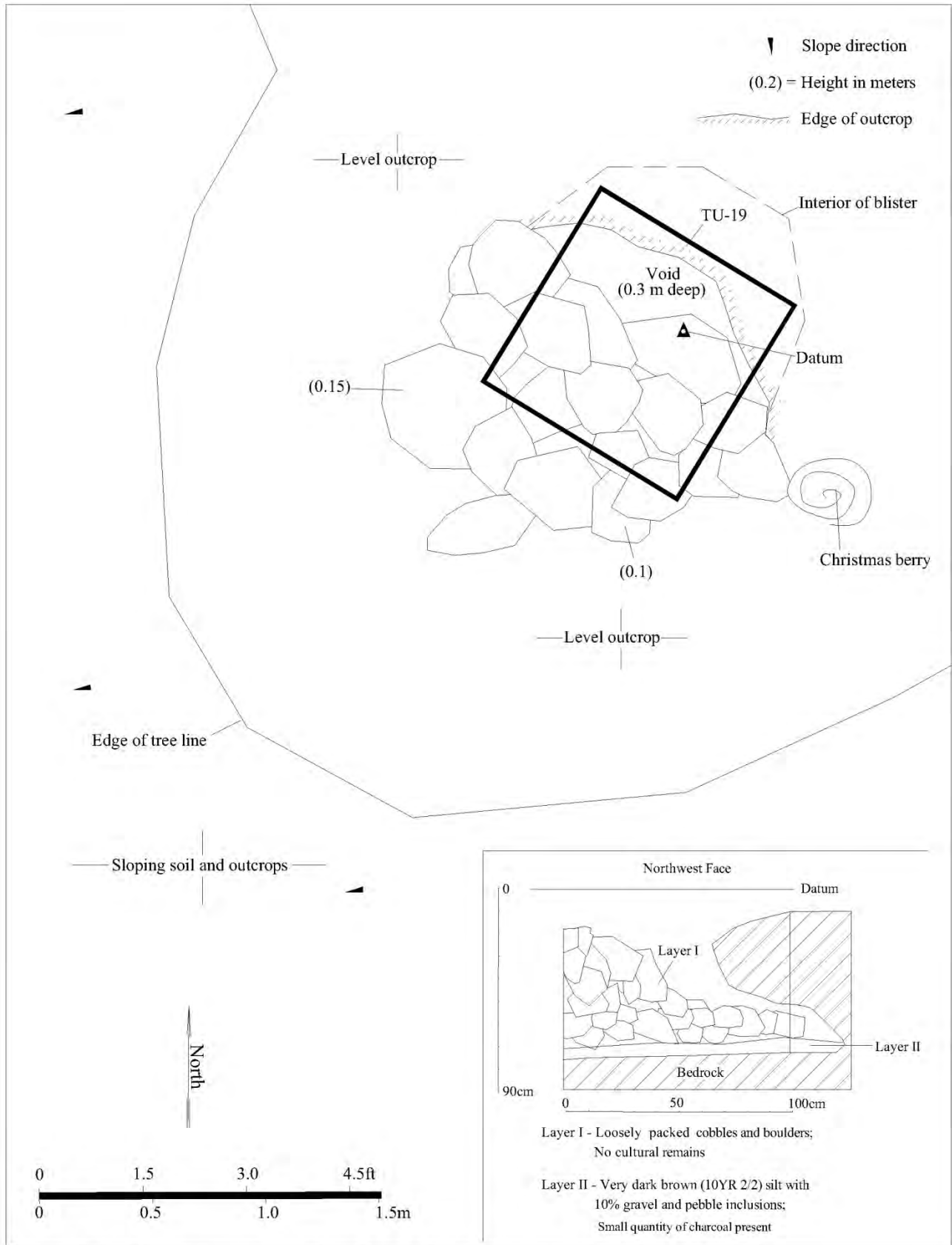


Figure 70. Site 26909, Feature 1309 Plan Map and TU-19 Northwest Face Profile

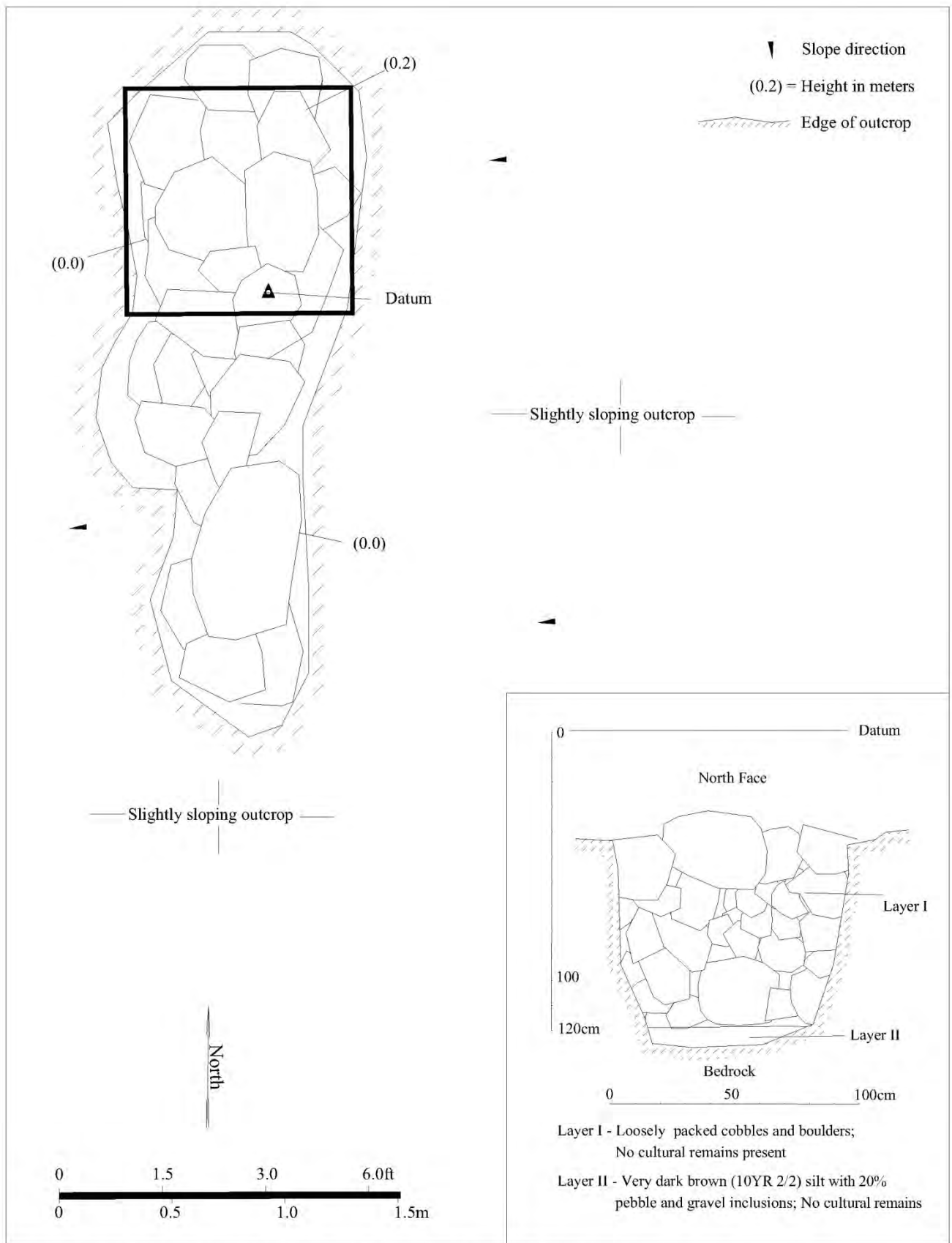


Figure 71. Site 26909, Feature 1344 Plan Map and TU-15 North Face Profile



with no cultural remains present. This was underlain by a 0.04 to 0.07 m thick deposit of very dark brown (10YR 2/2) silt with 20% gravel and pebble inclusion. No cultural remains were present.

Feature 1373 is an irregularly-shaped filled crack located in the north-central portion of the project area at c. 375 ft elevation. The feature is a natural crevice in a surface bedrock outcrop that is 7.95 m long (north-south) by 0.4 to 1.7 m wide (*Figure 72*). The crack is 0.5 to 1.0 m in depth below the surface of the outcrop. Cobbles and small boulders have been placed within the central portion of the crack in an area 4.2 m long and 0.4 to 1.9 m wide. The surface of this filled area is level with the surrounding outcrop. No cultural remains were present. A *noni* tree is growing out of the crack to the south of the filled area.

A 1.0 by 1.0 m test unit (TU-11) was excavated into the filled area at the northern end (see *Figure 72*). Layer I consists of 0.06 to 0.72 m of loosely packed cobbles and small boulders with no cultural remains present. Bedrock was encountered below Layer I in the western portion of the unit. A soil deposit (Layer II) is situated below Layer I in the eastern portion. Layer II is a 0.2 m thick deposit of very dark brown (10YR 2/2) silt with 40% gravel and pebble inclusions. A small amount of charcoal (0.8g) was recovered from Layer II.

Feature 1441 is an irregularly-shaped filled crack located in the northeastern portion of the project area at c. 445 ft elevation. The feature is a low pile of cobbles and small boulders situated on a bare pahoehoe lava flow that slopes gently to the northeast and southeast (*Figure 73*). The pile of stones is 1.6 m long (north-northwest by south-southeast), 0.9 m wide and 0.1 to 0.3 m in height. There are voids visible between the rocks that are 0.3 m in depth. No surface cultural remains were present.

A 1.0 by 1.0 m test unit (TU-10) was excavated into the center of the feature (see *Figure 73*). Layer I consists of 0.4 m of loosely packed cobbles and small boulders with no cultural remains present. A low lava blister was noted at the base of Layer I that measures 1.45 m long (east-west), 0.5 m wide and 0.08 to 0.25 m in height. The floor of the blister is bare lava with no cultural remains present.

Feature 1832 is a filled depression located northern project area boundary at c. 382 ft elevation. It is oval in shape, 7.6 m long (east-west), 2.6 to 7.0 m wide and 0.3 m deep below the surrounding ground surface (*Figure 74*). There is a pile of cobbles and small boulders located in the bottom of the depression that measures 6.2 m long (east-west) and 2.1 to 5.3 m wide. The surface is irregular and uneven and the sides are level with the surface of the outcrop. There is a void visible in the fill in the center of the feature that is 0.6 m deep.

A 1.0 by 1.0 m test unit (TU-2) was excavated into feature over the depression. The excavation revealed a layer of loosely packed cobbles and small boulders (Layer I) situated over the entrance to a small lava blister (see *Figure 74*). Layer I varied in thickness from 0.11 to 0.44 m and contained no cultural remains. The lava blister is roughly circular in shape and is 1.0 m in diameter and 0.5 m in height. The floor of the blister is a level soil with no cultural remains. This soil was removed as Layer II, a 0.01 to 0.3 m thick deposit of dark brown (10YR 2/2) fine silt with no cultural remains present. Bedrock was encountered below Layer II.

Feature 1847 is an irregularly-shaped filled crack located in the central portion of the project area at c. 385 ft elevation. The feature consists of a low pile of cobbles and small boulders situated on a bare pahoehoe lava flow that slopes gently to the west (*Figure 75*). The feature is 2.1 m long (northeast by southwest) and 1.15 to 1.65 m wide. The majority of the feature is level with the surface of the outcrop though some stones are 0.1 m in height. No cultural remains were present on the surface.

A 1.0 by 1.0 m test unit (TU-16) was excavated into the center of the feature revealing two layers over bedrock (see *Figure 75*). Layer I consists of 0.07 to 0.18 m of loosely packed cobbles and small boulders with no cultural remains present. Layer II is a 0.01 to 0.03 m thick deposit of brown (7.5YR 5/3) silt with 20% gravel and pebble inclusions. No cultural remains were present.

### **Agricultural walls**

Three agricultural walls were identified within the project area (Features 343, 488 and 1439). The locations these walls are presented in *Figure 46*. The agricultural walls are interpreted as linear features designed to keep grazing livestock out of garden plots. The features are described below.

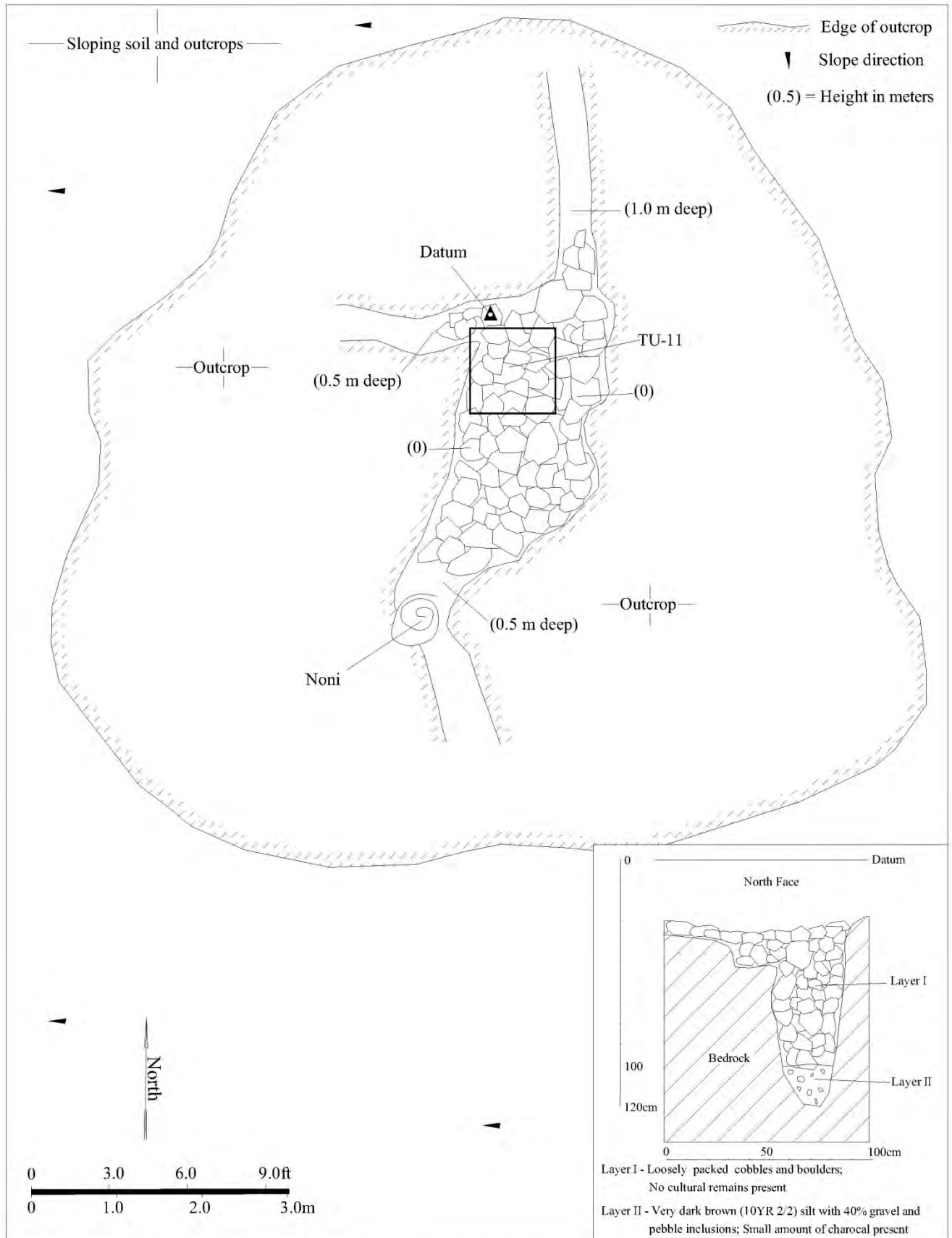


Figure 72. Site 26909, Feature 1373 Plan Map and TU-11 North Face Profile

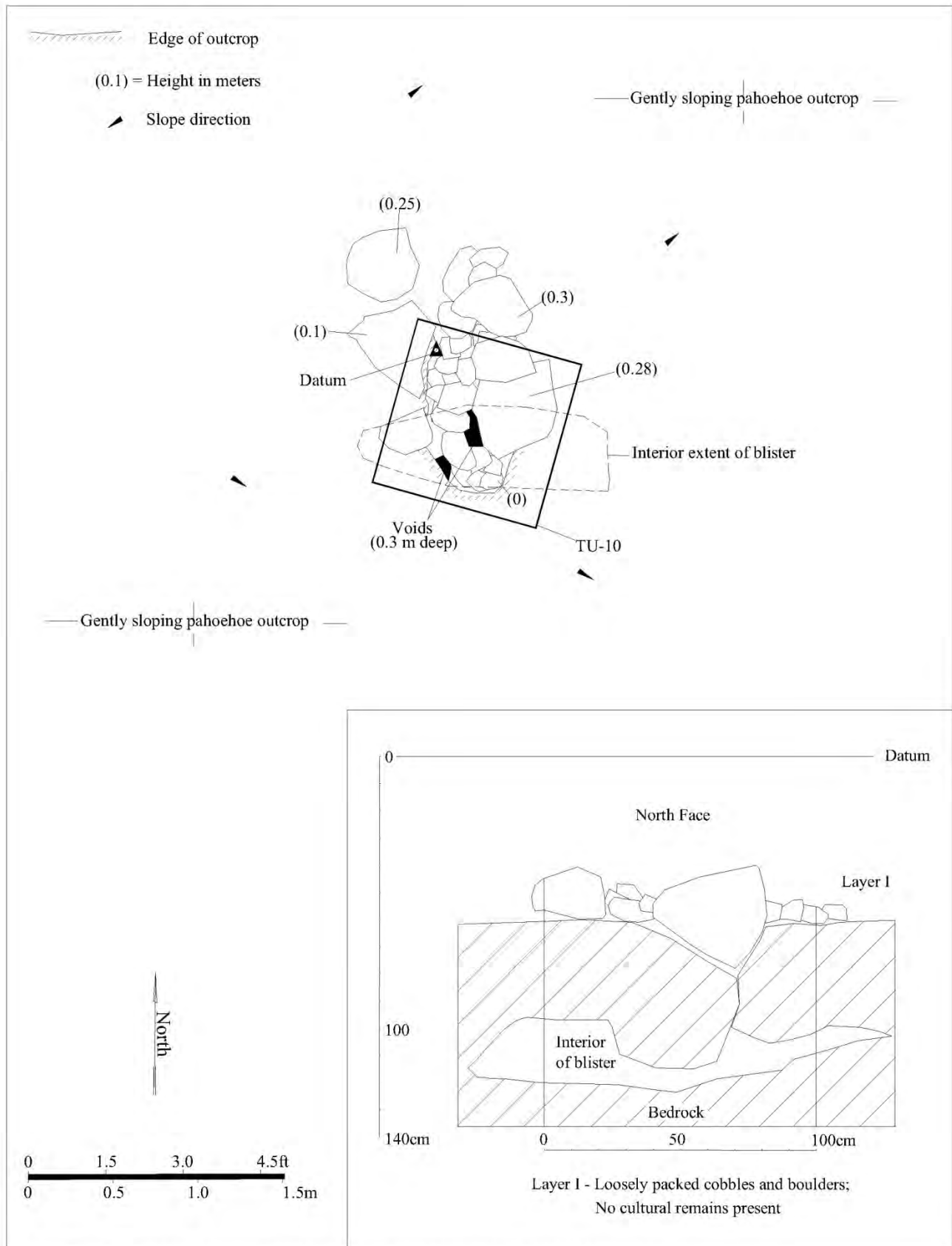


Figure 73. Site 26909, Feature 1441 Plan Map and TU-10 North Face Profile

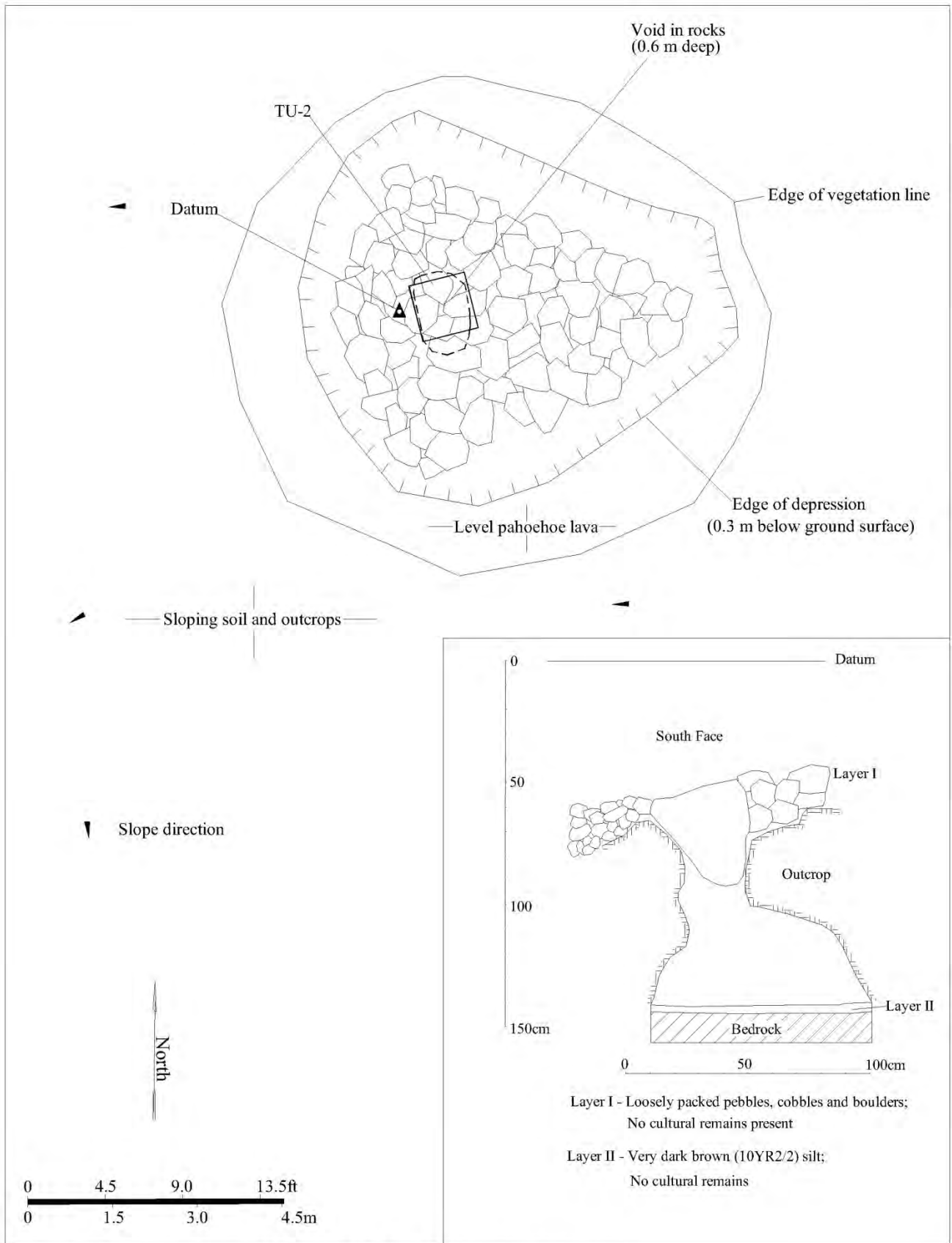


Figure 74. Site 26909, Feature 1832 Plan Map and TU-2 South Face Profile

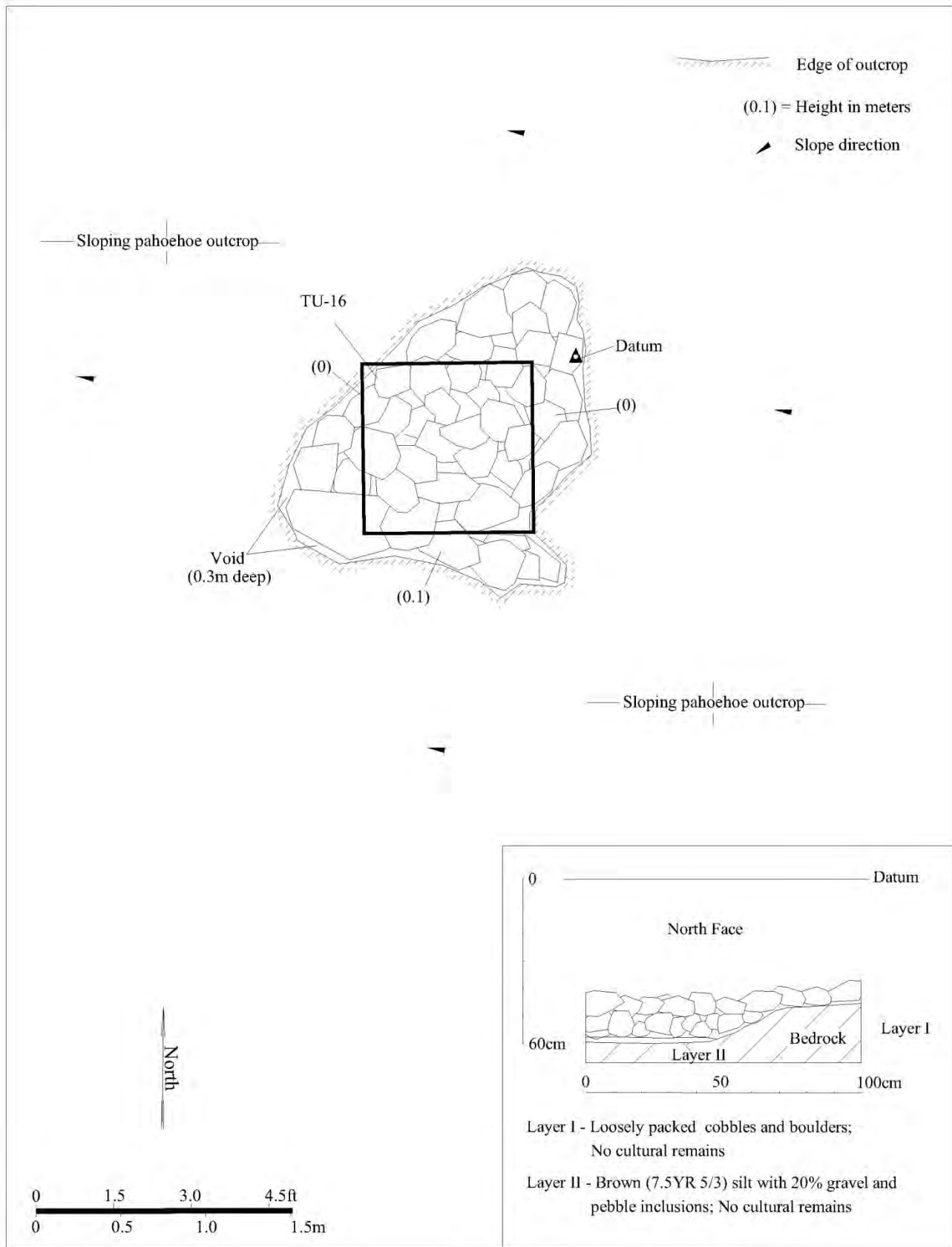


Figure 75. Site 26909, Feature 1847 Plan Map and TU-16 North Face Profile

Site 343 is a curvilinear section of stone wall located in the southwestern portion of the project area. The southeast end of the wall originates 7.0 m north of the large Site 28486, Feature A enclosure at c. 330 ft elevation. The Site 28492 possible burial is located adjacent to this end of the wall to the north. The wall extends to the west-southwest for 39.5 m and then angles to the northwest for 43.0 m. The wall turns slightly to the west-northwest and extends in this direction for 59.5 m where it angles to the north for 4.5 m, then turns to the northeast for 36.0 m. From this point, the wall extends to the north-northwest for 115, then angles to the north-northeast for 22.5 m where it terminates at c. 315 ft elevation. The wall passes through the Site 28497 complex.

The wall is constructed of stacked cobbles and small boulders. It is 0.7 to 1.0 m thick and 0.5 to 1.1 m in height. Although collapsed areas are present, the intact sections have faced sides and a core-filled cobble interior. An example of an intact portion of the wall is presented in *Figure 76*. No cultural remains were found in association with the wall.

Site 488 is a linear section of stone wall located in the southwestern portion of the project. The south end of the wall originates 13.5 m north of the large Site 28486, Feature A enclosure at c. 333 ft elevation. It extends 14.5 m long (north-south) then angles to the northeast for 42.5 m where it terminates at c. 340 ft elevation. Large sections of the wall have collapsed although intact, stacked and faced sections are present. These intact sections are 0.75 to 0.8 m thick and 0.6 to 1.0 m in height. *Figure 77* depicts an intact section of the wall. The collapsed sections range from 1.2 to 2.5 m in thickness and from 0.3 to 0.7 m in height. No cultural remains were present. Stones from this wall have likely been removed to construct nearby habitation sites. The Feature 343 wall, located 45.0 m to the southwest, likely represents another section of this enclosure.

Feature 1439 is the remnant of a stone wall located in the northeastern portion of the project area. The wall consists of aligned boulders and slabs set on edge with scattered cobbles. It 58.4 m long (north-northwest by south-southeast), 0.5 to 0.7 m thick and 0.25 to 0.7 m in height (*Figure 78*). The northern end of the wall terminates along the southern side of the Site 13452 cart path. The wall also passes just to the west of the Site 28415 permanent habitation complex. No cultural remains were found in association with the wall. Stones from this wall have likely been removed to construct nearby habitation sites.

### **Agricultural enclosure**

Feature 331 is a large enclosure built around the edge of a swale located in the southwestern portion of the project area. The enclosure is 32.2 m in length (east-west) and from 3.5 to 10.9 m wide with no apparent entrance (see *Figure 46*). The walls of the enclosure are built of stacked cobbles and slabs set on edge with a core-filled cobble interior. These walls range from 0.8 to 1.1 m in thickness and 0.4 to 1.2 m in height. Sections of the wall have collapsed although intact, roughly faced sections are present. An example of a wall section is presented in *Figure 79*. The interior is level soil with sparsely scattered cobbles. No cultural remains were present/

Feature 331 is interpreted as a possible garden enclosure designed to keep livestock from entering the interior. This is based on its formal type and its location surrounding the soil swale. This interpretation is supported by the absence of an obvious entrance.

**State No.:** 26910 (Numerous – see *Table 8*)

**Site Type:** Complex (196)

**Functional Interpretation:** Resource Procurement

**Topography** Pahoehoe lava flows sloping to west and southwest

**Elevation:** 510-521 ft

**Coordinates:** E=186682, N=2177108

**Vegetation:** Christmas berry, *alahe'e*, *haole koa*, grasses

**Probable Age:** Prehistoric

**Overall Dimensions:** 32.5 m long

**Condition:** Good

**Integrity:** Unaltered

**Description:** The survey identified 196 pahoehoe excavations located throughout the project area. These features are depressions resulting from removal of stone from the surface of pahoehoe lava outcrops. The excavated material



Figure 76. Site 26909, Site 343 Wall, view to east



Figure 77. Site 26909, Site 488 Wall, view to north



Figure 78. Site 26909, Site 1439 Wall, view to northwest



Figure 79. Site 26909, Site 331 Enclosure, view to east



is piled around the perimeter of the excavations. These features are summarized in *Table 8* and their locations are depicted in *Figure 80*. They range in length from 0.5 to 9.5 m (average 2.26 m), in width from 0.4 to 6.5 m (average 1.53 m) and in depth from 0.2 to 1.0 m (average 0.45 m). The majority of the features are irregularly-shaped (189), with the remainder consisting of circular (3), oval (3) and linear (1). No cultural remains were found in association with any of the features. Examples of the Site 26910 pahoehoe excavations are depicted in *Figures 81* and *82*.

The 196 pahoehoe excavations are assigned a resource procurement function, possibly created to obtain vesicular lava for the manufacture of abraders. These features resemble those found in the extensive abrader quarrying and production sites documented at 'Anaeho'omalu where the entire process from raw material extraction to abrader shaping occurred in the same locale (Donham 1987, Donham and Jensen 1988, Welch 1989, Jensen 1989a-e, 2001, Burgett et al. 1999, Landrum et al. 2002, and Haun and Henry 2004); however, unlike the quarry and production sites at 'Anaeho'omalu no abraded surfaces, which were used to shape the abraders, were identified. This suggests that either the manufacturing activity occurred elsewhere, or the excavations are the result of prospecting activity that did not yield suitable material.

**State No.:** 28399 (T-1755)

**Site Type:** Lava Tube

**Functional Interpretation:** Temporary Habitation Shelter

**Topography** Pahoehoe flow with shallow soil and outcrops with a moderate slope to the SSW

**Elevation:** 510-521 ft

**Coordinates:** E=186682, N=2177108

**Vegetation:** Christmas berry, *alaha'e*, *haole koa*, grasses

**Probable Age:** Prehistoric

**Overall Dimensions:** 32.5 m long

**Condition:** Good

**Integrity:** Unaltered

**Description:** Site 28399 consists of a lava tube in the northeastern portion of the project area (*Figure 83*). The lava tube contains a limited amount of subsistence debris scattered on the bare lava of the tube floor. The tube is 32.5 m long with an area of 136.3 sq m. Non-cultural pig and goat bones are also present within the chamber.

The lava tube is accessible from the southwest end, where a depression provides ground surface access to a horizontal overhang. The dripline above the overhang is 0.95 m above the ground surface. The entry is 2.8 m wide and provides access to a long, low and narrow chamber 32.5 m long by 4.6 to 1.5 m wide, with a ceiling height of 1.4 m or less. Collapsed roof fall is scattered on the bare lava floor at the entrance and in the approximate center of the chamber. Scattered fragments of charcoal and a *kukui* nutshell are within the light zone of the entry. Adult and juvenile pig bones and adult and juvenile goat bones are exposed on the chamber floor within 6.0 m of the entrance. A charcoal fragment was observed on the floor 7.7 m northeast of the entrance and marks the transition to the dark zone. Four crab claw fragments are exposed on the floor at the rear of the tube. A narrow passage is present at the northeast end of the tube but is not traversable.

Site 28399 is interpreted as a temporary habitation shelter based on its formal type and associated cultural material. The site is unaltered and in good condition, and is assessed significant for its information content.

**State No.:** 28400 (T-1750)

**Site Type:** Lava Tube

**Functional Interpretation:** Burial

**Topography** Pahoehoe lava flow sloping to south

**Elevation:** 505ft

**Vegetation:** Christmas berry, *alaha'e*, *haole koa*, grasses and vines

**Probable Age:** Prehistoric

**Overall Dimensions:** 12.05 m long

**Condition:** Good

**Integrity:** Unaltered

**Table 8. Summary of Site 26910 Pahoehoe Excavations**

<b>Feature</b>	<b>Length (m)</b>	<b>Width (m)</b>	<b>Depth (m)</b>	<b>Shape</b>	<b>Construction</b>	<b>Easting</b>	<b>Northing</b>
72.2	1.00	1.00	0.20	Irregular	Excavated boulders and cobbles	186691	2175902
75	2.00	1.50	0.30	Irregular	Excavated boulders and cobbles	186582	2175849
95	1.60	0.40	0.40	Irregular	Excavated boulders and cobbles	186467	2176343
116	1.10	1.10	0.35	Irregular	Excavated boulders and cobbles	186661	2176980
124.1	2.00	1.00	0.35	Irregular	Excavated boulders and cobbles	186648	2176971
124.2	1.00	0.40	0.20	Irregular	Excavated boulders and cobbles	186639	2176969
124.3	3.00	1.20	0.25	Irregular	Excavated boulders and cobbles	186635	2176968
140.1	2.00	1.10	0.50	Irregular	Excavated boulders and cobbles	186565	2176906
189.2	0.50	0.50	0.25	Irregular	Excavated boulders and cobbles	186600	2175777
189.3	0.50	0.50	0.25	Irregular	Excavated boulders and cobbles	186600	2175777
501.1	1.40	1.10	0.60	Irregular	Excavated boulders and cobbles	186807	2175720
582.1	1.50	1.50	0.75	Irregular	Excavated boulders and cobbles	186570	2175906
582.2	0.50	0.50	0.50	Irregular	Excavated boulders and cobbles	186571	2175912
583.1	2.30	1.00	0.50	Irregular	Excavated boulders and cobbles	186578	2175891
592.1	1.80	1.30	0.25	Irregular	Excavated boulders and cobbles	186610	2175934
592.2	2.30	1.60	0.25	Irregular	Excavated boulders and cobbles	186606	2175940
592.3	1.30	1.00	0.30	Irregular	Excavated boulders and cobbles	186608	2175941
592.4	1.20	1.10	0.20	Irregular	Excavated boulders and cobbles	186600	2175939
595.1	2.25	1.77	0.90	Irregular	Excavated boulders and cobbles	186662	2175930
598.3	2.00	1.50	0.25	Irregular	Excavated boulders and cobbles	186680	2175960
598.4	2.00	2.00	0.20	Irregular	Excavated boulders and cobbles	186678	2175955
606.1	1.00	0.80	0.30	Irregular	Excavated boulders and cobbles	186737	2175992
606.2	0.75	0.50	0.50	Irregular	Excavated boulders and cobbles	186737	2175994
606.3	0.50	0.50	0.40	Irregular	Excavated boulders and cobbles	186733	2175993
606.5	0.70	0.50	0.40	Irregular	Excavated boulders and cobbles	186739	2176007
610.1	1.50	1.50	0.50	Irregular	Excavated boulders and cobbles	186768	2175995
665.1	1.20	1.00	0.90	Irregular	Excavated boulders and cobbles	187005	2176140
676.1	2.00	1.00	0.40	Irregular	Excavated boulders and cobbles	187049	2176159
679.1	1.30	1.00	0.50	Irregular	Excavated boulders and cobbles	187062	2176165
679.2	2.00	2.00	0.70	Irregular	Excavated boulders and cobbles	187063	2176155
702.2	5.00	4.50	0.80	Irregular	Excavated boulders and cobbles	187074	2176233
706.1	2.00	2.00	0.50	Irregular	Excavated boulders and cobbles	187061	2176198
706.2	0.70	0.70	0.30	Irregular	Excavated boulders and cobbles	187064	2176194
708.1	2.30	0.70	0.40	Irregular	Excavated boulders and cobbles	187055	2176201
724.2	2.00	1.50	0.40	Irregular	Excavated boulders and cobbles	186949	2176203
726.2	0.80	0.40	0.20	Irregular	Excavated boulders and cobbles	186933	2176180
731.1	5.70	1.80	0.80	Irregular	Excavated boulders and cobbles	186928	2176202
731.4	3.70	2.60	0.40	Irregular	Excavated boulders and cobbles	186941	2176222
758.1	1.00	0.50	0.40	Irregular	Excavated boulders and cobbles	186774	2176045
758.2	0.80	0.80	0.50	Irregular	Excavated boulders and cobbles	186793	2176071
763.1	1.60	1.30	0.40	Irregular	Excavated boulders and cobbles	186728	2176043
769.1	1.00	1.00	0.40	Irregular	Excavated boulders and cobbles	186698	2176019
771.2	1.50	1.50	0.40	Oval	Excavated boulders and cobbles	186717	2176046
773.1	1.20	1.00	0.30	Irregular	Excavated boulders and cobbles	186684	2176033
773.3	1.00	0.40	0.25	Irregular	Excavated boulders and cobbles	186682	2176030
782.1	2.30	1.50	0.40	Oval	Excavated boulders and cobbles	186534	2175936
783.1	3.00	2.00	0.45	Irregular	Excavated boulders and cobbles	186526	2175945
914.6	1.00	1.00	0.40	Irregular	Excavated boulders	186839	2175720
922.1	1.50	1.25	0.50	Irregular	Excavated boulders and cobbles	186786	2175711
924.2	1.50	1.00	0.50	Irregular	Excavated boulders and cobbles	186792	2175729
944.1	9.50	1.00	0.50	Irregular	Excavated boulders and cobbles	186853	2175728
1048.4	5.20	2.80	0.90	Irregular	Excavated boulders and cobbles	186996	2176280
1073.4	2.30	1.80	0.40	Irregular	Excavated boulders and cobbles	187045	2176271
1079.1	2.80	2.20	0.30	Irregular	Excavated boulders and cobbles	187020	2176239
1095.1	3.40	3.10	0.60	Irregular	Excavated boulders and cobbles	186951	2176228
1100.1	3.60	3.10	0.50	Irregular	Excavated boulders and cobbles	186908	2176204

**Table 8. Summary of Site 26910 Pahoehoe Excavations (cont.)**

<b>Feature</b>	<b>Length (m)</b>	<b>Width (m)</b>	<b>Depth (m)</b>	<b>Shape</b>	<b>Construction</b>	<b>Easting</b>	<b>Northing</b>
1104.1	0.60	0.50	0.40	Irregular	Excavated boulders and cobbles	186867	2176198
1121.2	1.00	1.00	0.30	Irregular	Excavated boulders and cobbles	186721	2176113
1125.1	0.80	0.60	0.35	Irregular	Excavated boulders and cobbles	186706	2176099
1128.2	4.60	3.70	0.60	Irregular	Excavated boulders and cobbles	186673	2176073
1129.1	1.30	1.20	0.40	Circular	Excavated boulders and cobbles	186671	2176066
1141.1	1.00	1.00	0.40	Irregular	Excavated boulders and cobbles	186553	2176038
1153.1	7.00	1.50	0.40	Irregular	Excavated boulders	186534	2176059
1153.2	4.00	3.00	0.65	Irregular	Excavated boulders	186541	2176049
1156.8	3.80	2.70	0.40	Irregular	Excavated boulders and cobbles	186680	2176221
1158.1	2.90	1.80	0.60	Irregular	Excavated boulders and cobbles	186556	2176113
1160.3	1.50	1.00	0.30	Irregular	Excavated boulders and cobbles	186537	2176073
1165.1	2.30	1.20	0.50	Irregular	Excavated boulders and cobbles	186612	2176130
1166.1	1.60	1.10	0.40	Irregular	Excavated boulders and cobbles	186624	2176136
1174.10	1.80	1.00	0.25	Irregular	Excavated boulders	186592	2176105
1174.12	2.00	1.60	0.40	Irregular	Excavated boulders	186599	2176102
1174.4	2.50	2.00	0.40	Irregular	Excavated boulders	186660	2176142
1174.6	2.30	1.40	0.35	Irregular	Excavated boulders and cobbles	186645	2176100
1174.8	4.00	1.00	0.35	Irregular	Excavated boulders and cobbles	186628	2176104
1174.9	3.00	0.70	0.30	Linear	Excavated boulders	186598	2176111
1177.1	2.00	1.50	0.40	Irregular	Excavated boulders and cobbles	186729	2176183
1177.2	1.40	1.00	0.35	Irregular	Excavated boulders and cobbles	186724	2176183
1177.3	4.60	2.40	0.60	Irregular	Excavated boulders	186721	2176179
1180.2	2.00	0.80	0.45	Irregular	Excavated boulders and cobbles	186760	2176215
1180.3	5.00	2.00	0.30	Irregular	Excavated boulders and cobbles	186755	2176192
1206.1	3.50	1.40	0.25	Irregular	Excavated boulders	186963	2176327
1206.2	1.20	1.00	0.30	Irregular	Excavated boulders	186958	2176319
1206.3	3.50	2.00	0.50	Irregular	Excavated boulders	186929	2176339
1206.5	2.50	2.00	0.40	Irregular	Excavated boulders	186923	2176344
1210.1	3.00	2.00	0.40	Irregular	Excavated boulders	186987	2176333
1212.1	2.40	2.00	0.65	Irregular	Excavated boulders	187003	2176334
1212.2	6.00	2.00	0.30	Irregular	Excavated boulders	187006	2176338
1220.1	4.60	2.90	0.30	Irregular	Excavated boulders and cobbles	186889	2176364
1220.2	3.10	2.10	0.50	Irregular	Excavated boulders and cobbles	186893	2176367
1230.1	1.90	1.20	0.40	Irregular	Excavated boulders and cobbles	186852	2176382
1249.1	1.70	1.20	0.35	Irregular	Excavated boulders	186693	2176225
1260.1	1.40	1.20	0.50	Irregular	Excavated boulders	186376	2176129
1266.1	2.00	2.00	0.40	Circular	Excavated boulders	186290	2176044
1270.2	1.50	1.00	0.55	Irregular	Excavated boulders and cobbles	186759	2176376
1272.1	1.00	1.00	0.60	Irregular	Excavated boulders and cobbles	186712	2176400
1282.1	1.00	0.50	0.30	Irregular	Excavated boulders and cobbles	186677	2176323
1283	0.80	0.60	1.00	Irregular	Excavated boulders and cobbles	186658	2176344
1289.1	1.70	1.00	0.50	Irregular	Excavated boulders and cobbles	186553	2176257
1289.4	1.50	1.00	0.40	Irregular	Excavated boulders and cobbles	186548	2176245
1291.1	1.10	0.85	0.80	Irregular	Excavated boulders and cobbles	186507	2176221
1296.1	1.70	1.00	0.60	Irregular	Excavated boulders and cobbles	186302	2176188
1297.2	1.20	0.60	0.20	Irregular	Excavated boulders and cobbles	186263	2176184
1337.1	1.90	1.80	0.45	Irregular	Excavated boulders and cobbles	186639	2176493
1337.5	3.40	1.00	0.60	Irregular	Excavated boulders and cobbles	186572	2176475
1349.1	3.50	2.50	0.30	Irregular	Excavated boulders and cobbles	186201	2176288
1350.1	5.20	3.40	0.30	Irregular	Excavated boulders and cobbles	186232	2176258
1352.2	1.50	1.00	0.45	Irregular	Excavated boulders and cobbles	186563	2176495
1353.5	1.00	1.00	0.45	Irregular	Excavated boulders and cobbles	186267	2176389
1380.1	2.80	1.50	0.50	Irregular	Excavated boulders and cobbles	186642	2176581
1398.1	1.30	1.10	0.45	Circular	Excavated boulders and cobbles	186473	2176589

**Table 8. Summary of Site 26910 Pahoehoe Excavations**

Feature	Length (m)	Width (m)	Depth (m)	Shape	Construction	Easting	Northing
1399.1	2.00	1.70	0.40	Irregular	Excavated boulders and cobbles	186458	2176634
1406.1	1.00	0.75	0.50	Irregular	Excavated boulders and cobbles	186159	2176461
1419.1	5.60	3.70	0.40	Irregular	Excavated boulders and cobbles	186560	2176720
1420.2	4.00	2.50	0.70	Irregular	Excavated boulders and cobbles	186571	2176719
1423.1	3.20	2.70	0.60	Irregular	Excavated boulders and cobbles	186588	2176723
1423.2	2.00	1.20	0.45	Irregular	Excavated boulders and cobbles	186591	2176731
1423.3	2.40	1.40	0.50	Irregular	Excavated boulders and cobbles	186589	2176743
1425.1	5.20	4.60	0.50	Irregular	Excavated boulders and cobbles	186606	2176730
1426.1	1.80	1.70	0.40	Irregular	Excavated boulders	186620	2176753
1431.5	2.00	1.00	0.40	Irregular	Excavated boulders and cobbles	186691	2176786
1431.8	2.70	1.50	0.30	Oval	Excavated boulders and cobbles	186668	2176785
1437.1	2.00	1.30	0.40	Irregular	Excavated boulders and cobbles	186661	2176784
1437.2	1.00	0.70	0.30	Irregular	Excavated boulders and cobbles	186655	2176780
1437.3	1.60	1.20	0.45	Irregular	Excavated boulders and cobbles	186658	2176782
1437.4	2.10	1.50	0.35	Irregular	Excavated boulders and cobbles	186654	2176783
1437.5	1.80	1.30	0.30	Irregular	Excavated boulders and cobbles	186648	2176783
1437.6	1.70	1.00	0.40	Irregular	Excavated boulders and cobbles	186647	2176781
1437.7	5.00	2.50	0.80	Irregular	Excavated boulders and cobbles	186653	2176792
1437.8	1.70	1.30	0.50	Irregular	Excavated boulders and cobbles	186650	2176790
1441.1	1.50	1.10	0.45	Irregular	Excavated boulders and cobbles	186607	2176797
1442.1	2.00	2.00	0.50	Irregular	Excavated boulders and cobbles	186611	2176780
1443.1	2.40	1.70	0.55	Irregular	Excavated boulders and cobbles	186602	2176792
1453.1	1.30	1.00	0.60	Irregular	Excavated boulders and cobbles	186533	2176789
1456.1	0.90	0.75	0.40	Irregular	Excavated boulders and cobbles	186515	2176789
1456.2	0.90	0.80	0.30	Irregular	Excavated boulders and cobbles	186513	2176791
1456.3	0.75	0.50	0.60	Irregular	Excavated boulders and cobbles	186511	2176788
1458.1	0.75	0.60	0.50	Irregular	Excavated boulders and cobbles	186496	2176786
1458.2	2.00	1.00	0.40	Irregular	Excavated boulders and cobbles	186502	2176788
1466.4	2.20	2.00	0.40	Irregular	Excavated boulders and cobbles	186454	2176776
1467.1	2.00	1.20	0.70	Irregular	Excavated boulders and cobbles	186440	2176760
1467.5	3.00	2.00	0.30	Irregular	Excavated boulders and cobbles	186434	2176754
1473.1	2.00	1.50	0.50	Irregular	Excavated boulders and cobbles	186389	2176729
1474.1	3.00	2.50	0.30	Irregular	Excavated boulders and cobbles	186386	2176697
1475.1	6.80	5.70	0.50	Irregular	Excavated boulders and cobbles	186364	2176699
1477.1	1.60	1.00	0.60	Irregular	Excavated boulders and cobbles	186344	2176703
1477.2	1.00	0.70	0.55	Irregular	Excavated boulders and cobbles	186347	2176702
1479.1	1.00	0.45	0.50	Irregular	Excavated boulders and cobbles	186341	2176714
1482.1	2.70	1.80	0.70	Irregular	Excavated boulders and cobbles	186332	2176691
1483.1	3.60	2.50	0.40	Irregular	Excavated boulders and cobbles	186324	2176684
1485.1	8.30	6.50	0.50	Irregular	Excavated boulders and cobbles	186309	2176666
1492.1	2.00	2.00	0.40	Irregular	Excavated boulders and cobbles	186260	2176647
1492.2	2.60	1.70	0.50	Irregular	Excavated boulders and cobbles	186251	2176647
1497.1	6.20	5.30	0.50	Irregular	Excavated boulders and cobbles	186228	2176627
1503.1	2.80	2.70	0.80	Irregular	Excavated boulders and cobbles	186141	2176632
1508.1	2.50	1.70	0.50	Irregular	Excavated boulders and cobbles	186138	2176637
1529.1	2.00	2.00	0.65	Irregular	Excavated boulders and cobbles	186449	2176798
1536.1	2.80	2.50	0.90	Irregular	Excavated boulders and cobbles	186527	2176814
1537.1	1.50	1.00	0.35	Irregular	Excavated boulders and cobbles	186520	2176827
1543.1	1.00	1.00	0.45	Irregular	Excavated boulders and cobbles	186566	2176839
1545.2	1.70	1.70	0.60	Irregular	Excavated boulders and cobbles	186580	2176843
1546.1	1.00	1.00	0.50	Irregular	Excavated boulders and cobbles	186576	2176845
1562.9	1.30	0.70	0.50	Irregular	Excavated boulders and cobbles	186668	2176870
1608.1	2.40	1.60	0.65	Irregular	Excavated boulders and cobbles	186627	2176910
1608.2	1.70	1.50	0.70	Irregular	Excavated boulders and cobbles	186656	2176920

**Table 8. Summary of Site 26910 Pahoehoe Excavations**

<b>Feature</b>	<b>Length (m)</b>	<b>Width (m)</b>	<b>Depth (m)</b>	<b>Shape</b>	<b>Construction</b>	<b>Easting</b>	<b>Northing</b>
1612.1	1.00	1.00	1.00	Irregular	Excavated boulders and cobbles	186620	2176904
1624.4	1.50	1.40	0.45	Irregular	Excavated boulders and cobbles	186572	2176869
1624.5	1.30	1.30	0.40	Irregular	Excavated boulders and cobbles	186574	2176868
1634.1	1.50	1.20	0.30	Irregular	Excavated boulders and cobbles	186675	2176924
1635.1	4.90	3.70	0.40	Irregular	Excavated boulders and cobbles	186684	2176930
1656.4	2.00	2.00	0.45	Irregular	Excavated boulders and cobbles	186406	2176905
1661.1	2.60	1.80	0.35	Irregular	Excavated boulders and cobbles	186553	2177004
1662.1	1.00	0.90	0.45	Irregular	Excavated boulders and cobbles	186554	2176968
1662.2	1.50	0.50	0.30	Irregular	Excavated boulders and cobbles	186551	2176966
1671.1	1.00	1.00	0.45	Irregular	Excavated boulders and cobbles	186418	2176885
1671.2	1.00	1.00	0.30	Irregular	Excavated boulders and cobbles	186418	2176888
1671.3	0.70	0.70	0.35	Irregular	Excavated boulders and cobbles	186412	2176883
1672.1	1.00	1.00	0.65	Irregular	Excavated boulders and cobbles	186408	2176901
1673.1	1.00	0.55	0.50	Irregular	Excavated boulders and cobbles	186409	2176905
1673.2	2.30	1.70	0.55	Irregular	Excavated boulders and cobbles	186404	2176907
1677.2	1.40	1.40	0.50	Irregular	Excavated boulders and cobbles	186395	2176893
1677.3	5.00	1.00	0.75	Irregular	Excavated boulders and cobbles	186400	2176891
1679.1	1.00	1.00	0.40	Irregular	Excavated boulders and cobbles	186393	2176867
1689.2	1.20	0.90	0.40	Irregular	Excavated boulders and cobbles	186219	2176838
1695.2	2.00	1.30	0.50	Irregular	Excavated boulders and cobbles	186180	2176818
1697.1	1.50	0.60	0.40	Irregular	Excavated boulders and cobbles	186112	2176736
1704.1	2.50	2.00	0.50	Irregular	Excavated boulders and cobbles	186068	2176795
1739.1	2.50	1.00	0.20	Irregular	Excavated boulders and cobbles	186591	2177043
1747.1	3.20	2.50	0.50	Irregular	Excavated boulders and cobbles	186626	2177078
1760.1	0.80	0.80	0.30	Irregular	Excavated boulders and cobbles	186629	2177163
1764.1	3.80	3.50	0.50	Irregular	Excavated boulders and cobbles	186572	2177123
1778.1	2.00	1.30	0.65	Irregular	Excavated boulders and cobbles	186537	2177159
1798.1	1.00	1.00	0.60	Irregular	Excavated boulders and cobbles	186349	2176972
1798.2	1.00	0.60	0.60	Irregular	Excavated boulders and cobbles	186347	2176971
1798.3	0.60	0.60	0.50	Irregular	Excavated boulders and cobbles	186349	2176974
1814.1	3.50	1.90	0.50	Irregular	Excavated boulders and cobbles	186150	2176979
1834.1	6.80	4.50	0.30	Irregular	Excavated boulders and cobbles	186217	2177066

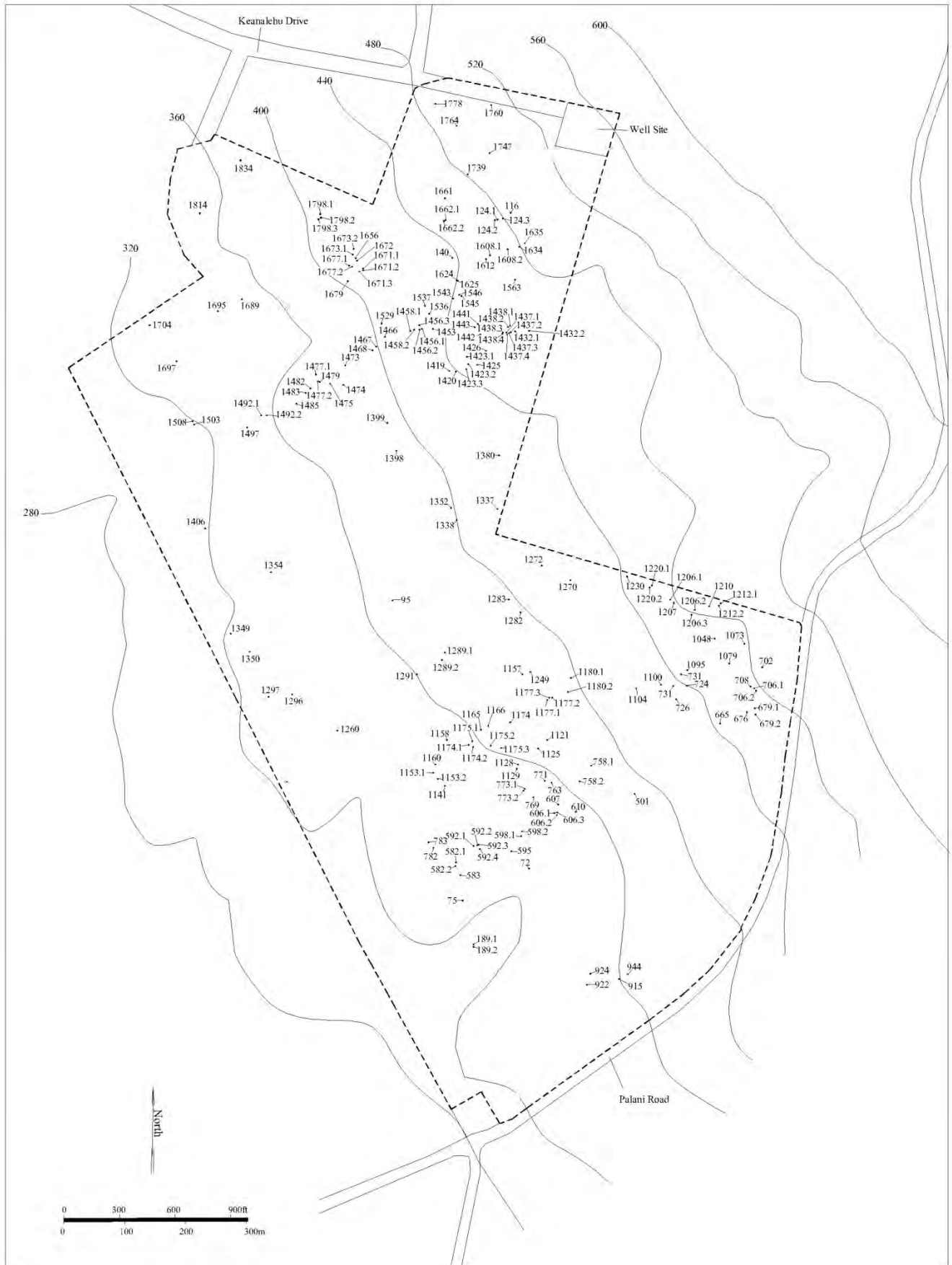


Figure 80. Distribution of Site 26910 Pahoehoe Excavations



Figure 81. Site 26910, Feature 679.1 Pahoehoe Excavation, view to west



Figure 82. Site 26910, Feature 1747.1 Pahoehoe Excavation, view to north

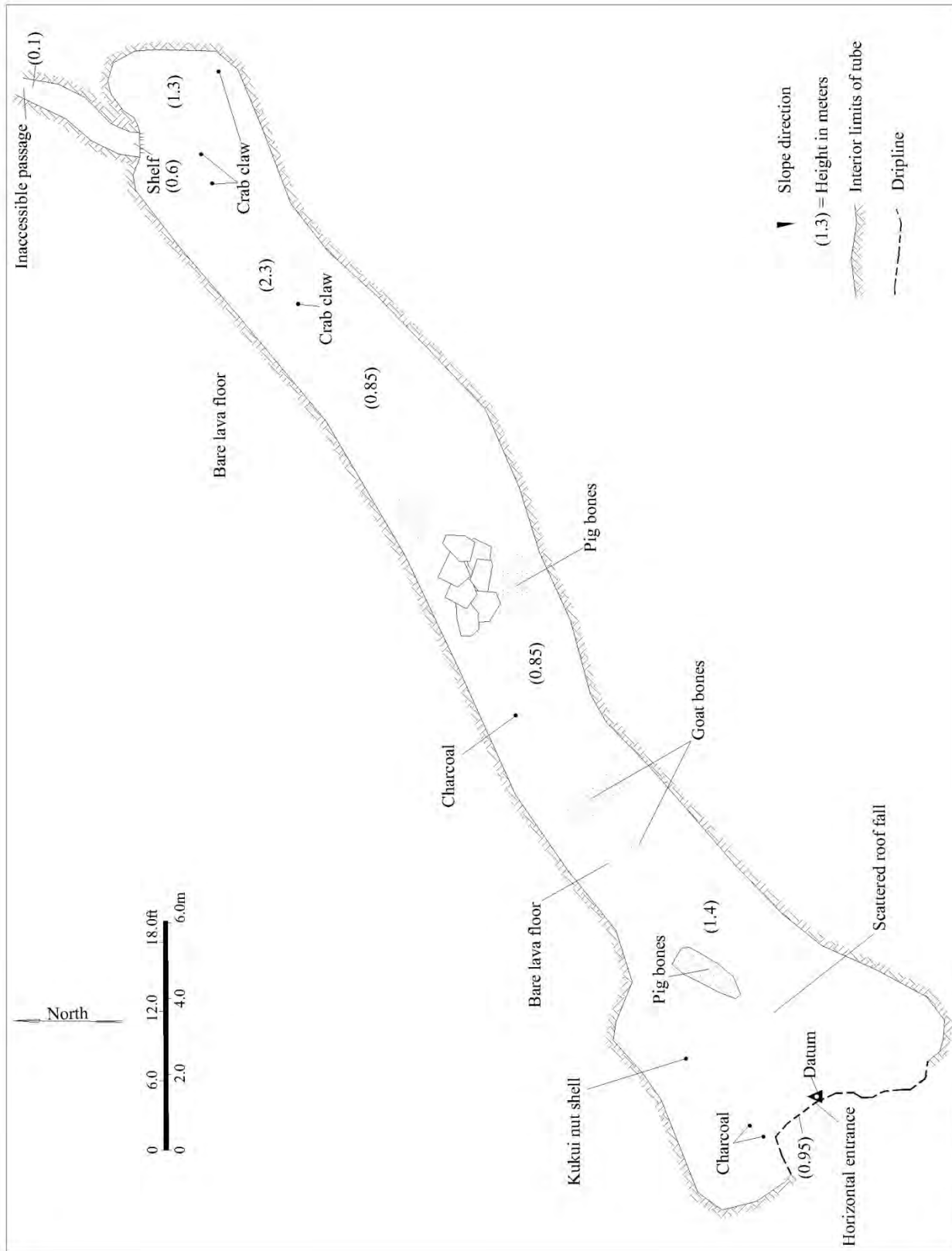


Figure 83. Site 28399 Plan Map



**Description:** Site 28400 is a lava tube located in an area of sloping pahoehoe lava in the northeastern portion of the project area. The Site 28401 trail is located 15.5 m to the southwest of the tube. The tube has an overall length of 12.05 m and an area of 20.9 sq m. Access to the tube is through a horizontal entrance on the side of an outcrop that is 2.25 m wide and 0.4 m in height (*Figure 84*). Roof fall partially blocks the entrance. This opens onto an irregularly-shaped chamber that is 4.75 m long (east-west) and 1.0 to 3.6 m wide. The floor in this chamber is a shallow soil and ceiling heights range from 0.1 to 0.5m. Roof fall is scattered over the soil surface. There is a concentration of human remains (pelvis, vertebrae, phalanges) on the soil floor in the eastern portion of the chamber.

Three passages extend off the main chamber; one to the northwest, one to the west and one to the east. The northwest passage extends 0.95 m to a point where it becomes inaccessible due to its low (0.1 m) ceiling. The passage to the west extends in this direction for 1.2 m then turns to the northwest for 5.8 where it becomes inaccessible due to its low (0.1 m) ceiling. The floor in these passages is bare lava and no cultural remains were present. The passage to the east extends in this direction for 0.5 m where it too becomes inaccessible due to its low ceiling height (0.2 m). The floor in this tube is a shallow soil with no cultural remains. Site 28400 is interpreted as a burial cave due to the presence of the human remains. There is no indication that the site was utilized for habitation. The site is in good condition and is unaltered. It is assessed as significant for its information content and for its cultural value.

**State No.:** 28401 (T-1853)

**Site Type:** Trail

**Functional Interpretation:** Transportation

**Topography:** A'a lava sloping to southwest

**Elevation:** 498ft

**Coordinates:** E=186621, N=2177098

**Vegetation:** Christmas berry, *haole koa*, lantana

**Probable Age:** Prehistoric

**Overall Dimensions:** 7.4 m long

**Condition:** Good

**Integrity:** Unaltered

**Description:** Site 28401 consists of a linear alignment of 10 flat pahoehoe slabs that extend across an area of a'a lava, in the northeastern portion of the project area. The alignment is 7.4 m in length (northeast by southwest). The individual slabs range in length from 0.26 to 0.43 m and in width from 0.15 to 0.3 m (*Figure 85*). No cultural remains were present. The Site 28401 trail is classified as a Type A trail as defined by Apple (1965) likely functioning as a single file foot trail constructed during pre-Contact times. It functioned as a path across the a'a lava area based on its formal type and appearance. The site is unaltered and in good condition. It is assessed as significant for its information content.

**State No.:** 28402 (T-1744)

**Site Type:** Trail

**Functional Interpretation:** Transportation

**Topography:** A'a lava sloping to west

**Elevation:** 486ft

**Coordinates:** E=186641, N=2177046

**Vegetation:** Christmas berry, *alahe'e*, *haole koa*, autograph tree, grasses

**Probable Age:** Prehistoric

**Overall Dimensions:** 12.2 m long

**Condition:** Good

**Integrity:** Unaltered

**Description:** Site 28402 consists of a linear alignment of 27 flat pahoehoe slabs that extend across an area of a'a lava, in the northeastern portion of the project area. The alignment is 12.2 m in length (northeast by southwest). The individual slabs range in length from 0.21 to 0.71 m and in width from 0.16 to 0.35 m (*Figure 86*). No cultural remains were present.

The Site 28402 trail is classified as a Type A trail as defined by Apple (1965) likely functioning as a single file foot trail constructed during pre-Contact times. It functioned as a path across the a'a lava area based on its formal type and appearance. The site is unaltered and in good condition. It is assessed as significant for its information content.

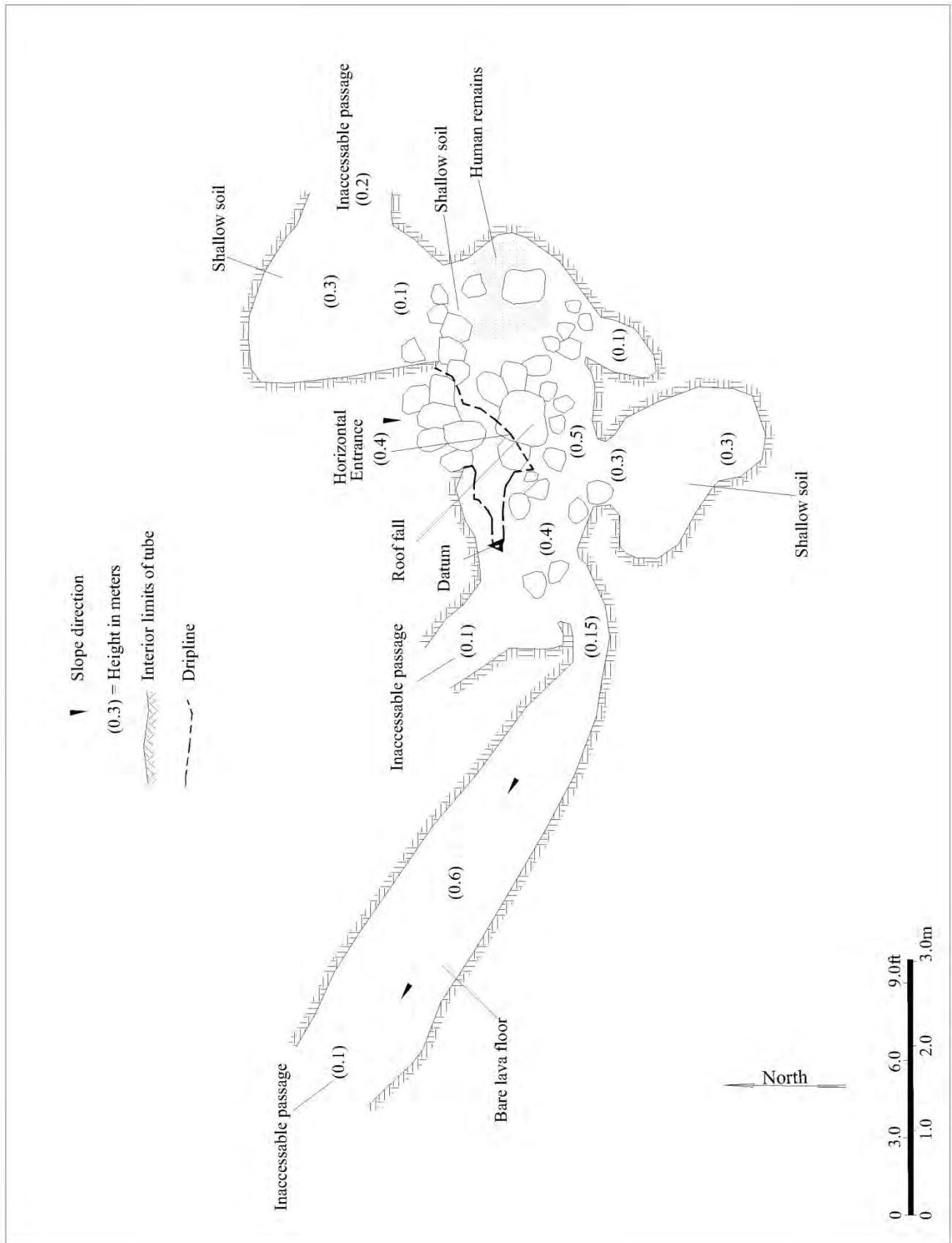


Figure 84. Site 28400 Plan Map



Figure 85. Site 28401 Trail, view to northeast



Figure 86. Site 28402 Trail, view to northwest

The Site 28402 trail is classified as a Type A trail as defined by Apple (1965) likely functioning as a single file foot trail constructed during pre-Contact times. It functioned as a path across the a'a lava area based on its formal type and appearance. The site is unaltered and in good condition. It is assessed as significant for its information content.

**State No.:** 28403 (T-1650)

**Site Type:** Terrace

**Functional Interpretation:** Temporary Habitation

**Topography** Soil and outcrops sloping to south and southwest

**Elevation:** 525 ft

**Coordinates:** - E=186759, N=2177061

**Vegetation:** *Haole koa*, *alahe'e*, grasses

**Probable Age:** Prehistoric

**Overall Dimensions:** 3.95 m by 2.95 m

**Condition:** Fair

**Integrity:** Unaltered

**Description:** Site 28403 is a rectangular-shaped terrace built on top of a raised bedrock outcrop in the northeastern portion of the project area. The terrace is rectangular in shape and is the main structure and a lower tier along the western side (*Figure 87*). The main terrace is 2.4 to 3.2 m long (east-west) and 1.65 to 1.7 m wide and is bordered by aligned cobbles and long the north side (0.15 m high) and stacked cobbles and small boulders along the west, south and east sides (0.2 to 0.6 m high). Facing is present along the south side and on the southern end of the east side. The surface of this tier is a level cobble and pebble pavement with no cultural remains present.

The lower tier abuts the main terrace along its western side. This tier is 3.0 m long (north-south) and 0.6 m wide. The west side of the tier is 0.25 to 0.35 m in height and is stacked cobbles and small boulders. The east side abuts the main tier and is 0.6 m lower. The surface is a level cobble and pebble pavement with no cultural remains present.

A 1.0 by 1.0 m test unit (TU-7) was excavated into the surface of the main tier revealing two layers over bedrock (see *Figure 87*). Layer I consists of 0.27 to 0.4 m of tightly packed cobbles, pebbles and small boulders with no cultural remains present. Bedrock was encountered below Layer I in the northern portion of the unit, with the Layer II soil present in the southern portion. Layer II is a 0.17 to 0.3 m thick deposit of very dark brown (10YR 2/2) silt with 70% gravel and pebble inclusions.

Site 28403 is interpreted as the possible foundation for a temporary habitation roofed structure based on its area (11.8 sq m). Although it exhibits attributes of substantial construction (faced side, paved surface), it is too small and too isolated to be a permanent habitation. The site is unaltered and in fair condition. It is assessed as significant for its information content.

**State No.:** 28404 (T-1653)

**Site Type:** Trail

**Functional Interpretation:** Transportation

**Topography:** A'a lava sloping to west

**Elevation:** 485ft

**Coordinates:** E=186650, N=2177031

**Vegetation:** Christmas berry, *alahe'e*, autograph tree, grasses

**Probable Age:** Prehistoric

**Overall Dimensions:** 3.05 m long

**Condition:** Good

**Integrity:** Unaltered

**Description:** Site 28404 consists of a linear alignment of four flat pahoehoe slabs that extend across a finger of a'a lava, in the northeastern portion of the project area. The alignment is 3.05 m in length (north-northwest by south-southeast). The individual slabs range in length from 0.27 to 0.3 m and in width from 0.17 to 0.3 m (*Figure 88*). No cultural remains were present. The Site 28404 trail is classified as a Type A trail as defined by Apple (1965) likely functioning as a single file foot trail constructed during pre-Contact times. It functioned as a path across the a'a lava finger based on its formal type and appearance. The Site 28402 trail is situated 20.0 m to the northwest of Site 28404, suggesting that they are segments of the same trail. The site is unaltered and in good condition. It is assessed as significant for its information content.

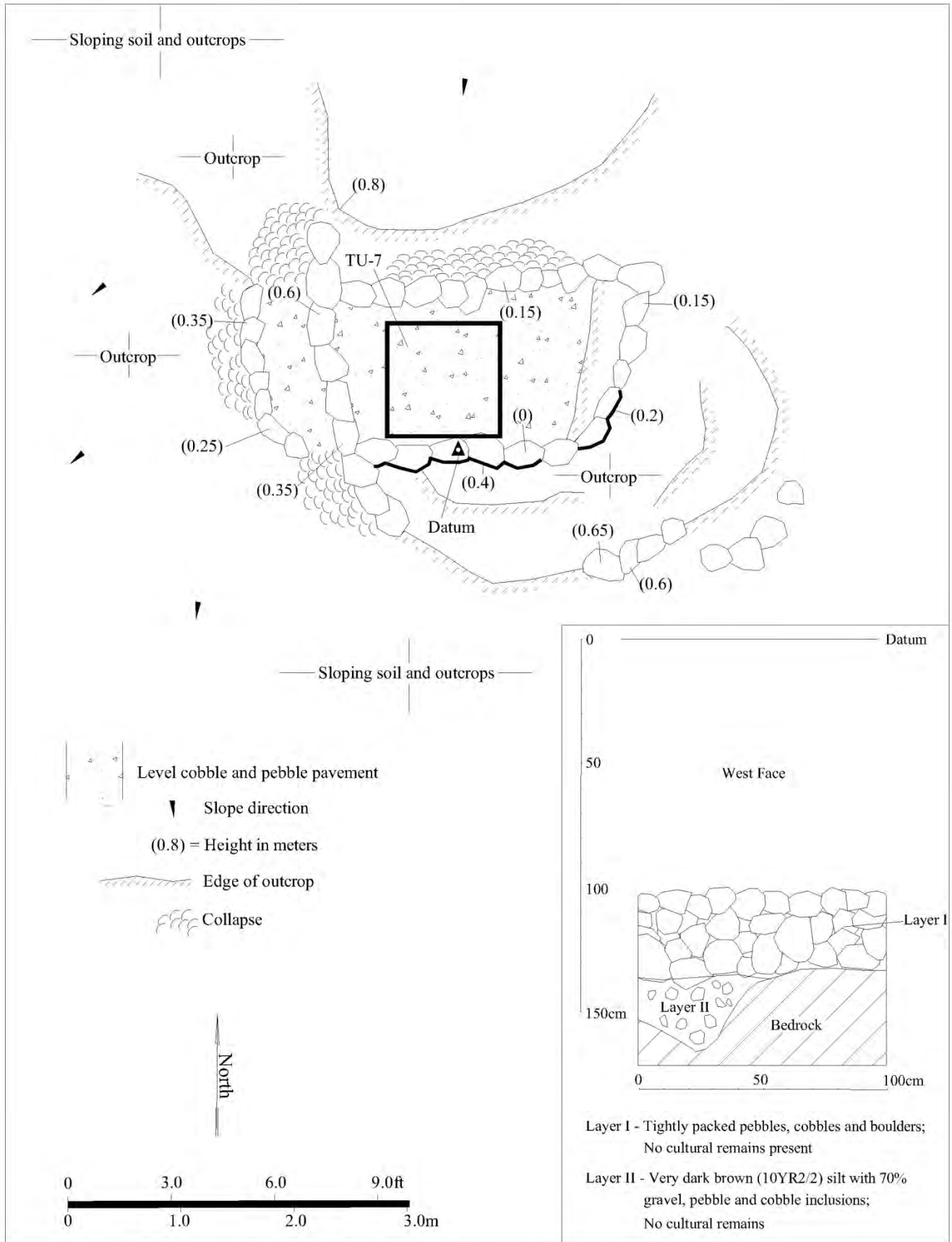


Figure 87. Site 28403 Plan Map and TU-7 West Face Profile



**Figure 88. Site 28404 Trail, view to north**

**State No.:** 28405 (T-1737)

**Site Type:** Terrace

**Functional Interpretation:** Permanent Habitation, Possible Burial

**Topography:** Pahoehoe lava sloping to west

**Elevation:** 471ft

**Vegetation:** Christmas berry, *haole koa*, *alahe'e*, grasses

**Probable Age:** Prehistoric

**Overall Dimensions:** 5.2 m by 4.1 m

**Condition:** Fair

**Integrity:** Unaltered

**Description:** Site 28405 is a roughly rectangular terrace built in an area of sloping soil and outcrops on pahoehoe lava in the northeastern portion of the project area. The terrace is 5.2 m in length (north-northeast by south-southwest) and 3.8 to 4.1 m wide (*Figure 89*). The northwest, southwest and south sides of the terrace are stacked cobbles and small boulders. The sides range in height from 0.2 to 0.6 m. Portions of the northwest and southwest sides are faced and a 0.6 m high bedrock outcrop is incorporated into the northwestern side. The northeast and southeast sides are level with the surface of the sloping terrain.

The surface of the terrace is a level cobble and pebble pavement. There is an oval-shaped mound present on top of the terrace in the northern portion. This mound is 1.25 m long (east-west), 0.95 m wide and 0.8 to 0.9 m in height above the surface of the terrace. No cultural remains were present on the surface of the site.

A 1.0 by 1.0 m test unit (TU-9) was excavated into the terrace surface adjacent to the mound to the south, revealing two layers (see *Figure 89*). Layer I consists of 0.35 to 0.46 m of tightly packed pebbles, cobbles and small boulders with no cultural remains present. Bedrock was encountered below Layer I throughout the majority of the unit, although a small pocket of Layer II soil was present below Layer I in the north-central portion. Layer II is a 0.07 m thick deposit of very dark brown (10YR 2/2) silt with 60% gravel and pebble inclusions. No cultural remains were present.

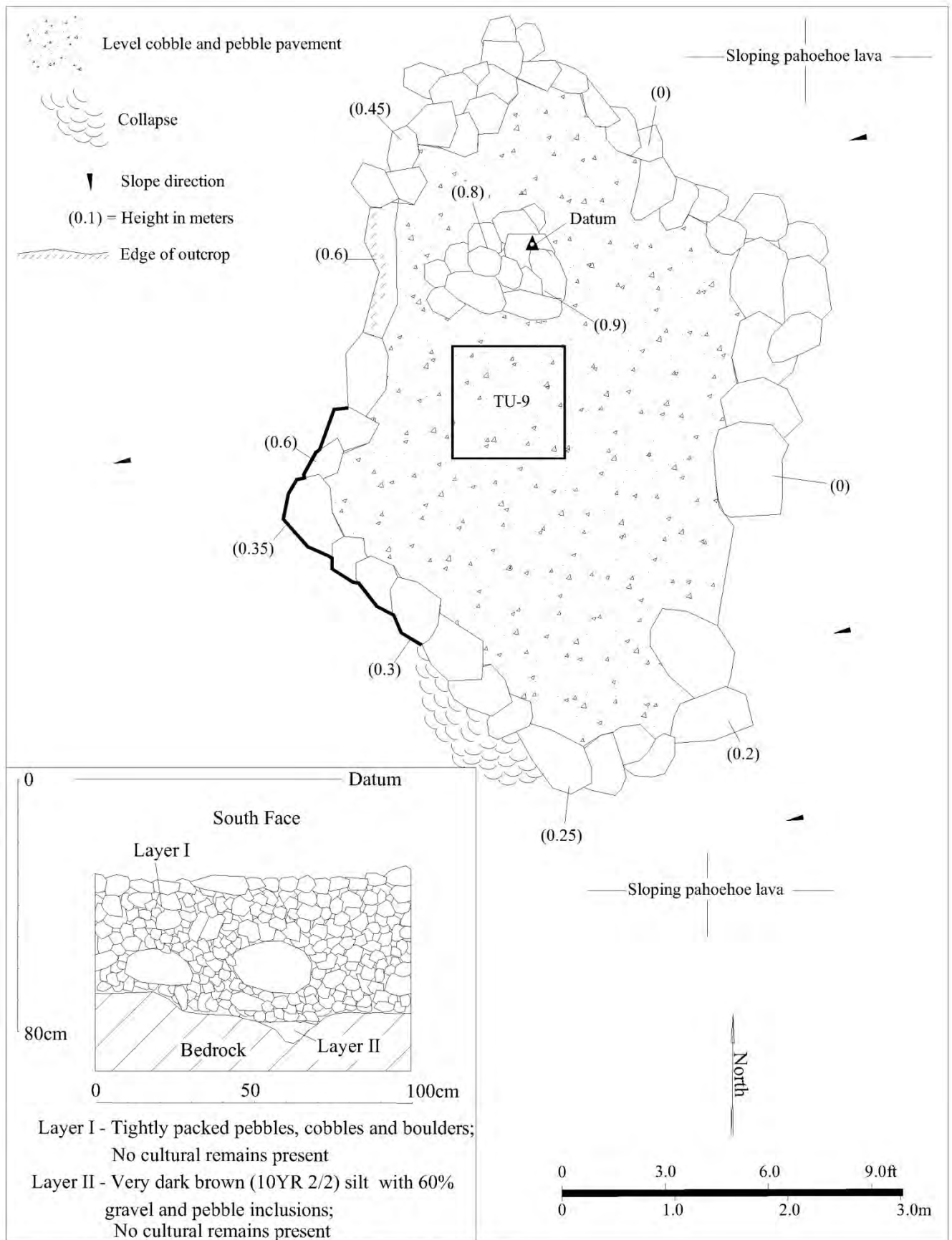


Figure 89. Site 28405 Plan Map and TU-9 South Face Profile

Site 28405 is interpreted as the possible foundation for a permanent habitation roofed structure. This is based on formal type, substantial construction (faced side, paved surface) and area (21.3 sq m). The site is also assigned a possible burial function based on the DLNR-SHPD review of the current report (see **Appendix B**). According to this review, “[d]ue to the small percentage of the terrace that has been tested; the appearance and dimensions as reported, and the absence of portable remains, we request that this feature be classified as a habitation/possible burial until such time that its function be verified”. Site 28405 is unaltered and is in fair condition. It is assessed as significant for its information content and potentially for its cultural value due to the re-classification as a possible burial by SIHP.

**State No.:** 28406 (T-1655)

**Site Type:** Lava Tube

**Functional Interpretation:** Temporary Habitation

**Topography** Pahoehoe lava flow sloping to southwest

**Elevation:** 455ft

**Coordinates:** E=186652, N=2176999

**Vegetation:** Christmas berry, *haole koa*, *noni*, airplant

**Probable Age:** Prehistoric

**Overall Dimensions:** 10.6 m long

**Condition:** Good

**Integrity:** Unaltered

**Description:** Site 28406 is lava tube located in an area of sloping pahoehoe lava in the northeastern portion of the project area. It has an overall length of 10.6 m and an area of 46.9 sq m. The entrance to the tube is through a horizontal opening at the northern end of a large sinkhole (*Figure 90*). The entrance is 2.65 m wide and 0.5 m in height and opens onto a irregularly-shaped chamber that is bisected by a floor to ceiling column in the northwestern portion. The chamber is 10.6 m long (northwest by southeast) and from 2.6 to 4.5 m wide with a bare lava floor and ceiling heights that range from 0.2 to 1.0 m.

There is one area of roof fall to the northwest of the entrance and another outside the entrance adjacent to the dripline. Charcoal is present amidst the roof fall stones 2.2 m inside of the entrance. A *kukui* nut shell is present on the bare lava floor to the north of the charcoal.

There are four inaccessible passages that extend off the main chamber that could not be explored due to their low ceiling heights (0.1 to 0.2 m). These passages extend to the west, north and northeast from the main tube. The floor in these passages is bare lava and no cultural remains were present.

Site 28406 is interpreted as a temporary habitation shelter based on its formal type and on the presence of the cultural remains. The site is unaltered, in good condition and is assessed as significant for information content.

**State No.:** 28407 (T-1636)

**Site Type:** Lava Tube

**Functional Interpretation:** Temporary Habitation

**Topography** Pahoehoe lava flow sloping to southwest

**Elevation:** 481-483ft

**Coordinates:** E=186678, N=2176943

**Vegetation:** Christmas berry, *alahe'e*, *haole koa*, grasses

**Probable Age:** Prehistoric

**Overall Dimensions:** 12.05 m long

**Condition:** Good

**Integrity:** Unaltered

**Description:** Site 28407 is a lava tube located along the northern side of a shallow sinkhole in the northeastern portion of the project area. The site has an overall length of 12.75 m and an area of 20.1 sq m. The entrance is 3.25 m wide by 0.55 m in height and opens onto a linear chamber that is 12.75 m long (northeast by southwest) and 0.85 to 2.0 m wide (*Figure 91*). The ceiling heights range from 0.3 to 0.7 m and the floor is bare lava. Scattered roof fall is present in the southeastern half of the tube. An area of shallow ashy soil with scattered *kukui* nut shells extends through the center of the northeastern portion of the tube.

There is a small niche in the north wall of the main chamber that is 1.5 m long (north-northeast by south-southwest), 0.75 to 1.0 m wide and 0.2 m in height. The floor is bare lava with no cultural remains. A 0.75 m wide inaccessible passage extends to the north from the northeastern end of the main chamber.



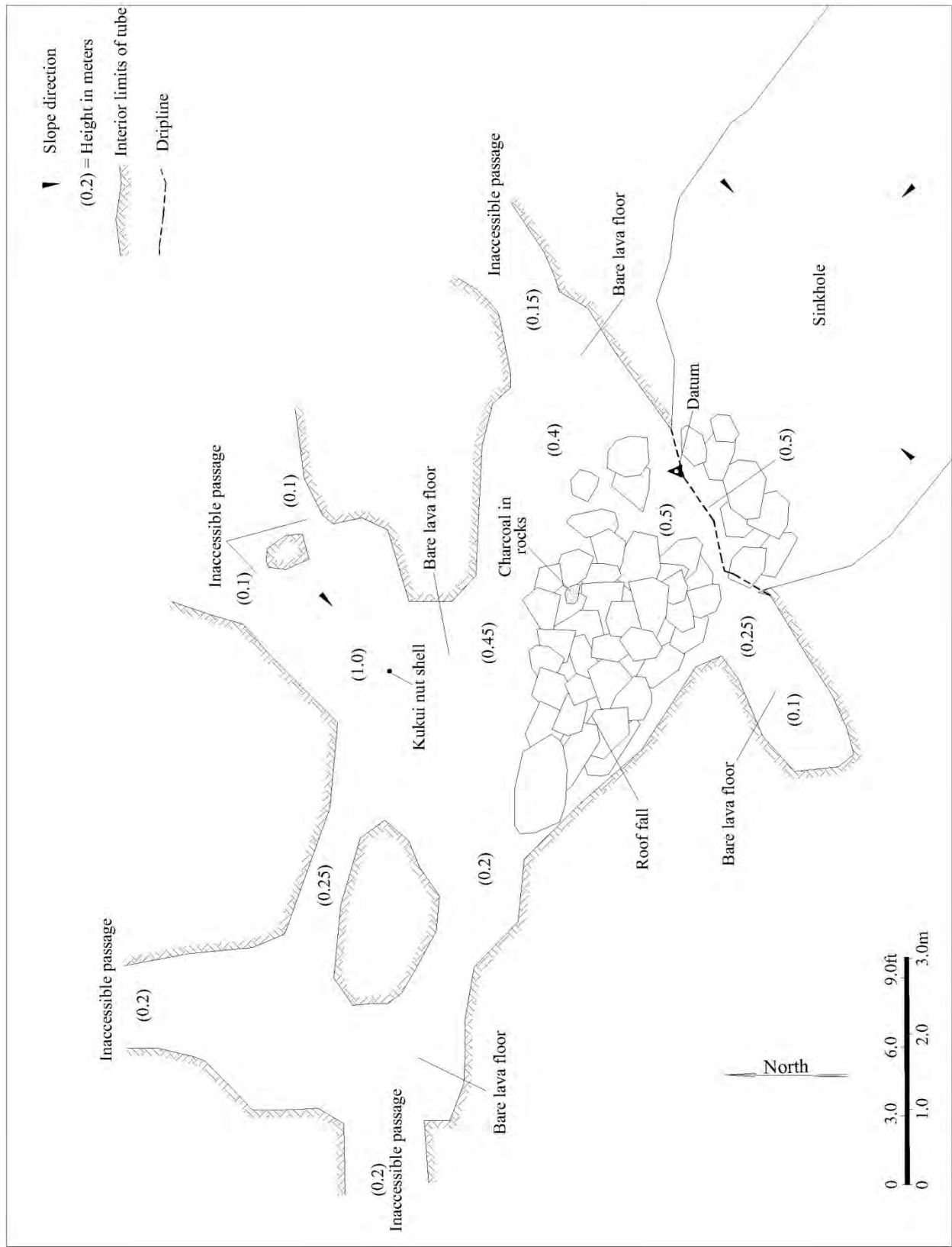


Figure 90. Site 28406 Plan Map

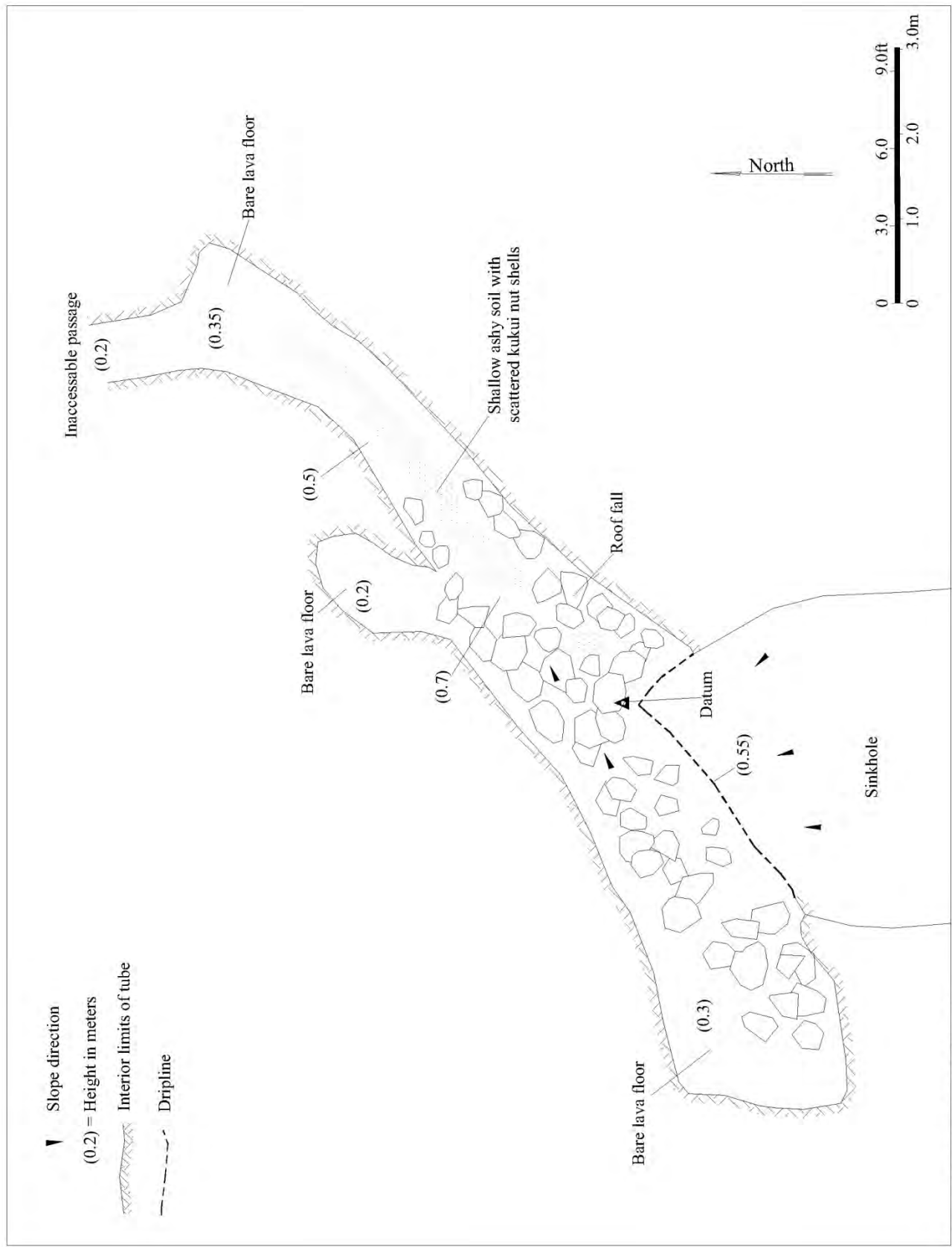


Figure 91. Site 28407 Plan Map

Site 28407 is interpreted as a temporary habitation shelter based on formal type and on the presence of the ashy soil and *kukui* nut shells. The site is unaltered, in good condition and is assessed as significant for information content.

**State No.:** 28408 (T-1606, 1607, 1610)

**Site Type:** Complex (4)

**Functional Interpretation:** Permanent Habitation

**Topography** Soil and outcrops sloping to west and southwest

**Elevation:** 468-480 ft

**Coordinates:** - E=186643, N=2176919

**Vegetation:** Christmas berry, *haole koa*, *alahe'e*, grasses

**Probable Age:** Prehistoric

**Overall Dimensions:** 19.3 m by 10.5 m

**Condition:** Fair

**Integrity:** Unaltered

**Description:** Site 28408 is a complex of four features located in the northeastern portion of the project area. The site is located adjacent to a secondary entrance to the Site 26900, Feature A lava tube. The features are comprised of two terraces (Features A and B), a modified outcrop (Feature C) and a platform (Feature D), located in an area 19.3 m long (northeast by southwest) and 10.5 m wide (*Figure 92*).

Feature A is a terrace located at the southwest end of the site. It is oval in shape and is 3.7 m long (northeast by southwest) and 2.7 m wide, built on top of a raised bedrock outcrop. There is a stacked cobble and small boulder retaining wall that extends along the west, south and southeast sides of the feature, ranging in height from 0.35 to 0.5 m. The west side is faced and the south side has collapsed. The surface is a level soil with scattered cobbles and no cultural remains. There is a cupboard built into the west side of the terrace retaining wall. The cupboard is 0.35 m deep, 0.25 m wide and 0.3 m in height.

Feature B is a rectangular-shaped terrace located adjacent to Feature A to the southeast. It is 4.15 m long (west-northwest by east-southeast) and 1.5 to 3.6 m wide. Stacked cobble and small boulder retaining walls that are 0.35 to 0.55 m in height extend along the west, south and east sides. The west side and portions of the south side are faced and the remainder of the retaining wall has collapsed. The north side is level with the surface of the adjacent outcrop. The surface of the feature is a level cobble and pebble pavement with no cultural remains present.

The Feature C modified outcrop is located 12.5 m to the north of Feature B. It is a pile of cobbles and small boulders placed on top of a low bedrock outcrop. It is linear in shape and is 3.6 m long (northeast by southwest), 1.15 m wide and 0.1 to 0.25 m in height above the surrounding ground surface. No cultural remains were present.

There is a void present between the rocks of the feature and the outcrop along the northwestern side. A 1.0 by 1.0 m test unit (TU-5) was excavated into the surface of the feature to examine this void (*Figure 93*). The surface stones (Layer I) were removed to reveal a small blister that is 0.8 m wide, 0.65 m deep and 0.32 m high. The floor of the blister is bare lava and no cultural remains were present. Layer I consists of 0.36 to 0.55m of loosely packed cobble and small boulders with no cultural remains present. Layer II is a 0.09 to 0.13 m thick deposit of very dark brown (10YR 2/2) silt with 25% gravel and pebble inclusions. Cultural remains from Layer II consist of an unburned *kukui* nutshell (0.3g) and 22 fragments of charcoal (2.3g). A sample of this charcoal will be submitted for identification and age determination analysis during the data recovery phase of the project.

Feature D is a rectangular, low platform located 4.5 m to the southeast of Feature C. The small, secondary entrance to the Site 26900, Feature A lava tube is located 3.0 m to the north. The platform is 4.1 m long (north-northwest by south-southeast) and 2.5 m wide. The northwest, northeast and southeast sides are built of stacked and faced cobbles and small boulders and are 0.2 to 0.4 m in height. The southeast side is an alignment of four slabs set on edge (0.45 m high). The surface is level but unpaved cobbles and small boulders. No cultural remains were present.

A 1.0 by 1.0 m test unit (TU-4) was excavated into the center of the feature revealing two layers over bedrock (see *Figure 93*). Layer I consists of 0.24 to 0.49 m of tightly packed cobbles, pebbles and small boulders with no cultural remains present. Bedrock was present below Layer I in the center of the unit, with pockets of Layer II soil present around the edges. Layer II is a 0.03 to 0.8 m thick deposit of very dark brown (10YR 2/2) silt with 30% gravel and pebble inclusions. Cultural remains from Layer II consist of 18 charcoal fragments (3.3g).

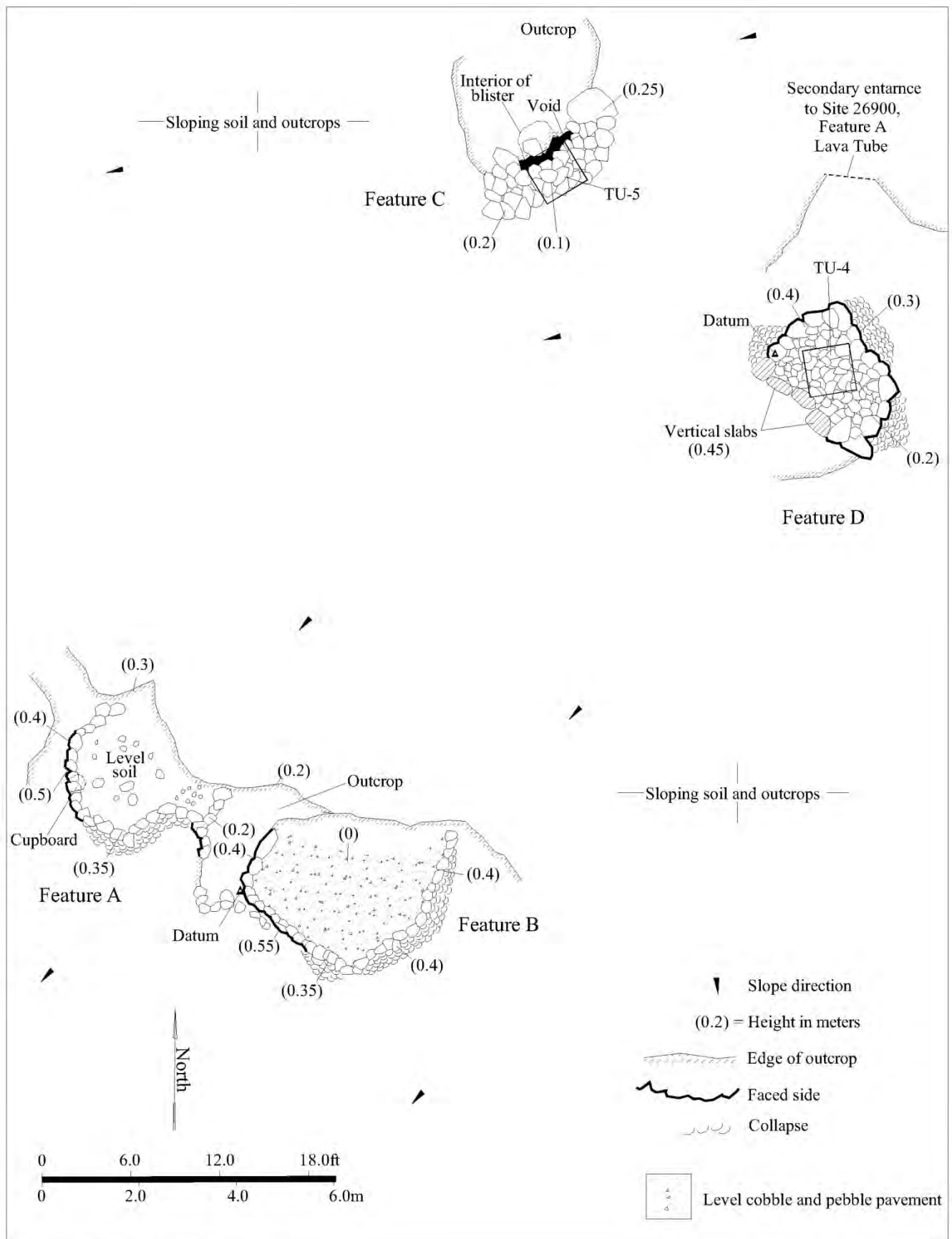
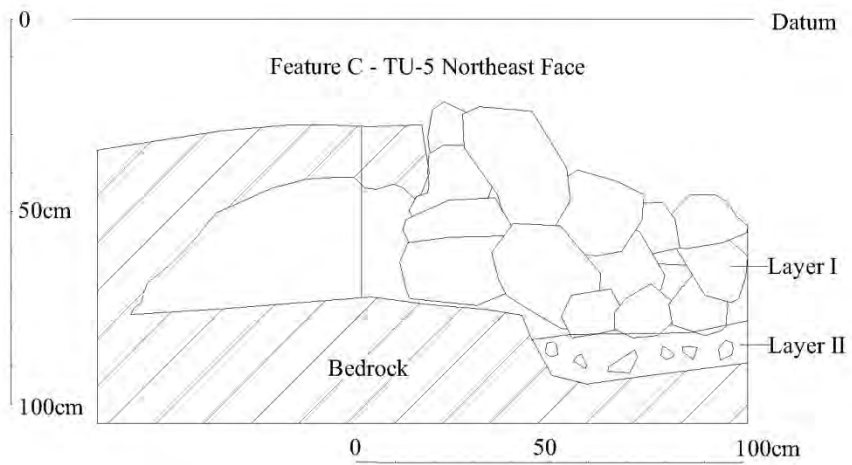
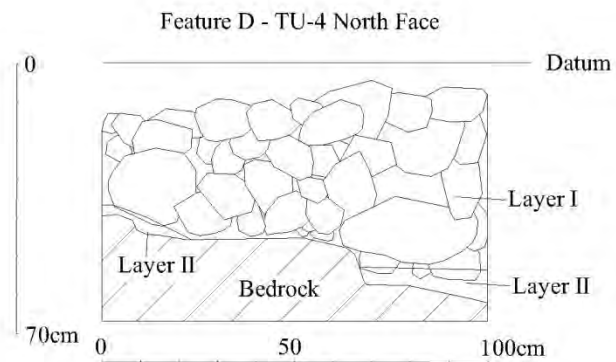


Figure 92. Site 28408 Plan Map



Layer I - Loosely packed pebbles, cobbles and boulders;  
No cultural remains present

Layer II - Very dark brown (10YR2/2) silt with 25%  
gravel and pebble inclusions;  
Cultural remains present



Layer I - Tightly packed pebbles, cobbles and boulders;  
No cultural remains present

Layer II - Very dark brown (10YR2/2) silt with 30%  
gravel and pebble inclusions;  
Cultural remains present

Figure 93. Site 28408, Feature C and D, Profiles of TUs 4 and 5

Site 28408 is interpreted as a complex of permanent habitation structures. The Feature B terrace likely functioned as the foundation for a roofed structure based on its formal type, substantial construction (faced sides, paved surface) and area (16.0 sq m). Features A and D may have served as special purpose structures based on substantial construction (faced sides at Feature A, faced sides vertical slabs at Feature D) and small areas (Feature A = 9.9 sq m, Feature D = 10.2 sq m). The Feature D modified outcrop potentially functioned as site furniture. The site is unaltered, in fair condition and is assessed as significant for information content.

**State No.:** 28409 (T-1660)

**Site Type:** Trail

**Functional Interpretation:** Transportation

**Topography:** Uneven a'a lava flow sloping to southwest

**Elevation:** 445ft

**Coordinates:** E=186552, N=2176954

**Vegetation:** Christmas berry, klu, *alahe'e*, grasses

**Probable Age:** Prehistoric

**Overall Dimensions:** 23.4 m long

**Condition:** Good

**Integrity:** Unaltered

**Description:** Site 28409 is a linear alignment of 21 flat pahoehoe slabs that extend across a finger of a'a lava in the north-central portion of the project area. This alignment is 23.4 m in length (northwest by southeast). The individual pahoehoe slabs vary in length from 0.35 to 0.98 m and in width from 0.31 to 0.75 m (*Figure 94*). No cultural remains were present.

The Site 28409 trail is classified as a Type A trail as defined by Apple (1965) likely functioning as a single file foot trail constructed during pre-Contact times. It functioned as a path across the a'a lava finger based on its formal type and appearance. The site is unaltered and in good condition. It is assessed as significant for its information content.

**State No.:** 28410 (T-1734)

**Site Type:** Cairn

**Functional Interpretation:** Marker

**Topography:** Uneven a'a lava flow sloping to west

**Elevation:** 433ft

**Coordinates:** E=186452, N=2176993

**Vegetation:** Christmas berry, *haole koa*, *alahe'e*, Tahitian ginger, grasses

**Probable Age:** Prehistoric

**Overall Dimensions:** 1.3 m by 0.95 m

**Condition:** Good

**Integrity:** Unaltered

**Description:** Site 28410 is a small cairn located a bare a'a lava flow in the north-central portion of the project area. The cairn is built of stacked and piled a'a cobbles and it is 1.3 m long (northeast by southwest) by 0.95 m wide at the base (*Figure 95*). The cairn has a maximum height of 0.7 m. No cultural remains were present on or around the site.

Site 28410 is interpreted as a probable marker based on its formal type and appearance. Site 28411 (discussed below) is a trail located 45.0 m to the south-southeast of Site 28410. It is possible that the cairn marks a northern continuation of the Site 28411 trail. The site is unaltered, in good condition and is assessed as significant for its information content.

**State No.:** 28411 (T-1667)

**Site Type:** Trail

**Functional Interpretation:** Transportation

**Topography:** Uneven a'a lava flow sloping to west

**Elevation:** 433ft

**Coordinates:** E=186476, N=2176948

**Vegetation:** Christmas berry, *haole koa*, *alahe'e*

**Probable Age:** Prehistoric



Figure 94. 28409 Trail, view to southeast



Figure 95. 28410 Cairn, view to west

**Overall Dimensions:** 4.6 m long

**Condition:** Good

**Integrity:** Unaltered

**Description:** Site 28411 is a linear alignment of six flat pahoehoe slabs that extend across a narrow finger of a'a lava in the north-central portion of the project area. This alignment is 4.6 m in length (north-northwest by south-southeast) and is pahoehoe slabs that vary in length from 0.3 to 0.55 m and in width from 0.2 to 0.35 m (*Figure 96*). No cultural remains were present.

The Site 28411 trail is classified as a Type A trail as defined by Apple (1965) likely functioning as a single file foot trail constructed during pre-Contact times. It functioned as a path across the a'a lava finger based on its formal type and appearance. The site is unaltered and in good condition. It is assessed as significant for its information content.



**Figure 96. Site 28411 Trail, view to north**

**State No.:** 28412 (T-1665, 1668)

**Site Type:** Complex (3)

**Functional Interpretation:** Transportation, Marker

**Topography** A'a lava flow sloping to northwest

**Elevation:** 425 ft

**Coordinates:** - E=186488, N=2176921

**Vegetation:** Christmas berry, *haole koa*, *alahe'e*, *klu*

**Probable Age:** Prehistoric

**Overall Dimensions:** 21.3 m by 6.0 m

**Condition:** Good

**Integrity:** Unaltered

**Description:** Site 28412 is a complex of three features located in an area of sloping a'a lava in the northeastern portion of the project area. The site consists of a steppingstone trail (Feature A) and two cairns (Features B and C) located in an area 21.3 m long (north-south) and 6.0 m wide (*Figure 97*). The Feature A trail is a linear alignment of



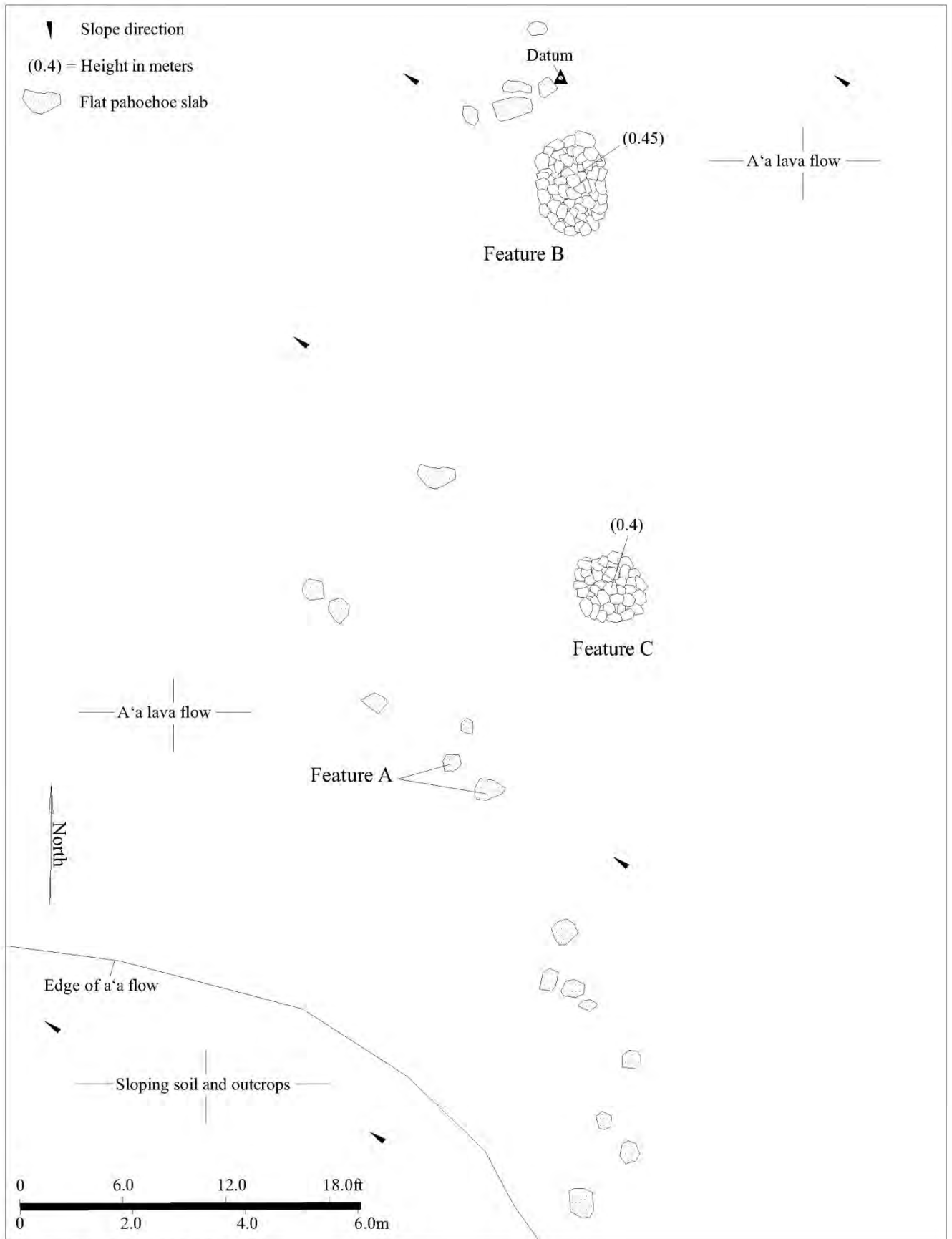


Figure 97. Site 28412 Plan Map

20 flat pahoehoe slabs that extends from an area of sloping soil and outcrops 21.3 m to the north. The slabs range in length from 0.35 to 0.66 m and in width from 0.16 to 0.41 m. No cultural remains were present.

Feature B is an oval-shaped mound located adjacent to the northern end of the Feature A trail. The feature is built of stacked cobbles and small boulders with sides that taper toward the top. It is 1.9 m long (north-south), 1.25 m wide and 0.45 m in height. The Feature C cairn is situated 5.8 m south of Feature B. It is roughly circular in shape at the base with tapering sides. It is 1.25 m long (east-west), 1.2 m wide and 0.4 m in height. No cultural remains were present at either Feature B or C.

The Feature A trail is classified as a Type A trail as defined by Apple (1965) likely functioning as a single file foot trail constructed during pre-Contact times. The associated Features B and C cairns likely marked the trail based on its appearance and proximity to Feature A. The site is unaltered and in good condition. It is assessed as significant for its information content.

**State No.:** 28413 (T-1547)

**Site Type:** Enclosure

**Functional Interpretation:** Temporary Habitation

**Topography:** Soil and outcrops sloping to west-southwest

**Elevation:** 439ft

**Coordinates:** E=186566, N=2176860

**Vegetation:** Christmas berry, *haole koa*, *alahe'e*, grasses

**Probable Age:** Prehistoric

**Overall Dimensions:** 3.8 m by 2.9 m

**Condition:** Fair

**Integrity:** Unaltered

**Description:** Site 28413 is an oval-shaped enclosure built on and adjacent to low bedrock outcrops in the north-central portion of the project area. The enclosure is 3.8 m in length (north-south) and 2.9 m wide (*Figure 98*). The western side of the enclosure is an alignment of cobbles and small boulders (0.2 m high) and a single slab set on edge (0.4 m high). The remaining sides are collapsed, roughly stacked and piled cobbles and small boulders and are 0.45 to 0.82 m thick and 0.1 to 0.32 m in height. The interior of the enclosure is a level soil deposit with no cultural remains present.

Site 28413 is interpreted as a temporary habitation shelter based on its formal type, insubstantial construction and small area (11.02 sq m). The site is unaltered and in fair condition. It is assessed as significant for its information content.

**State No.:** 28414 (T-1553)

**Site Type:** Terrace

**Functional Interpretation:** Permanent Habitation

**Topography:** Soil and outcrops sloping to west and northwest

**Elevation:** 457ft

**Coordinates:** E=186628, N=2176849

**Vegetation:** Christmas berry, *alahe'e*, *haole koa*, grasses

**Probable Age:** Prehistoric

**Overall Dimensions:** 5.6 m by 5.4 m

**Condition:** Fair

**Integrity:** Unaltered

**Description:** Site 28414 is a roughly square terrace built on the side of a slope in the northeastern portion of the project area. Areas of level soil are located adjacent to the terrace to the east and west of the structure. The terrace is 5.6 m in length (north-south) by 4.1 to 5.4 m wide with a retaining wall of roughly stacked and aligned cobbles and small boulders extending along the northeast, north and west sides (*Figure 99*). These sides range in height from 0.1 to 0.35 with collapse present along the north and northwest sides. The southeast side is level with the surrounding ground surface and the south side abuts a low (0.05 m) bedrock outcrop. The surface of the terrace is a level cobble and pebble pavement with no cultural remains present.

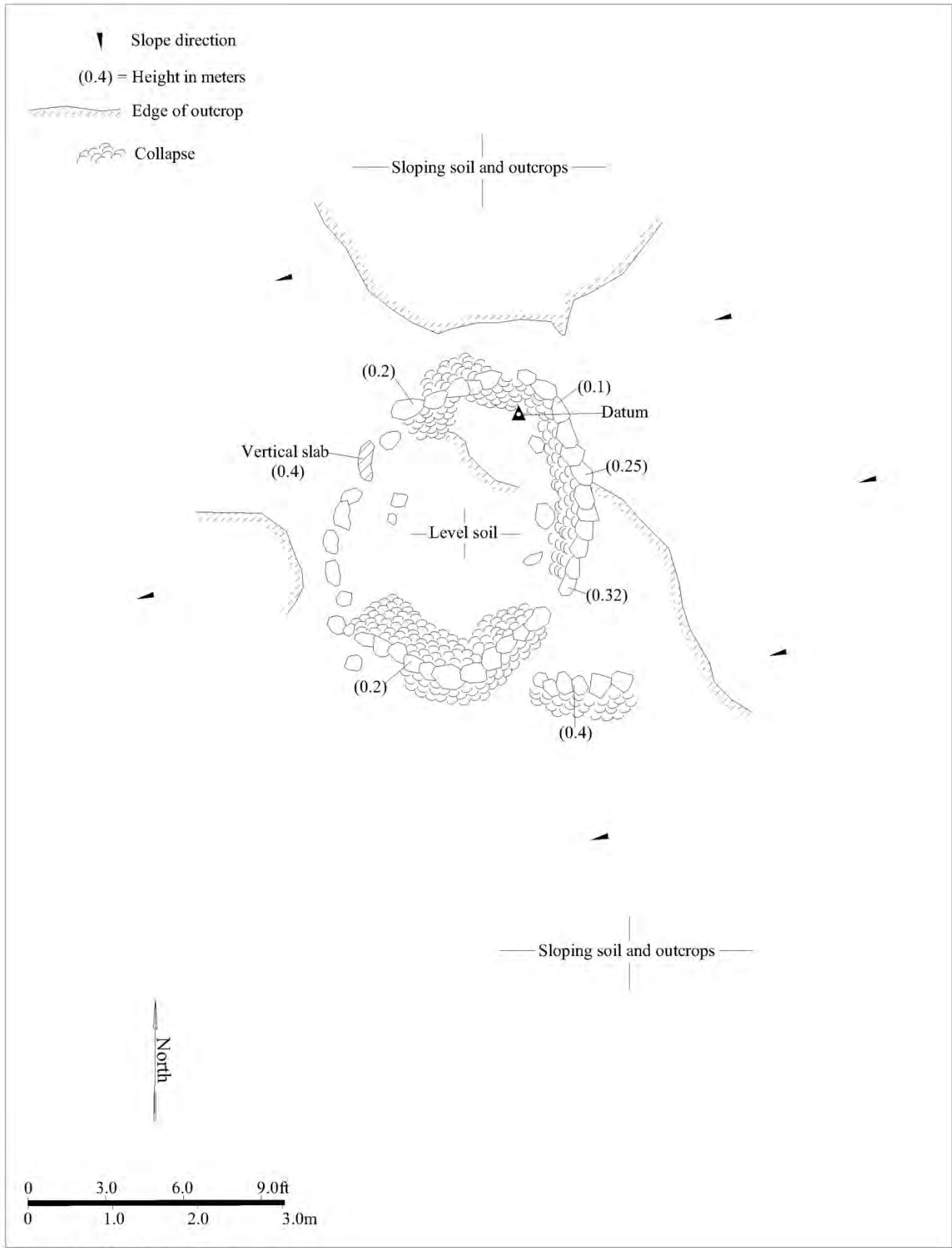


Figure 98. Site 28413 Plan Map

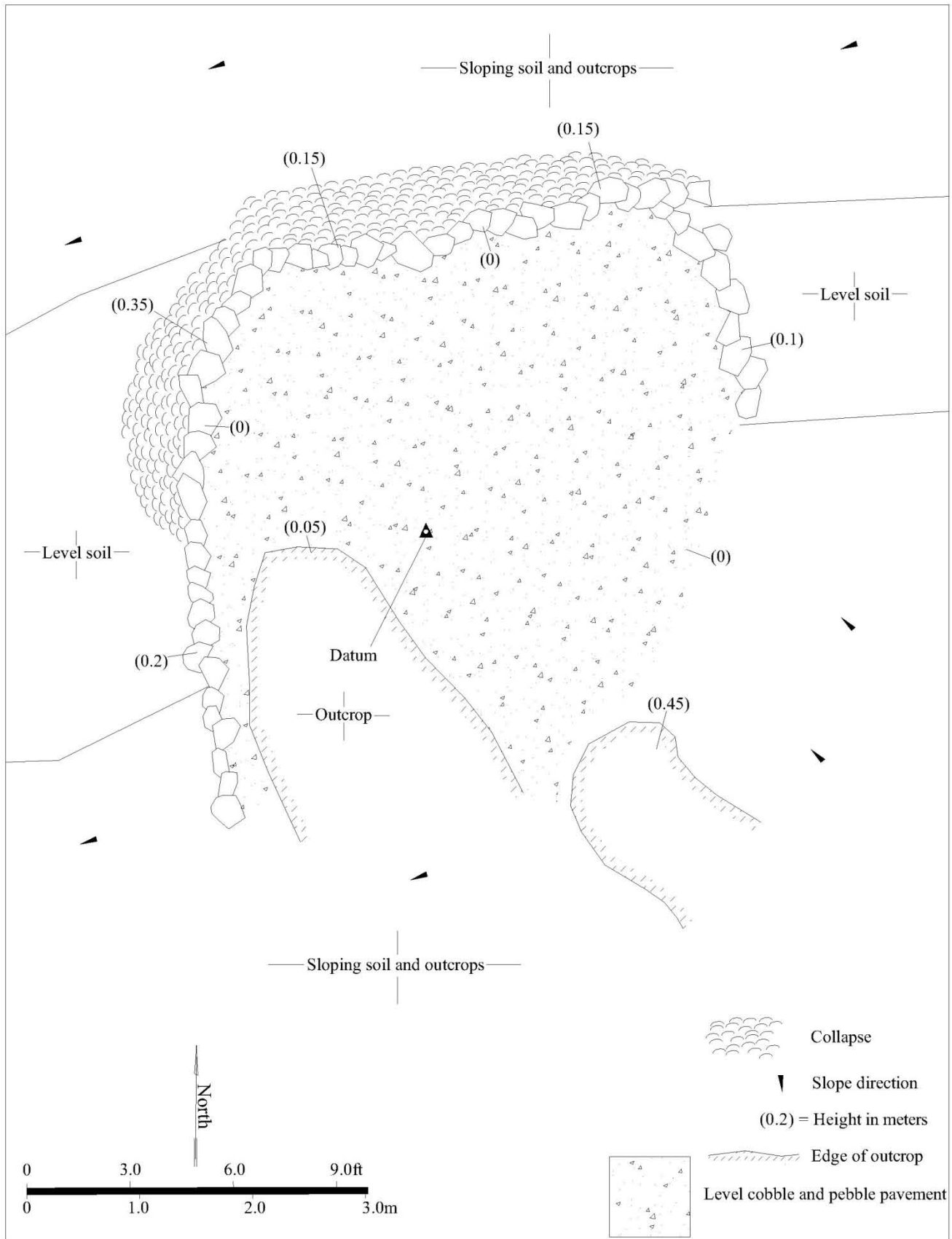


Figure 99. Site 28414 Plan Map

Site 28414 is interpreted as the foundation for a permanent habitation roofed structure. This is based on formal type, substantial construction (paved surface) and area (30.2 sq m). The site is unaltered, in fair condition and is assessed as significant for its information content.

**State No.:** 28415 (T-1850)

**Site Type:** Complex (3)

**Functional Interpretation:** Permanent Habitation, Possible Burial

**Topography:** Weathered pahoehoe flow on gentle slope to west

**Elevation:** 456 ft

**Vegetation:** *Haole koa*, *alahe'e*, grasses and vines

**Probable Age:** Prehistoric

**Overall Dimensions:** 13.5 m by 13.0 m

**Condition:** Fair

**Integrity:** Unaltered

**Description:** Site 28415 is a complex of three features clustered on and around pahoehoe outcrops in the northeastern portion of the project area. The site consists of a paved platform (Feature A) and two paved terraces (Features B-C) located in an area 13.5 m long (north-south) and 13.0 m wide (*Figure 100*). The site is bounded on the west by the Site 26909, Feature 1439 wall.

**Feature A** is a low, roughly rectangular, paved platform 4.5 m long (N-S) by 3.5 m wide and 0.25 m high. The perimeter consists of an alignment of boulders and cobbles, that has largely collapsed on the north and west sides. The level surface is paved with boulders, cobbles and pebbles. A shallow pit 1.0 m in diameter and 0.2 m deep is located in the northwest corner of the platform surface, possibly the remains of a posthole. The entire platform encompasses an area of 15.8 sq m.

**Feature B** is a rectangular terrace constructed on and around a pahoehoe outcrop adjacent to the west side of the Feature A platform. The surface of the terrace is c. 0.25 m below the surface of the platform and covers an area 5.0 to 5.5 m long (northeast-southwest) and 4.0 m wide (21.0 sq m). The south and west sides of the terrace have largely collapsed, but are defined by a retaining wall composed of aligned boulders and cobbles. The maximum height of the terrace retaining wall is 0.3 m on the south side and 0.2 m on the west. The southwest half of the terrace surface is level and paved with cobbles and pebbles. The northeast half is level soil and the bare lava of the outcrop surface, capped by collapsed rubble from the south retaining wall and collapsed debris from the west side of the Feature A platform. Fragments of *Cypraea* sp. shells are exposed on the terrace pavement.

**Feature C** is a rectangular terrace contiguous with the north-central edge of the Feature B terrace and is composed of a collapsed retaining wall on the west side. The terrace is 6.6 m long (northwest-southeast) by 5.0 m wide and c. 0.3 m high, encompassing 33.0 sq m. The other three sides of the terrace are defined by the edge of a pahoehoe outcrop. The surface is paved with boulders, cobbles and pebbles, and is level with the exposed outcrop surface on its north, south and east sides. A mound composed of piled boulders and cobbles is present on the southeast side of the terrace surface and is 1.5 m long (W-E) by 1.0 m wide and 0.5 m high.

Site 28415 is interpreted as a complex of permanent habitation structures. The Feature A platform and the Feature B and C terraces are interpreted as foundations of roofed structures based on formal type, substantial construction (paved surfaces) and area (A= 15.8 sq m; B= 21.0 sq m; C= 33.0 sq m). The site is also assigned a possible burial function based on the DLNR-SHPD review of the current report (see **Appendix B**). According to this review, “[n]o testing was conducted during the survey. We request that the site be classified as a habitation/possible burial until such time that its function be verified”. Site 28415 is unaltered and is in fair condition. It is assessed as significant for its information content and potentially for its cultural value due to the re-classification as a possible burial site by SHPD.

**State No.:** 28416 (T-1432)

**Site Type:** Lava Tube

**Functional Interpretation:** Temporary Habitation

**Topography:** Level pahoehoe lava flow

**Elevation:** 460ft

**Coordinates:** E=186700, N=2176800

**Vegetation:** Christmas berry, *haole koa*, *alahe'e*, *noni*, grasses

**Probable Age:** Prehistoric

**Overall Dimensions:** 19.5 m long

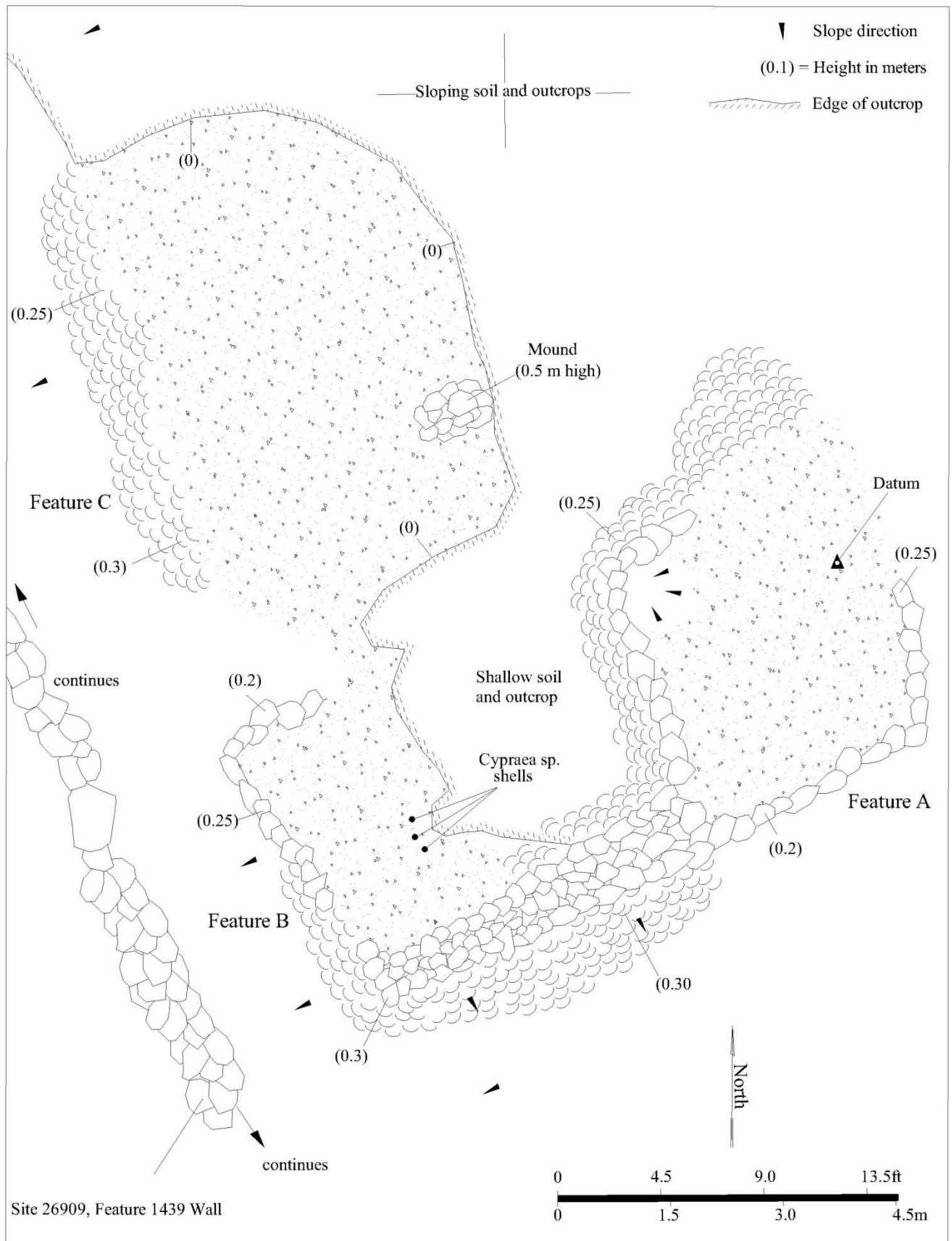


Figure 100. Site 28415 Plan Map

**Condition:** Good

**Integrity:** Unaltered

**Description:** Site 28416 is a lava tube located in an area of level pahoehoe lava in the northeastern portion of the project area. The site has an overall length of 19.5 m and an area of 46.3 sq m. The entrance to the tube is through a vertical opening that is 1.05 m long (northeast by southwest), 0.8 m wide and 0.9 m in depth (*Figure 101*). This opens onto a roughly oval-shaped chamber that is 6.8 m long (east-northeast by west-southwest) and 1.4 to 3.2 m wide. The floor is bare lava and the ceiling heights range from 0.3 to 0.6 m. Roof fall is present along the sides of the chamber and appears to have been placed there to clear the center of the room of debris. A concentration of goat bones is present to the north of the entrance and a cluster of charcoal is located along the northern wall. A small inaccessible passage with a low ceiling (0.05 m) extends to the north-northeast from the northeast corner of this room.

A linear tube is located along the west side of the main chamber, accessed through a 0.95 m wide by 0.3 m high passage. This linear chamber is 13.2 m long (north-northwest by south-southeast) and 1.9 to 3.3 m wide. The floor is bare lava and the ceiling heights vary from 0.1 m at the northern end to 0.6 m at its highest point. There is an area of shallow soil in the center of this room with scattered cultural remains consisting of charcoal, *Nerita picea*, *Isognomon* and sea urchin body fragments.

Site 28416 is interpreted as a temporary habitation shelter based on its formal type and the presence of the cultural remains within it. The site is unaltered and in good condition. It is assessed as significant for its information content.

**State No.:** 28417 (T-1854)

**Site Type:** Terrace

**Functional Interpretation:** Temporary Habitation

**Topography:** Soil and outcrops sloping to west-southwest

**Elevation:** 455ft

**Coordinates:** E=186656, N=2176770

**Vegetation:** Christmas berry, *haole koa*, grasses

**Probable Age:** Prehistoric

**Overall Dimensions:** 1.75 m by 1.55 m

**Condition:** Fair

**Integrity:** Unaltered

**Description:** Site 28417 is a small rectangular terrace located in the northeastern portion of the project area. The terrace is built against the western side of a low bedrock outcrop and is 1.75 m long (northeast by southwest) by 1.55 m wide (*Figure 102*). Stacked cobble and boulder retaining walls extend around the northwest, southwest and southeast sides of the terrace, ranging in height from 0.15 to 0.45 m. The surface is level but unpaved cobbles and small boulders. No cultural remains were present on the surface of the terrace.

A 1.0 by 1.0 m test unit (TU-32) was excavated in the center of the terrace revealing two layers over bedrock (see *Figure 102*). Layer I consists of 0.07 to 0.46 m of tightly packed cobbles and small boulders. Cultural remains from Layer I consist of marine gastropod shells (9 [9=TNF-total number of fragments] *Cypraea* sp. 18.7g; 5 *Nerita picea* 2.3g; 5 *Cellana* sp. 4.8g), marine bivalve shells (5 *Isognomon perna* 0.8g; 1 *Tellina* sp. 0.1g), 1 urchin exoskeleton fragment (< 0.1g), 1 unburned *kukui* nutshell (2.1g) and 1 fragment of charcoal (0.1g). Layer II is a 0.02 to 0.3 m thick deposit of very dark brown (10YR 2/2) silt with 40% gravel and pebble inclusions. Cultural remains from Layer II consist of one large, nearly complete *Cellana talcosa* scraper (Acc. 23.001, 36.9g, 83.2 x 72.0 x 29.3 mm), a volcanic glass primary flake (0.2g, size < 20.0 mm), marine gastropod shells (34 *Cypraea* sp. 41.4g; 1 *Littoraria pintado* 0.1g; 30 *Nerita picea* 7.2g; 2 *Theodoxus vespertinus* 1.2g; 32 *Cellana* sp. 16.9g; 8 Thaididae 7.7g; 1 *Trochus intextus* 0.1g), marine bivalve shells (50 *Isognomon perna* 6.9g; 32 Mytilidae 5.1g), 5 indeterminate marine gastropod shells (0.8g), 42 urchin exoskeleton fragments (3.7g), 9 helmet urchin spines (1.7g), 1 crab exoskeleton fragment (< 0.1g) and 54 fragments of charcoal (4.8g) .

Site 28417 is interpreted as temporary habitation site. The terrace is too small (2.7 sq m) to have functioned as a dwelling foundation, but potentially served as site furniture for an activity area that lacks architecture. The artifacts and diverse assemblage of marine invertebrate remains is quite atypical for temporary habitation sites in the project area. The site is unaltered, in fair condition and is assessed as significant for its information content.



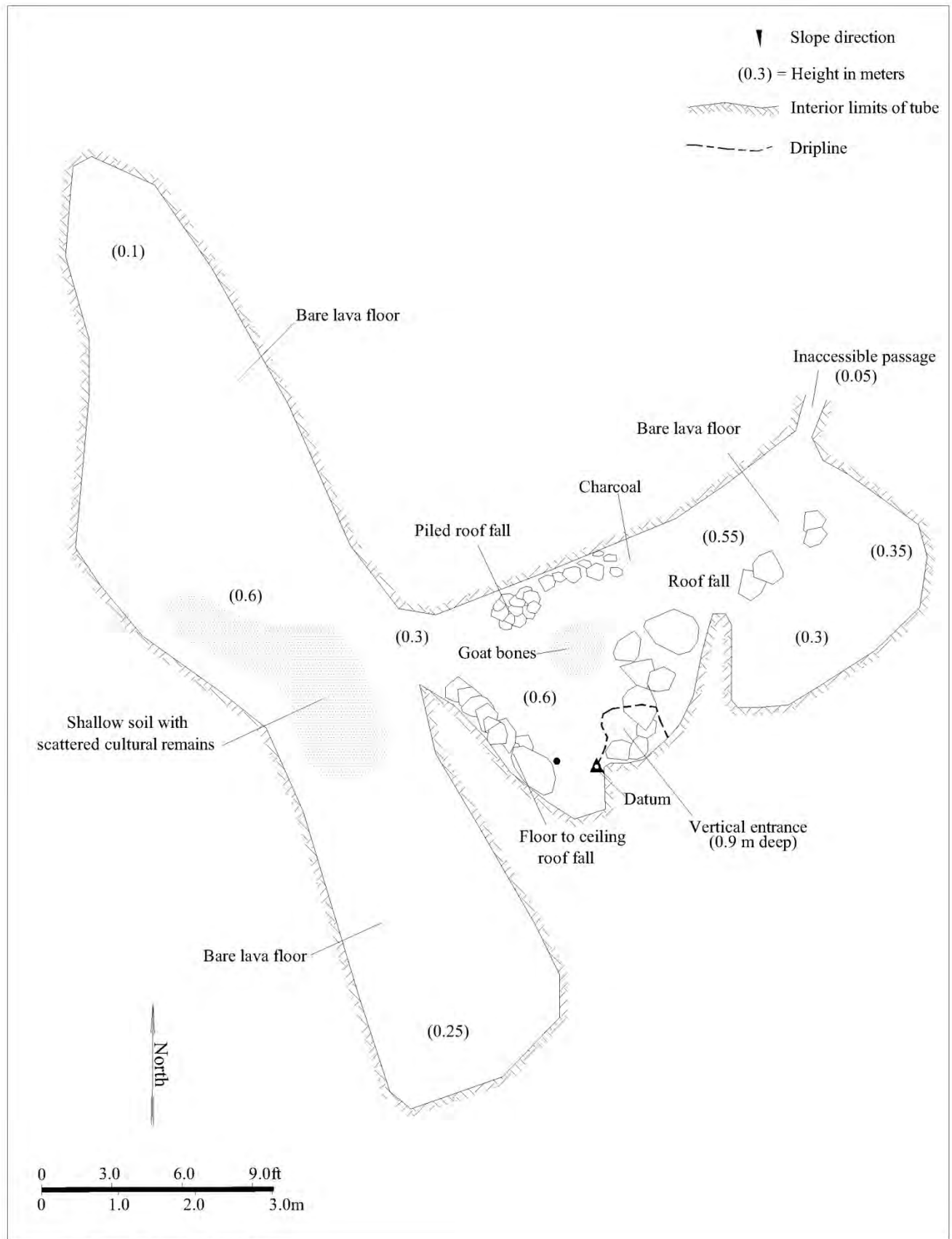


Figure 101. Site 28416 Plan Map

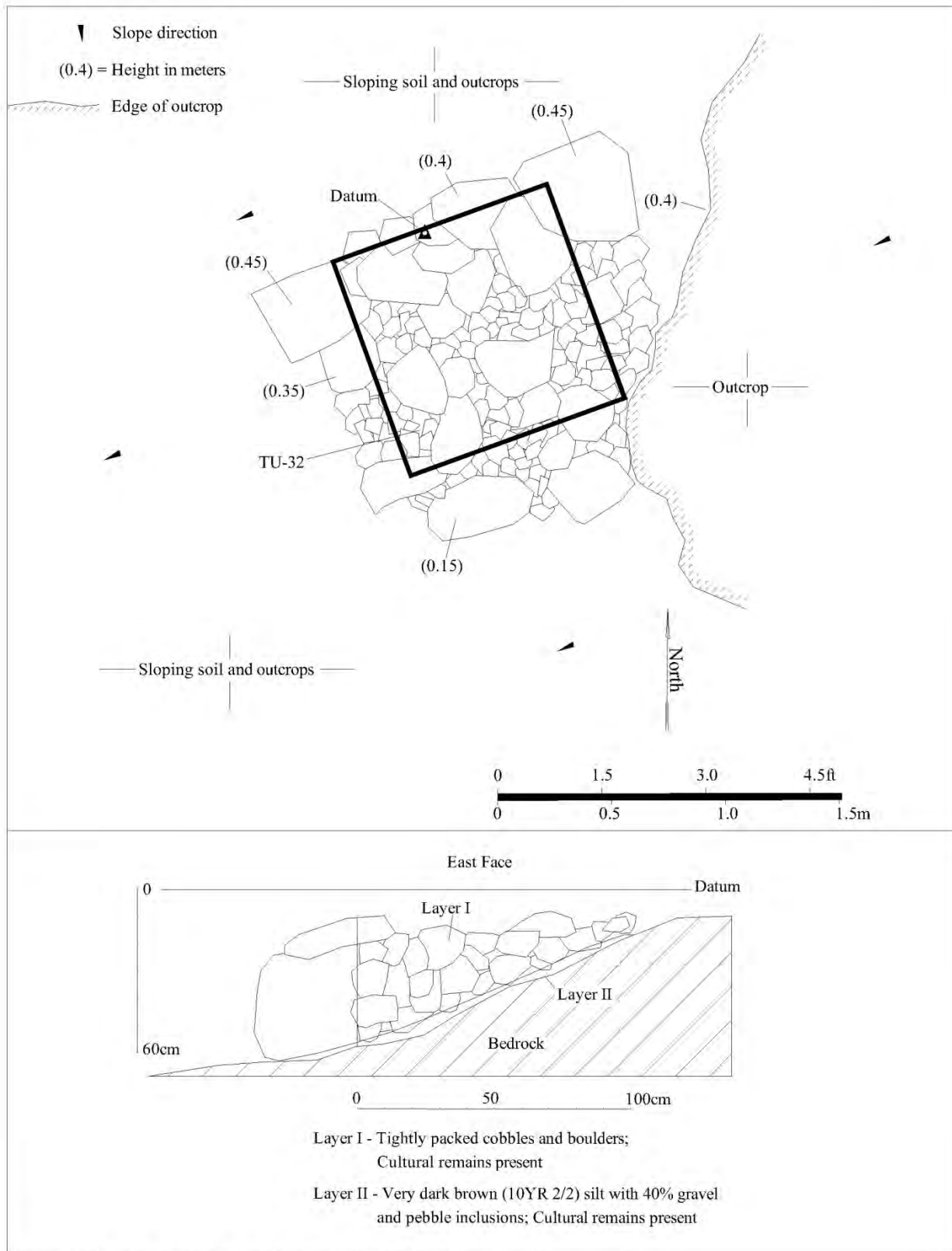


Figure 102. Site 28417 Plan Map and TU-32 East Face Profile

**State No.:** 28418 (T-1429)  
**Site Type:** Lava Tube  
**Functional Interpretation:** Temporary Habitation  
**Topography:** Pahoehoe lava flow sloping to southwest  
**Elevation:** 455ft  
**Coordinates:** E=186713, N=2176739  
**Vegetation:** Christmas berry, *haole koa*, grasses  
**Probable Age:** Prehistoric  
**Overall Dimensions:** 13.7 m long  
**Condition:** Good  
**Integrity:** Unaltered

**Description:** Site 28418 is lava tube located in an area of sloping pahoehoe lava in the northeastern portion of the project area. It has an overall length of 13.7 m and an area of 36.0 sq m. The entrance to the tube is through a vertical opening that is 0.7 m long (east-west), 0.55 m wide and 0.75 m deep (*Figure 103*). This opens onto a linear chamber that is 13.7 m long (northeast by southwest) and 0.85 to 4.15 m wide. There is an area of level soil with scattered roof fall to the east and south of the entrance that contains unidentified marine shell fragments, charcoal, a waterworn coral abrader and a *kukui* nut shell. A floor to ceiling column is located along the east side of the soil area with a skylight choked with roof fall adjacent to it to the south.

The floor throughout the remainder of the tube is bare lava. The floor in the northeastern portion slopes down to the southwest. The tube turns to the southeast at the northeast end of the main chamber. This passage is inaccessible due to its low ceiling height (0.1 m).

Site 28418 is interpreted as a temporary habitation shelter based on its formal type and on the presence of the cultural remains. The site is unaltered, in good condition and is assessed as significant for information content.

**State No.:** 28419 (T-1446)  
**Site Type:** Terrace  
**Functional Interpretation:** Temporary Habitation  
**Topography:** Soil and outcrops sloping to west  
**Elevation:** 448ft  
**Coordinates:** E=186594, N=2176789  
**Vegetation:** Christmas berry, *alahe'e*, *haole koa*, grasses and vines  
**Probable Age:** Prehistoric  
**Overall Dimensions:** 3.55 m by 1.9 m  
**Condition:** Fair  
**Integrity:** Unaltered

**Description:** Site 28419 is a small, roughly oval-shaped terrace built against the northwestern side of a raised bedrock outcrop in the northeastern portion of the project area. The terrace is 3.55 m long (east-west) and 1.9 m wide, with a low retaining wall of boulder and large cobbles present along the west and north sides that are 0.2 to 0.3 m in height (*Figure 104*). The southern side of the terrace has collapsed outward. The surface is relatively level, but unpaved cobbles and small boulders. No cultural remains were present.

Site 28419 is interpreted as the foundation for a temporary habitation shelter. This is based on its formal type, insubstantial construction and small area (6.7 sq m). The site is unaltered, in fair condition and is assessed as significant for its information content.

**State No.:** 28420 (T-1445, 1447)  
**Site Type:** Complex (3)  
**Functional Interpretation:** Permanent Habitation  
**Topography:** Soil and outcrops sloping to west and southwest  
**Elevation:** 443-446ft  
**Coordinates:** E=186572, N=2176756  
**Vegetation:** Christmas berry, *klu*, *kiawe*, *alahe'e*, *haole koa*, grasses  
**Probable Age:** Prehistoric  
**Overall Dimensions:** 22.8 m by 9.5 m

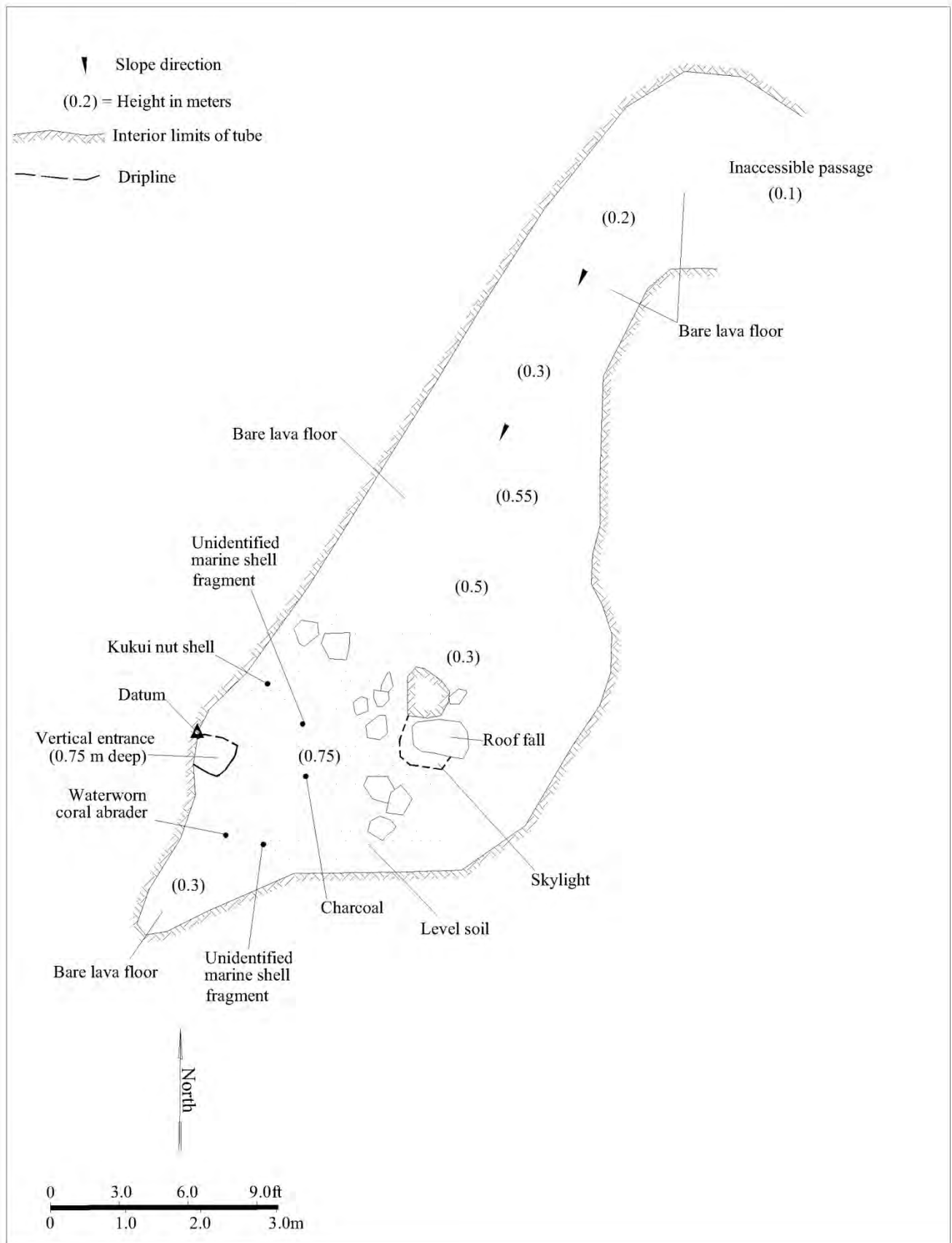


Figure 103. Site 28418 Plan Map

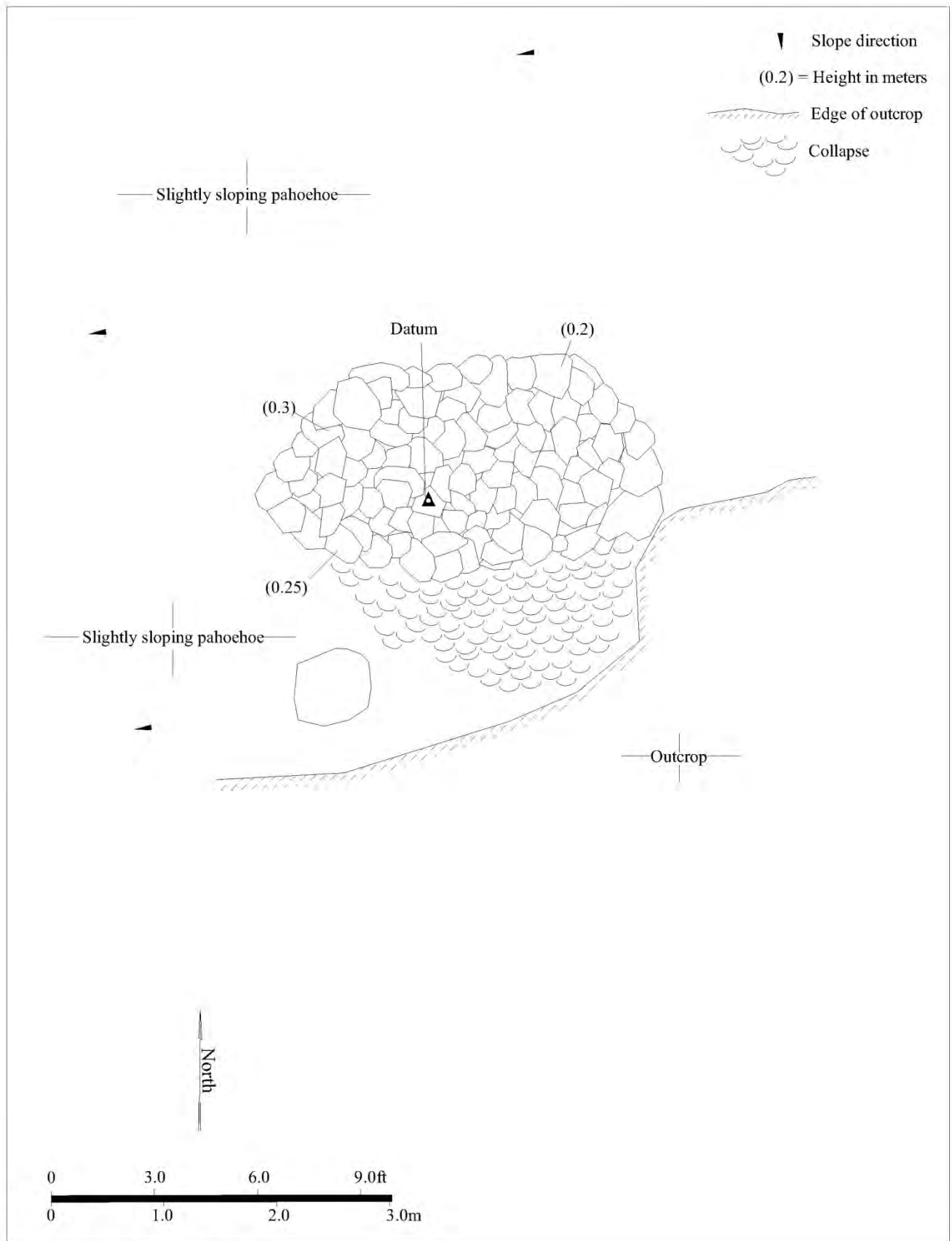


Figure 104. Site 28419 Plan Map

**Condition:** Fair

**Integrity:** Unaltered

**Description:** Site 28420 is a complex of three features located in the northeastern portion of the project area. The features consist of an enclosure (Feature A), a mound (Feature B) and a lava tube (Feature C) located in an area 22.8 m long (northeast by southwest) and 9.5 m wide. Feature A, Feature B and the entrances to Feature C are depicted in *Figure 105*.

Feature A is an enclosure that is 4.1 m long (northeast by southwest) by 2.8 to 3.9 m wide with no apparent entrance into the interior, potentially the result of wall collapse. The walls are built of stacked cobbles and small boulders and are 0.65 to 1.5 m thick with faced sections present along the interior of the east side and south sides, and the exterior of the south and west sides. The walls are 0.2 to 0.8 m in height on the exterior side and 0.3 m in height on the interior. The floor of the enclosure consists of a level cobble and pebble pavement. A Christmas berry tree is growing in the interior.

There is a projection extending to the west from the southwest corner of the enclosure. It is 1.3 m long (east-west), 0.6 to 1.4 m wide and 0.4 to 0.6 m in height. Facing is present along the south and west sides and the surface is comprised of level but unpaved cobbles. No cultural remains were present on the surface.

Feature B is an oval-shaped mound with a level surface situated 9.2 m northeast of Feature A. It is 2.0 m long (north-south) and 1.8 m wide with collapsed sides that range in height from 0.25 to 0.65 m. No cultural remains were present on the surface.

A 1.0 by 1.0 m test unit (TU-12) was excavated into the center of the mound revealing two layers over bedrock (see *Figure 105*). Layer I consists of 0.2 to 0.46 m of tightly packed cobbles and small boulders. Cultural remains from Layer I consist of two large and nearly complete *Cellana* sp. shell scrapers (Acc.5.001, 9.1g; Acc. 6.001, 5.9g), a *Porites* sp. coral pebble abrader fragment (Acc. 7.001, 21.8g, 51.8 x 31.5 x 27.6 mm) and an unburned *kukui* nutshell (6.4g). Layer II is a 0.01 to 0.19 m thick deposit of brown (7.5YR 5/3) silt with 80% gravel and pebble inclusions. Cultural remains from Layer II consist of a volcanic glass core (Acc. 9.001, 13.8g, 26.3 x 22.2 x 18.9 mm), marine gastropod shells (52 [52=TNF-total number of fragments] *Cypraea* sp. 55.1g; 4 *Planaxis labiosa* 0.5g; 4 *Nerita picea* 1.5g), marine bivalve shells (5 *Isognomon perna* 1.7g), 6 urchin exoskeleton fragments (0.5g), 3 crab exoskeleton fragments (0.9g), 2 small mammal bones (0.5g), 41 unburned *kukui* nutshells (21.6g) and 46 fragments of charcoal (7.2g).

The Feature C lava tube has an overall length of 10.0 m and an area of 49.0 sq m. There are two vertical entrances into the Feature C lava tube located adjacent to Feature B. One is located 1.8 m to the northwest of Feature B and one is 2.3 m to the east. The entrance to the northwest is 0.85 m long (east-west), 0.65 m wide and 0.5 m deep. The entrance to the east is 0.9 m long (east-west), 0.8 m wide and 0.7 m deep. These entrances open onto a large irregularly-shaped chamber that is 10.0 m long (northwest by southeast) and 2.1 to 6.75 m wide (*Figure 106*).

The floor throughout the Feature C lava tube is bare lava and the ceiling heights vary from 0.15 to 0.6 m. There are two areas of shallow soil inside the tube; one to the west of the eastern entrance and one to the south. The western soil area is 3.6 m long (northwest by southeast) and 1.1 m wide. Charcoal is scattered over the surface of this area, along with two *Nerita picea* shells. The southern soil area is 1.5 m long (northeast by southwest) and 0.6 m wide with no cultural remains. Roof fall is present on the floor to the north and northwest of the eastern entrance. There is an alignment of roof fall boulders between the two entrances. A *Nerita picea* and a *Cypraea* sp. shell are located on the floor to the east of the alignment.

Site 28420 is interpreted as a complex of permanent habitation features. Feature A is interpreted as the foundation for a permanent habitation roofed structure based on formal type, substantial construction (faced sides, paved surface) and area (15.9 sq m). Feature B is interpreted as site furniture based on its formal type and proximity to Feature A. The Feature C lava tube likely served as an associated sleeping or storage area. The site is unaltered, in fair condition and is assessed as significant for its information content.

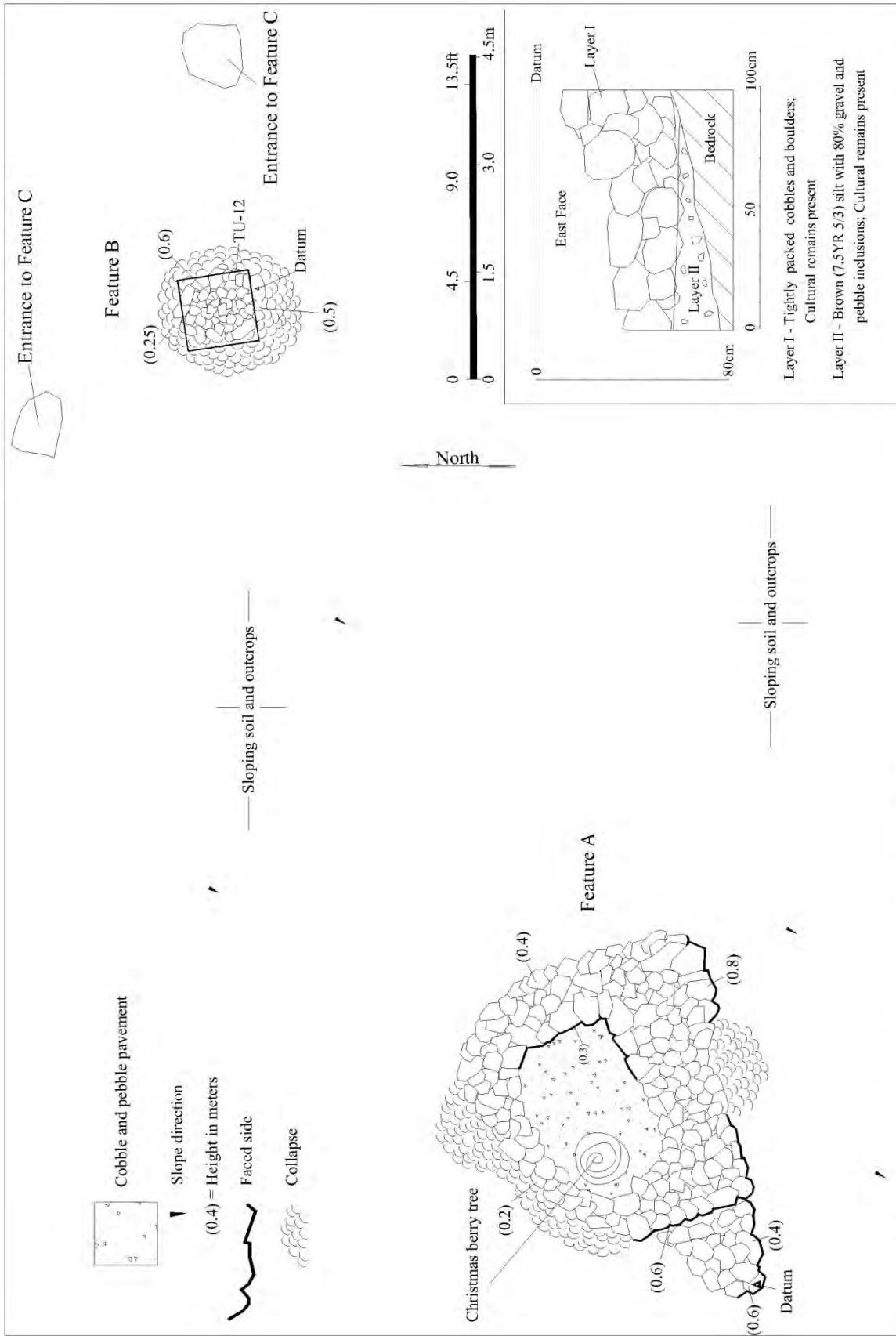


Figure 105. Site 28420 Plan Map and TU-12 East Face Profile

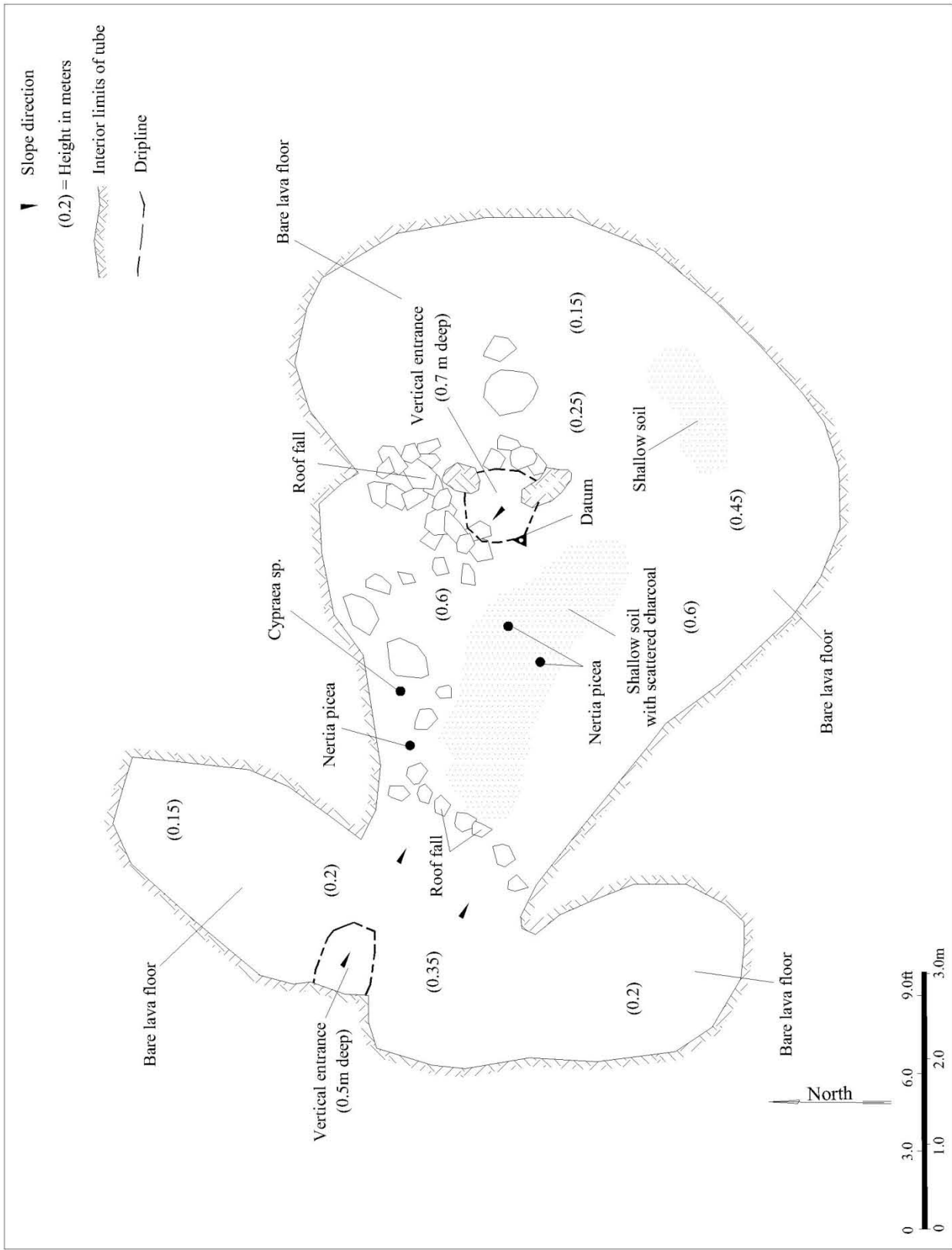


Figure 106. Site 28420, Feature C Plan Map



**State No.:** 28421 (T-1454)  
**Site Type:** Lava Tube  
**Functional Interpretation:** Temporary Habitation  
**Topography** Pahoehoe lava flow sloping to southwest  
**Elevation:** 421ft  
**Coordinates:** E=186512, N=2176763  
**Vegetation:** Christmas berry, *alahe'e*, grasses  
**Probable Age:** Prehistoric  
**Overall Dimensions:** 5.0 m long  
**Condition:** Good  
**Integrity:** Unaltered

**Description:** Site 28421 is a small lava tube located in the north-central portion of the project area in an area of sloping pahoehoe lava. The site has an overall length of 7.6 m and an area of 15.9 sq m. The entrance to the tube is through a vertical opening that is 0.75 m long (west-northwest by east-southeast), 0.45 m wide and 1.2 m in depth (*Figure 107*). This opens onto a roughly oval-shaped chamber that is 4.5 to 5.0 m long (east-west) and 2.85 to 3.3 m wide. The floor is bare lava with scattered roof fall and the ceiling heights range from 0.5 to 1.5 m. *Cypraea sp.* shells are scattered over the floor and a fragment of charcoal is present along the southern wall. There are two concentrations of small mammal bones located along the northern wall.

A passage extends to the northwest from the northwestern corner of the main chamber. This tube is 2.6 m long, 0.55 to 0.95 m wide and 0.2 m in height. The floor in this passage is bare lava and no cultural remains are present.

Site 28421 is interpreted as a temporary habitation shelter based on its formal type and on the presence of the cultural remains. The site is unaltered, in good condition and is assessed as significant for information content.

**State No.:** 28422 (T-1463, 1466)  
**Site Type:** Complex (4)  
**Functional Interpretation:** Permanent Habitation  
**Topography:** Soil and outcrops sloping to southwest  
**Elevation:** 403 ft  
**Coordinates:** E=186454, N=2176781  
**Vegetation:** Christmas berry, *alahe'e haole koa*, grasses  
**Probable Age:** Prehistoric  
**Overall Dimensions:** 27.0 m by 8.5 m  
**Condition:** Fair  
**Integrity:** Unaltered

**Description:** Site 28422 is a complex of four features located in the north-central portion of the project area. The features are comprised of two terraces (Features A and D), an enclosure (Feature B) and a platform (Feature C) located in an area 27.0 m long (north-south) by 8.5 m wide (*Figure 108*).

Feature A is a rectangular terrace built against the south side of a low outcrop. It is 6.5 m long (north-south) and 4.0 m wide, with the east and south sides bordered by stacked and aligned cobbles and small boulders and slabs set on edge. Fallen slabs are present along the east and west sides. The surface is a level cobble and pebble pavement. A discoidal waterworn coral cobble was collected from the surface of the structure, measuring 76.1 mm by 73.7 mm and 49.0 mm thick (Acc. 61.001 – *Figure 109*).

There are two cupboards incorporated into the feature; one in the northeast corner and one along the south side. The northeastern cupboard is collapsed although the southern one is intact. The southern cupboard is 1.35 m long, 0.65 m wide and 0.3 m in height. It is capped by flat pahoehoe slabs. A 1.0 m long by 0.65 m wide test unit (TU-67) was excavated into the cupboard at the northern end revealing two layers over bedrock (see *Figure 108*). Layer I consisted of the layer of slabs over the cupboard. The remainder of Layer I consists of 0.35 to 0.38 m of tightly packed cobbles, pebbles and small boulders with no cultural remains present. Layer II is a 0.09 to 0.11m thick deposit of very dark brown (10YR 2/2) silt with 30% pebble and gravel inclusions located on the floor of the cupboard. Cultural remains from Layer II consisted of marine gastropod shells (12 *Cypraea sp.* 16.5g; 2 Thaididae 2.0g), 13 crab exoskeleton fragments (1.6g), 26 unburned *kukui* nutshells (11.6g), 1 burned *kukui* nutshell (0.2g) and 91 fragments of charcoal (20.5g).

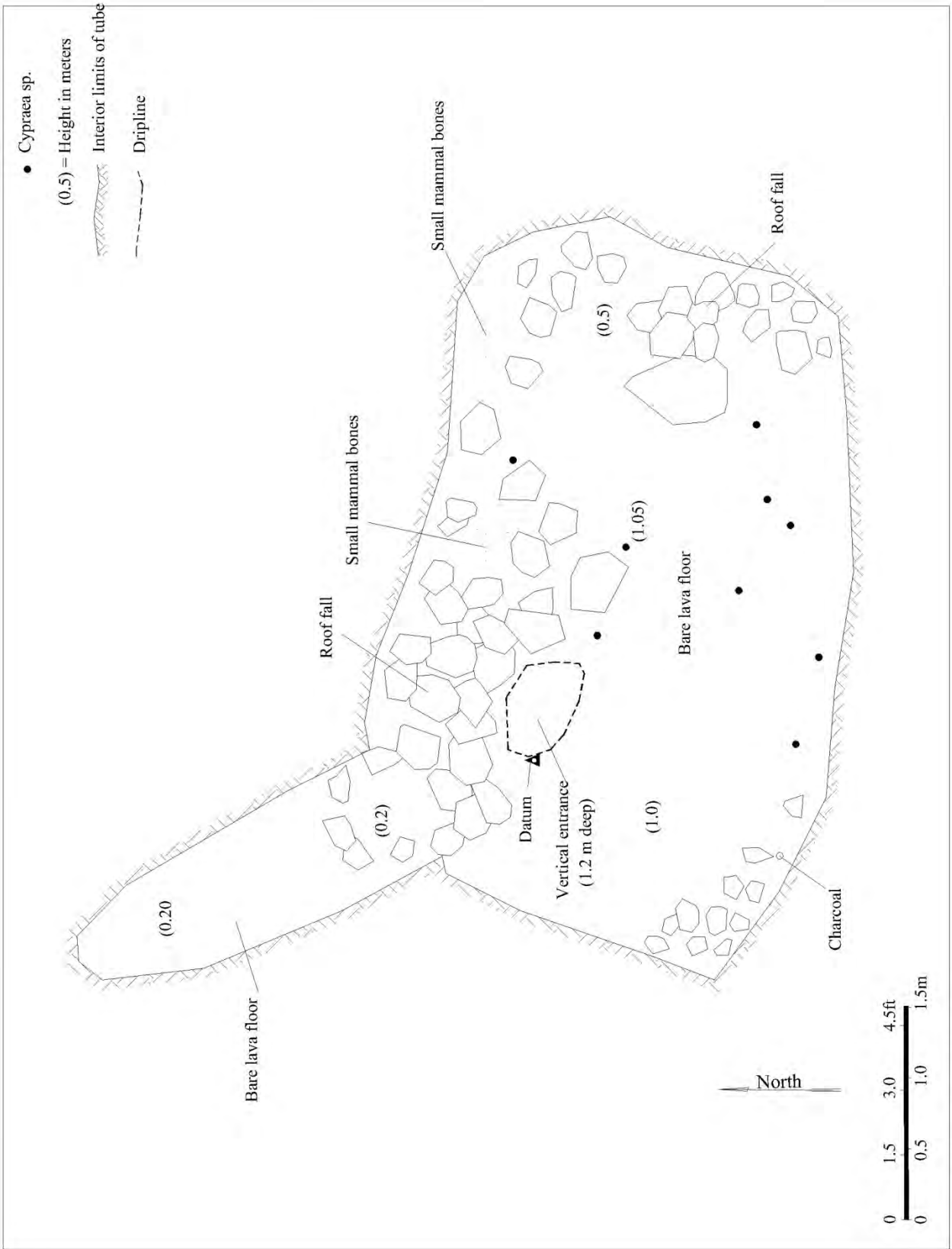


Figure 107. Site 28421 Plan Map

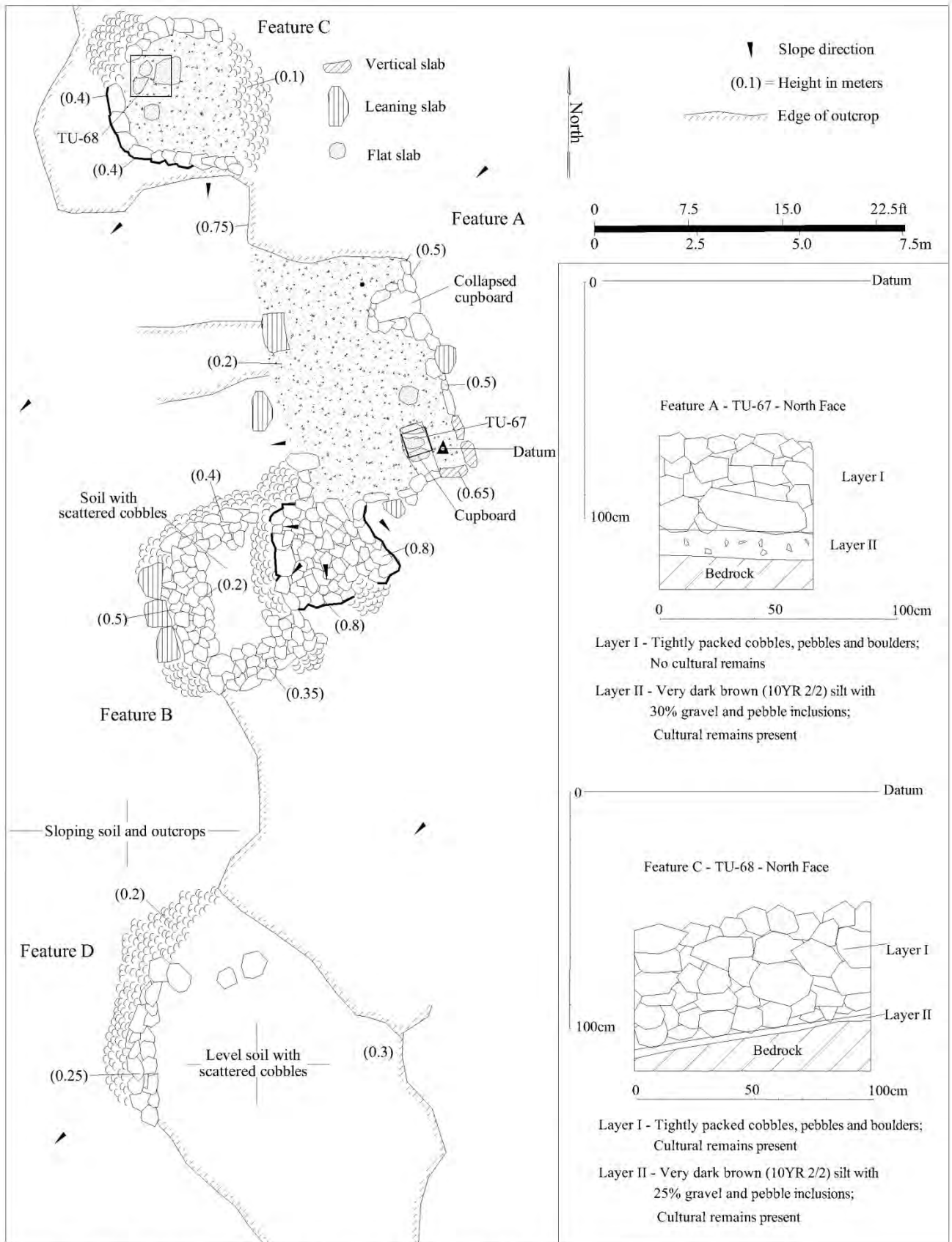


Figure 108. Site 28422 Plan Map and Profiles of TUs 67 and 68



**Figure 109. Site 28422, Discoidal Waterworn Coral Cobble**

Feature B is a rectangular enclosure located adjacent to Feature A to the southwest. It is 4.5 m long (north-south) and 3.5 m wide with no entrance into the interior. The walls are built of stacked cobbles and small boulders with fallen slabs along the west side. The walls are 1.0 to 1.3 m thick and 0.2 to 0.5 m in height. The interior is a level soil with scattered cobbles and no cultural remains.

There is a square stacked and faced mound situated along the eastern side of the enclosure. This mound is 2.9 m long (east-west) and 2.6 m wide with sides that average 0.8 m. The surface is slightly domed and no cultural remains were present.

Feature C is an oval-shaped low platform located to the northwest of Feature A. This feature is 5.7 m long (north-south) and 2.8 m wide with sides that range in height from 0.1 to 0.4 m. The southwest side is faced and the northern end has collapsed. The surface is a level cobble and pebble pavement with several flat slabs present at the northwest end. No cultural remains were present on the surface.

A 1.0 by 1.0 m test unit (TU-68) was excavated into the northwestern surface of Feature C over the slabs. This excavation revealed two layers over bedrock (see *Figure 108*). Layer I consists of 0.45 to 0.49 m of tightly packed cobbles, pebbles and small boulders. Cultural remains from Layer I consist of a waterworn *Porites* sp. coral pebble manuport (29.4g). Layer II is a 0.03 to 0.05 m thick deposit of very dark brown (10YR 2/2) silt with 25% gravel and pebble inclusions. Cultural remains from this deposit consist of marine gastropod shells (1 *Littoraria pintado* 0.2g; 1 *Nerita picea* 0.2g), 81 unburned *kukui* nutshells (64.8g), 2 burned *kukui* nutshells (0.4g) and 7 fragments of charcoal (1.1g).

Feature D is a terrace located 4.9 m south of Feature C, built against the western side of a low bedrock outcrop. It is 5.7 m long (north-south) and 5.0 m wide with a collapsed cobble and small boulder retaining wall along the west side (0.2 to 0.25 m in height). The surface is level soil with no cultural remains present.

Site 28422 is interpreted as a complex of permanent habitation features. Features A, B and C potentially served as the foundations for roofed structures based on formal type, substantial construction and area (Feature A = 26.0 sq m, Feature B = 15.7 sq m and Feature C = 15.9 sq m). The Feature D terrace likely served as an associated activity area. The site is unaltered and in fair condition. It is assessed as significant for information content.

**State No.:** 28423 (T-1855)

**Site Type:** Complex (19)

**Functional Interpretation:** Rock art

**Topography:** Pahoehoe flow

**Elevation:** 420 ft

**Coordinates:** E=186624, N=2175613

**Vegetation:** *Haole koa*, *alahe'e*, various grasses

**Probable Age:** Prehistoric/Possible historic

**Overall Dimensions:** 11.5m by 6.0 m

**Condition:** Fair

**Integrity:** Unaltered

**Description:** Site 28423 is a complex of 19 petroglyphs that have been pecked into the surface of an irregular-shaped, north-facing pahoehoe outcrop in the northeastern portion of the project area. The 19 petroglyphs are located in an area 11.5 m long (east-west) and 6.0 m wide (*Figure 110*). The physical characteristics of the 19 features are summarized in *Table 17* in the Conclusion section of this report.

Feature A is an anthropomorphic figure with an open triangular body 28cm long by 28cm wide. The right side is pecked deeper than the left side of the body and is much more distinct. The figure has an implement extending down from the right hand. The implement is straight for the top two thirds of its length with the bottom third bent in towards the figure. The right foot has been obscured/destroyed by a mass of fountain grass that was growing over the figure.

Feature B is a petroglyph that potentially represents more than one episode of rendering. It is 49cm long by 22cm wide. The initial episode to be a turtle-type with a rounded, closed triangular body, and short "arms" extending outward from the shoulders and near the bottom of the body. This turtle-type petroglyph was then modified so that its body became the legs of an anthropomorphic figure and its back legs were incorporated to be the figures hands resting on its legs. A closed triangular body was added on to the original petroglyph and protrudes down between the legs creating male genitalia for the figure. The "head" of this anthropomorphic figure is a closed triangle. The effect of the modifications on the original turtle-type petroglyph is a male anthropomorphic figure with a triangular head standing on a board. The modifications added to the turtle-type are not as well pecked as the original. A *poho* or cupule was pecked out of the turtle-type's left shoulder (oriented turtle's head up). The area around the turtle-types head has been pecked in to a shape that is similar to Feature J.

Feature C is a roughly elliptical-shaped ring of pecking that is 28cm long by 24cm wide. The western half of the petroglyph is a much thicker area of pecking than the eastern half. Feature D is a roughly pecked out *poho* with a rough edge that measures 7cm long by 6.5cm wide.

Feature E is another multi-episode petroglyph. It appears that the original part of this petroglyph was an irregularly-shaped *poho*. It appears that an anthropomorphic figure may have been attached to the *poho* utilizing the *poho* as a head. This addition is pecked but not as well defined as the *poho* and there is other pecking around that obscures the true-shape of the anthropomorphic figure addition. This petroglyph measures 38cm long by 34cm wide.

Feature F is a *poho* that measures 7.3cm by 7.2cm. Feature G is a possible anthropomorphic stick figure astride something, perhaps a horse. The figure is bent towards the west and appears to have an arm reaching forward and perhaps grabbing the pommel of a saddle while its other arm is being held behind the figure. The pecking of this

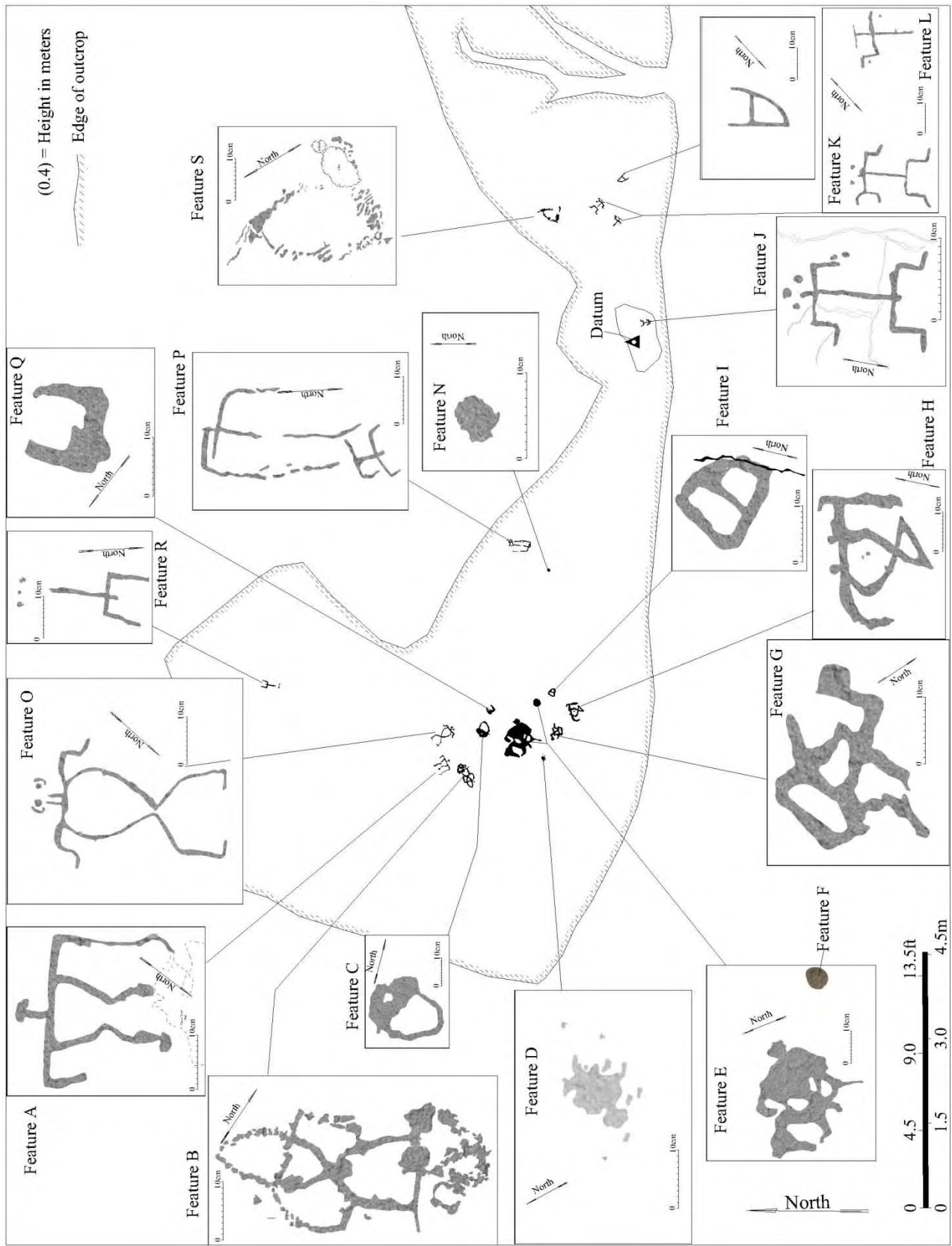


Figure 110. Site 28423 Plan Map

petroglyph is very faint and can only be seen in the right lighting conditions. The figure measures 29.5cm by 24.7cm.

Feature H is possibly a turtle-type petroglyph that has been modified. It is a faintly pecked petroglyph that measures 35.5cm by 29.6cm. The overall shape of the image appears to be turtle-like. The rear flippers, however, have been closed-off to create a triangle and the right "flipper" no longer looks flipper-like.

Feature I is an irregularly-shaped bisected ring that has been faintly pecked into the pahoehoe outcrop. The petroglyph measures 14cm by 10.7cm. Feature J is a male anthropomorphic stick figure on a large, flat-sided pahoehoe boulder that rests on the outcrop. The figure measures 18.4cm by 12.9 cm. It has three dots encircling the head and two dots next to the right arm in lieu of a right hand. This petroglyph is similar in style to Features L and M, potentially created by the same individual.

Feature K is an anthropomorphic stick figure. The figure measures 25.6cm by 19.4cm. This figure does not have a well defined head, but more of a small protrusion extending above the arms with two dots above it. Feature L is an unfinished anthropomorphic figure. The petroglyph measures 19.2cm by 18cm. The figure's left arm is raised and the right arm is unfinished. A dot has been pecked below the left hand and also below the terminus of the right arm. This figure has a "T" shaped head and no legs.

Feature M appears to be the petroglyph of a crab-claw sail that measures 19.5cm by 12.3cm. This petroglyph is very faint and hard to see under most light conditions. Feature N is a *poho* that measures 5.3cm by 5.2cm.

Feature O is a large anthropomorphic figure that measures 42.8cm by 28.5cm. Its body is an open tear-drop shape and its legs terminate into two feet that are facing inward. The arms are short and stubby and are pointed downward. The neck is outlined and there are two dots above the neck with semicircles enclosing the dots as if creating a head with two eyes.

Feature P is at least two anthropomorphic figures. One is a small figure next to a much larger figure. This petroglyph is very faint. The overall dimensions 43.9cm by 19.6cm. The smaller of the figures appears to be a male stick figure and the larger figure an ambiguous shape.

Feature Q is a 'U'-shaped area of pecking that measures 14.6m by 14.2m. Feature R is an unfinished anthropomorphic figure male stick figure that measures 33.4cm by 13.8cm. The body extends down below the legs but there are no arms. There are three dots arranged in a row above the body. This petroglyph is very faint.

Feature S is a roughly pecked oval with roughly pecked lines extending north off of the northern end and to the east off of the southeastern corner. The eastern corner has been obscured by lichen growing on the pahoehoe outcrop. The overall dimensions of this petroglyph are 41.5cm by 31.1cm.

Site 28423 is a cluster of Hawaiian rock art features. It is possible that at least portions of the site may have been created historically based on the possible rider astride a horse petroglyph (Feature G). The site is unaltered and in good condition. It is assessed as significant for information content, as a good site type example and for its cultural value.

**State No.:** 28424 (T-1478)

**Site Type:** Enclosure

**Functional Interpretation:** Permanent Habitation

**Topography:** Soil and outcrops sloping to southwest

**Elevation:** 376ft

**Coordinates:** E=186344, N=2176709

**Vegetation:** Christmas berry, *klu*, lantana grasses

**Probable Age:** Prehistoric

**Overall Dimensions:** 6.7 m by 5.3 m

**Condition:** Fair

**Integrity:** Unaltered

**Description:** Site 28424 is an oval-shaped enclosure built on and adjacent to a raised bedrock outcrop in the north-central portion of the project area. The structure is 6.7 m in length (northwest by southeast) by 5.3 m wide with a 1.0 m wide gap along the western side (*Figure 111*). The enclosure walls are predominately comprised of stacked cobbles and small boulders and are 0.45 to 1.05 m thick by 0.3 to 0.55 m in height. Faced sections are present along the interior east and south sides and vertical slabs are incorporated into the walls along the west and southwest sides. The northern side of the enclosure is collapsed rubble that slopes down into the interior the structure.

The interior floor of the site is a level soil deposit with no cultural remains present. There is a depression in the adjacent outcrop that borders the eastern side of the enclosure. This depression is 2.2 m long (east-northeast by west-southwest), 1.7 m wide and 0.6 m deep below the surface of the outcrop.

Site 28424 is interpreted as the foundation for a permanent habitation roofed structure. This is based on its formal type, substantial construction (faced sides, vertical slabs) and area (35.5 sq m). The site is unaltered, in fair condition and is assessed as significant for its information content.

**State No.:** 28425 (T-1706)

**Site Type:** Lava tube (2 Chambers)

**Functional Interpretation:** Temporary Habitation

**Topography:** Pahoehoe lava flow sloping to west and southwest

**Elevation:** 331-336 ft

**Coordinates:** E=186104, N=2176802

**Vegetation:** Christmas berry, *haole koa*, *opiuma*, *noni*, airplant, grasses

**Probable Age:** Prehistoric

**Overall Dimensions:** 49.5 m by 17.2 m

**Condition:** Good

**Integrity:** Unaltered

**Description:** Site 28425 is a lava tube with two chambers located in the northwestern portion of the project area. Feature A is 15.6 m long with an area of 111.2 sq m and Feature B is 22.8 m long with an area of 130.6 sq m. The two chambers are separated by a large oval-shaped sinkhole that is 10.7 m long (east-west), 4.0 to 4.3 m wide and 1.4 m in depth (*Figure 112*). The Feature A tube extends to the east from the sinkhole. This chamber is accessed through a 4.8 m wide and 0.9 m entrance. Feature A is 15.6 m long (northeast by southwest) and 2.3 to 9.3 m wide with a bare lava floor. The ceiling heights range from 0.2 to 1.0 m. A concentration of goat bones and *kukui* nut shells is present on the floor adjacent to the entrance to the east.

There is a column in the chamber along the south side with a small skylight to the north. A low secondary entrance to Feature A is located at the east end of the chamber, blocked by roof fall. This opening is 3.7 m wide and 0.2 m high. A passage extends to the north from the main chamber for 6.5 m to where it becomes inaccessible due to a low ceiling. This passage is 0.95 to 2.5 m wide and 0.4 m high with a bare lava floor and no cultural remains.

The Feature B chamber extends to the west from the sinkhole, accessed through a 3.1 m wide and 1.0 m high entrance. This opens onto an irregularly-shaped chamber that is 22.8 m long (east-northeast by west-southwest) and 3.0 to 7.75 m wide. The floor in this chamber is bare lava and the ceiling heights vary from 0.75 to 1.2 m. There is a pile of boulder roof fall just inside the entrance and a basalt adze located adjacent to it to the west. The adze (Acc. 63.001, 66.2g, 45.1 x 30.6 x 26.3 mm) is a medial adze fragment that is flaked and ground with snap fractures at both ends (*Figure 113*).

There is a raised shelf along the north side of the main chamber that is 6.8 m wide and 0.6 m above the main floor. This shelf is 4.1 m deep and 0.2 m in height with a bare lava floor and no cultural remains. A narrow passage extends 5.0 m to the west from the northwest end of the chamber. This passage is 1.0 to 1.3 m wide and 0.3 m high with a bare lava floor and no cultural remains.

Site 28425 is interpreted as a complex of temporary habitation shelters based on their formal type and the presence of the cultural remains. The site is unaltered, in good condition and is assessed as significant for information content.



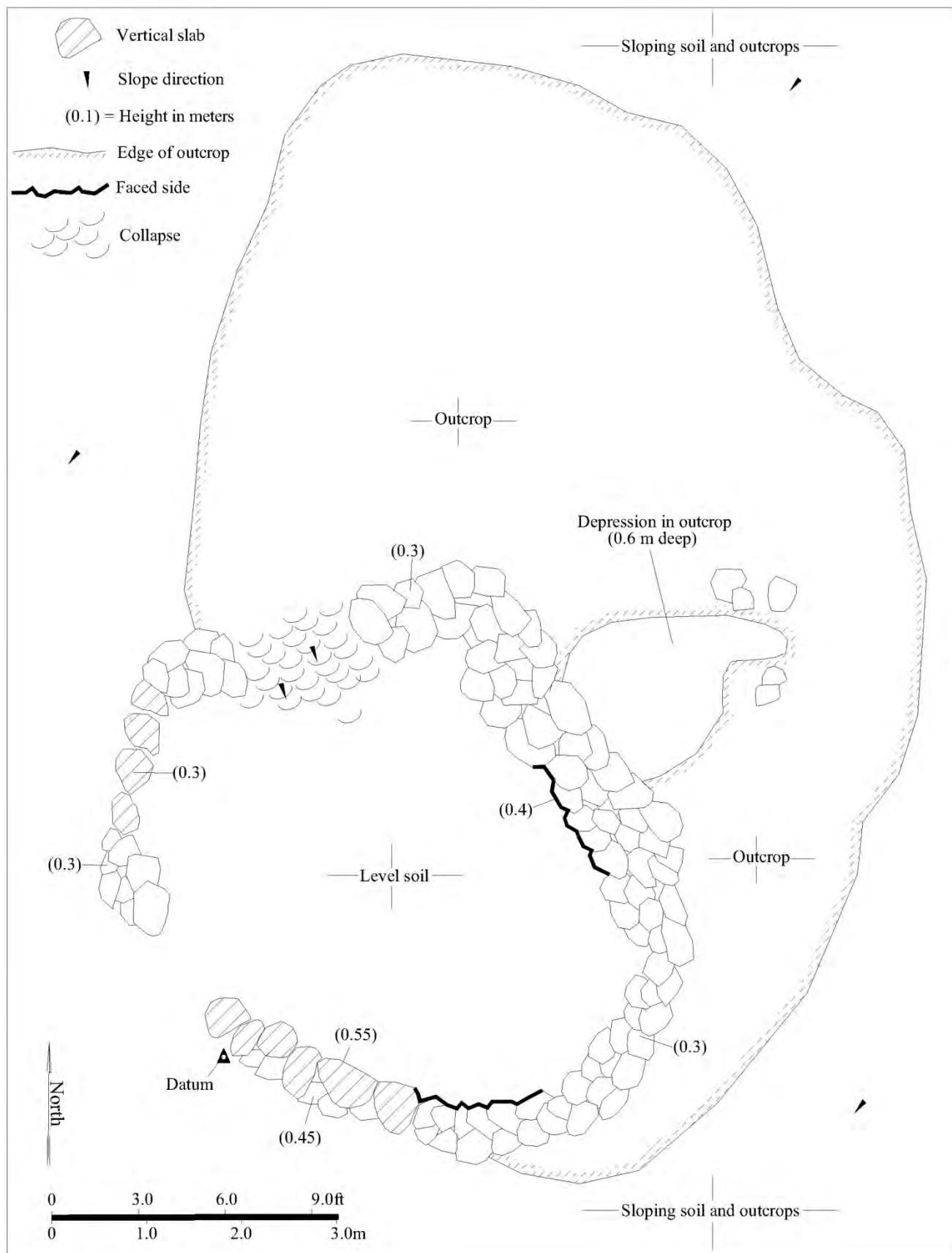


Figure 111. Site 28424 Plan Map

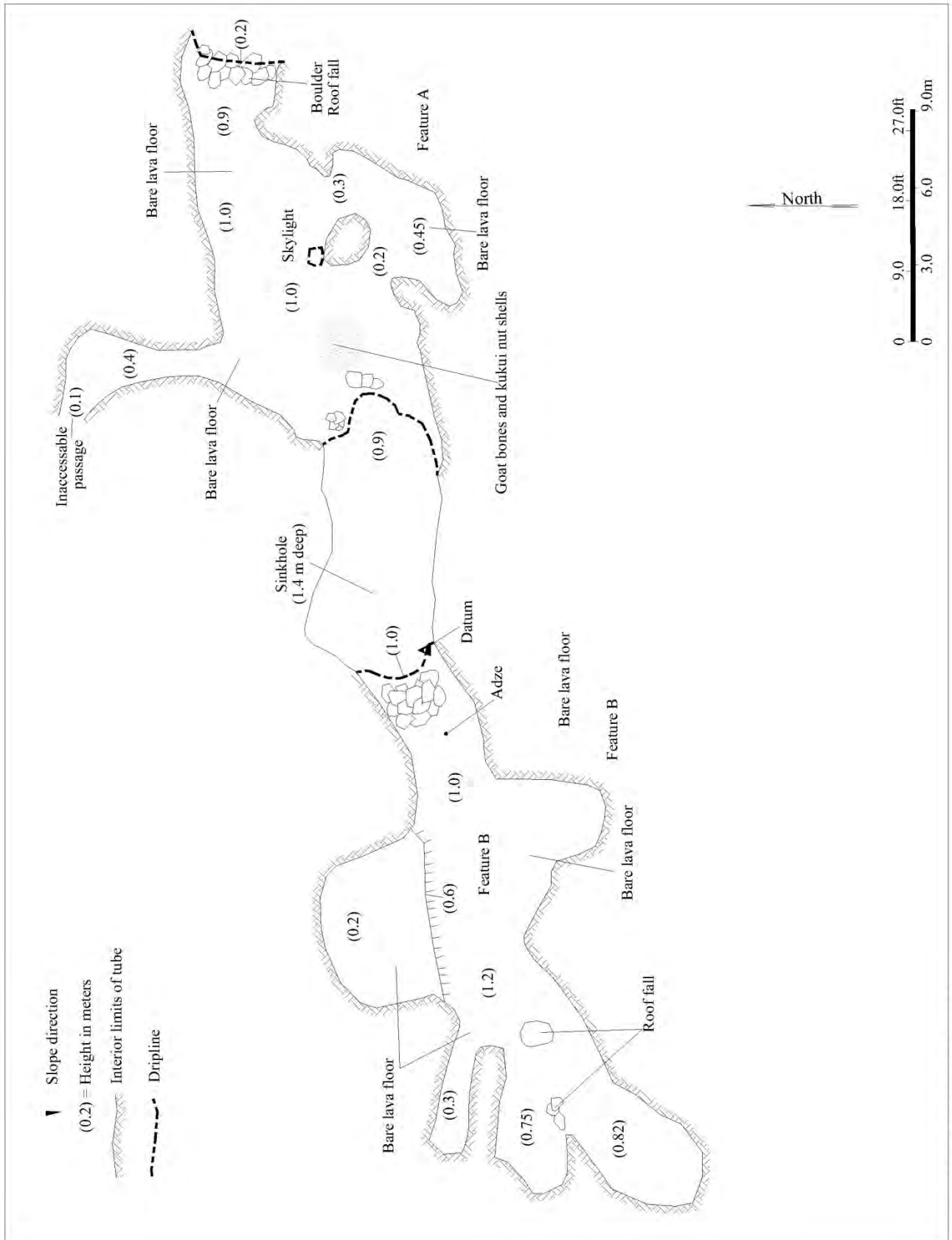


Figure 112. Site 28425 Plan Map



**Figure 113. Site 28425, Feature B Adze Fragment**

**State No.:** 28426 (T-1408)

**Site Type:** Walled Terrace

**Functional Interpretation:** Permanent Habitation

**Topography:** Soil and outcrops sloping to west

**Elevation:** 313ft

**Coordinates:** E=186139, N=2176480

**Vegetation:** Christmas berry, klu, *kiawe*, *alahe'e*, *haole koa*, grasses

**Probable Age:** Prehistoric

**Overall Dimensions:** 11.2 m by 3.6 m

**Condition:** Fair

**Integrity:** Unaltered

**Description:** Site 28426 is a roughly rectangular-shaped walled terrace built against the western side of a raised bedrock outcrop in the northwestern portion of the project area. The terrace is 11.2 m in length (north-south) and 3.6 m wide with a retaining wall along the western side comprised of boulders (0.5 to 0.7 m in height – *Figure 114*). Portions of this retaining wall are faced. The northeastern side of the structure abuts the edge of an outcrop.

There is a stacked cobble and small boulder wall that extends along the southeast and south sides of the terrace. This wall is 0.5 to 1.3 m thick and 0.55 to 0.7 m in height above the surface of the terrace and the adjacent ground surface. The interior eastern side and the portions of the exterior south side are faced. The surface of the terrace in the northern portion is uneven cobbles and small boulders. The southern portion of the site, adjacent to the raised wall, is a level cobble pavement with several scattered small boulders.

There is an oval-shaped depression in the surface of the outcrop adjacent to the terrace to the west. This depression is 2.2 m long (west-northwest by east-southeast), 1.25 m wide and 0.65 m in depth. A linear pile of boulders extends from the west side of the terrace across the southern side of the depression. No cultural remains were present on or adjacent to the site.

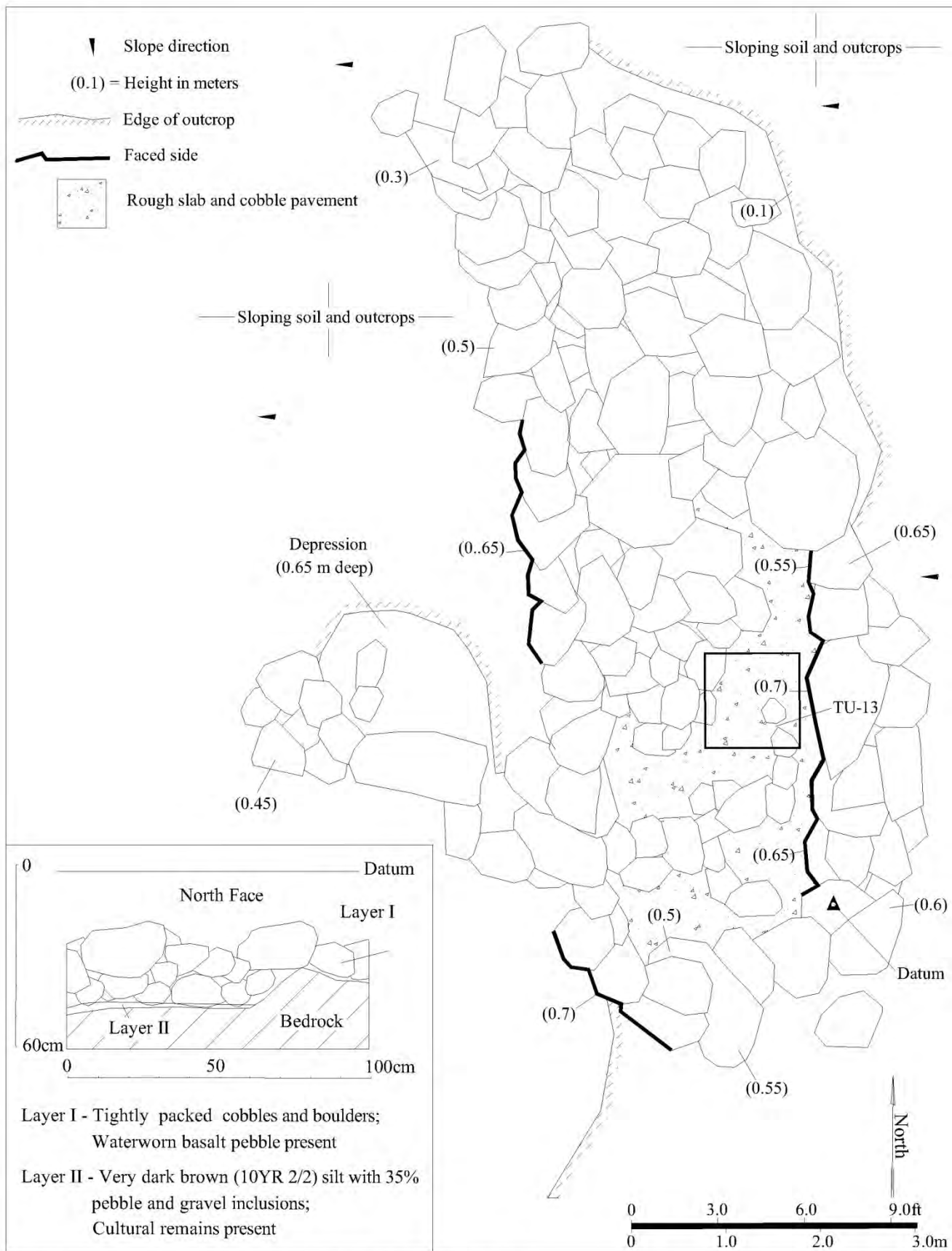


Figure 114. Site 28426 Plan Map and TU-13 North Face Profile

A 1.0 by 1.0 m test unit (TU-13) was excavated in the paved surface revealing two layers over bedrock (see *Figure 114*). Layer I consists of 0.16 to 0.27 m of tightly packed cobbles and pebbles. A waterworn basalt pebble was recovered from Layer I. Bedrock is present below Layer I in the east half of the unit with Layer II present in the west half. Layer II is a 0.01 to 0.04 m thick deposit of very dark brown (10YR 2/2) silt with 35% pebble and gravel inclusions. Cultural remains from Layer II consist of waterworn basalt cobbles and pebbles (740.0g).

Site 28426 is interpreted as the foundation for a permanent habitation roofed structure. This is based on its formal type, substantial construction (faced sides, paved surface) and area (40.3 sq m). The site is unaltered, in fair condition and is assessed as significant for its information content.

**State No.:** 28427 (T-1407)

**Site Type:** Lava Tube

**Functional Interpretation:** Temporary Habitation

**Topography** Pahoehoe lava flow sloping to west and southwest

**Elevation:** 318ft

**Coordinates:** E=186155, N=2176446

**Vegetation:** Christmas berry, *alahe'e*, *haole koa*, grasses

**Probable Age:** Prehistoric

**Overall Dimensions:** 15.1 m long

**Condition:** Good

**Integrity:** Unaltered

**Description:** Site 28427 is lava tube located in an area of sloping pahoehoe lava in the northwestern portion of the project area. It has an overall length of 15.1 m and an area of 48.7 sq m. The main entrance to the tube is through a horizontal opening on the west side of an outcrop that is 2.4 m long (north-northwest by south-southeast) and 0.6 m in height (*Figure 115*). Roof fall cobbles and boulders have been piled under the dripline at the south end, restricting the opening. There is a second opening located 3.3 m to the northeast that is an oval-shaped vertical hole that is 1.25 m long (north-south), 0.75 m wide and 0.7 m in depth. A floor to ceiling column is located adjacent to this entrance to the north.

The interior of the tube is roughly oval in shape and is 9.4 to 10.9 m long (northeast by southwest) and 3.4 to 4.7 m. The floor is bare lava with scattered roof fall and the ceiling heights range from 0.1 to 0.6 m. The eastern end of the tube slopes to the southwest. There is a concentration of charcoal and *kukui* nut shells on the floor of the tube adjacent to the western entrance.

Three passages extend off the main chamber; one to the west, one to the northeast and one to the southeast. The passage to the west is 2.7 m long, 0.5 to 0.75 m wide and 0.3 m in height. The passage to the northeast is 3.15 m long, 0.75 to 1.5 m wide and 0.3 m in height. The passage to the southeast is inaccessible due to its low ceiling height (0.15 m). This passage extends 1.0 m to the south and is 0.8 m wide. The floor in each of these chambers is bare lava and no cultural remains were present.

Site 28427 is interpreted as a temporary habitation shelter based on its formal type and on the presence of the cultural remains. The site is unaltered, in good condition and is assessed as significant for information content.

**State No.:** 28428 (T-1846)

**Site Type:** Pavement

**Functional Interpretation:** Temporary Habitation

**Topography** Sloping pahoehoe lava

**Elevation:** 365 ft

**Coordinates:** E=186447, N=2176351

**Vegetation:** Christmas berry *haole koa*, *alahe'e*, grasses

**Probable Age:** Prehistoric

**Overall Dimensions:** 4.2 m (W-E) by 2.0 m wide (N-S)

**Condition:** Fair

**Integrity:** Unaltered

**Description:** Site 28428 is a pavement located in a low spot between two pahoehoe ridges in the central portion of the project area. The pavement is 4.2 m long (east-west) by 2.0 m wide and is filled in a semi-circular area at the

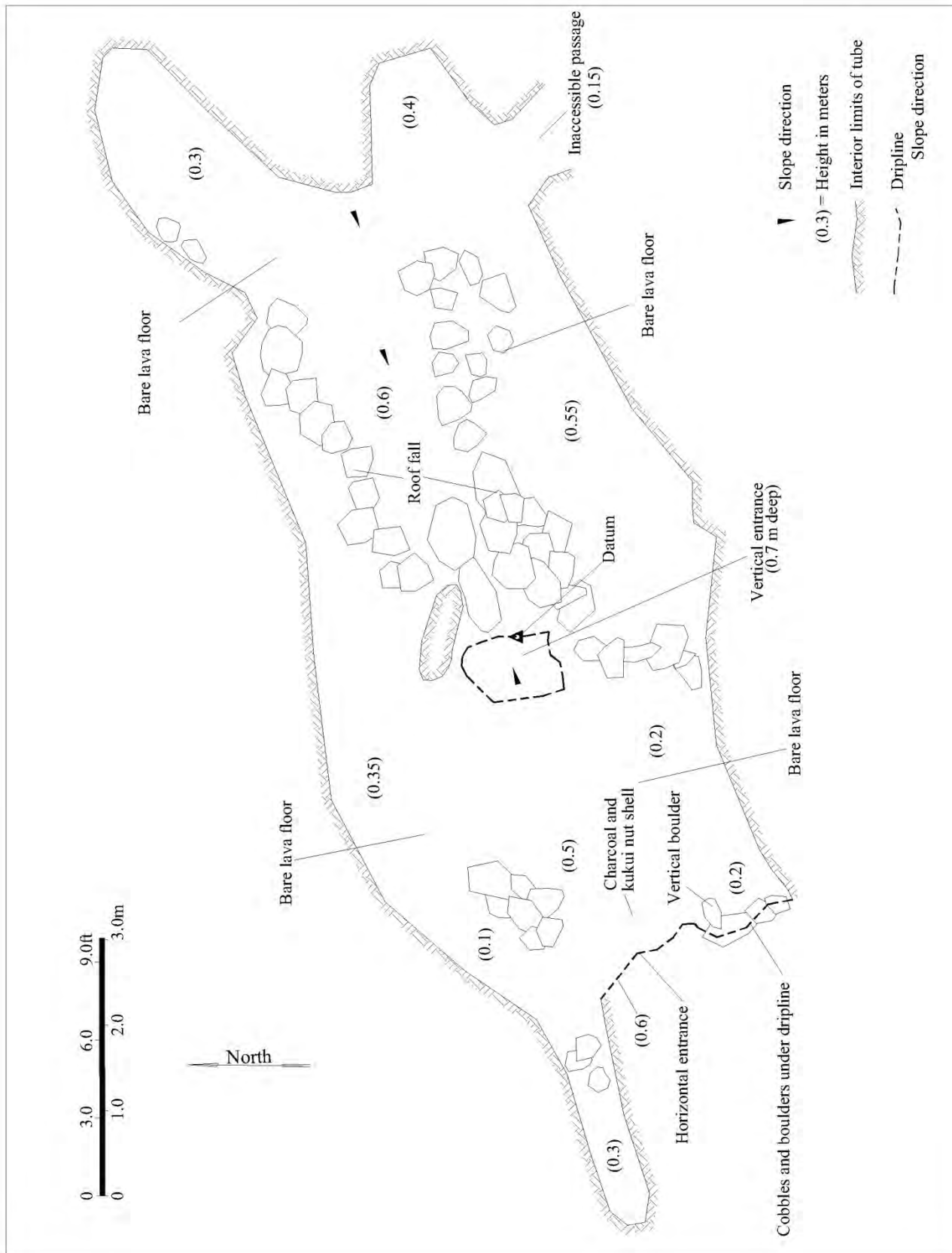


Figure 115. Site 28427 Plan Map

south edge of an outcrop (*Figure 116*). The paved surface is slightly lower than the surrounding pahoehoe surface. The fill consists of piled pahoehoe boulders and cobbles. A flat pahoehoe slab marks the approximate center of the feature. No cultural material was observed in association with the feature. The feature was tested to determine its function.

TU-17, a 1.0 by 1.0 m test unit was excavated in the center of the pavement (see *Figure 116*). Excavation showed that the fill (Layer I) consists of 0.28 m of piled boulders, cobbles and pebbles overlying a silt deposit accumulated on bedrock. No cultural material was recovered from Layer I. Layer II consists of a maximum of 0.28 cm of very dark brown (10YR 2/2) silt with 40% cobble and pebble inclusions. Cultural material recovered from Layer II consists of 54 fragments of crab exoskeleton (11.7g) and 49 fragments of charred wood (5.4g).

Site 28428 is interpreted as a foundation for temporary habitation shelter based on its formal type and small area (8.4 sq m). The site is unaltered and in fair condition. It is assessed significant for its information content.

**State No.:** 28429 (T-1336)

**Site Type:** Complex (2)

**Functional Interpretation:** Temporary Habitation, Marker

**Topography** Pahoehoe flow with shallow soil and outcrops with a moderate slope to the SSW

**Elevation:** 410 ft

**Coordinates:** - E=186638, N=2176473

**Vegetation:** Christmas berry, *alahe'e*, *haole koa*, and fountain grass

**Probable Age:** Prehistoric

**Overall Dimensions:** 13.5 m 5.0 m wide

**Condition:** Good

**Integrity:** Unaltered

**Description:** Site 28429 is a complex of two features located in the northeastern portion of the project area. It consists of a cairn (Feature A) and a lava blister (Feature B) with a horizontal surface overhang entry (*Figure 117*). The Feature A cairn is located 12.0 m south of the entrance to Feature B. It is constructed of two stacks of pahoehoe boulder slabs 3 courses high. The cairn is 1.0 m long by 0.5 m wide and 0.3 m high.

No cultural remains were present.

**Feature B** is a lava tube composed of a linear N-S main passage and two contiguous side chambers that intersect the main passage on its west-central side. The Feature B tube is 17.5 m long with an area of 33.7 sq m. The entry provides access to the north end of the chamber immediately adjacent to the main passage. The entrance is 1.9 m wide and the dripline height is 0.65 m. The entry chamber is 2.5 m long by a maximum of 2.5 m wide and is entirely within the light zone. The floor surface is a shallow soil deposit containing non-human mammal bones, avian bones and *kukui* nutshells. A small sub-chamber intersects the northwest side of the entry chamber. The sub-chamber is 2.2 m long by 1.8 m wide and is within the twilight zone. Both afford only crouched access. The sub-chamber floor is bare lava overlain by roof fall debris and no cultural material was observed within it. On the east side of the entry chamber access to the main passage is partially obscured by two to three courses of large boulders and cobbles piled in such a way as to obstruct access. The rock pile is 1.0 m long by a maximum of 0.5 m high. The entrance to the main passage is 1.9 m wide and the ceiling height is 0.4 m. The main passage extends about 7.0 m north and south of the chamber entryway and beyond that, is not traversable. No cultural material was observed within the main passage.

Site 28429 is interpreted as a temporary habitation shelter based on its formal type and the associated cultural material. The site is unaltered and in excellent condition, and is assessed significant for its information content.

**State No.:** 28430 (T-1277)

**Site Type:** Complex (2)

**Functional Interpretation:** Temporary Habitation, Rock Art, Water Catchment

**Topography** Pahoehoe lava flow sloping gently to southwest

**Elevation:** 410-420ft

**Coordinates:** E=186697, N=2176399

**Vegetation:** Christmas berry, lantana, autograph tree, *haole koa*, grasses

**Probable Age:** Prehistoric

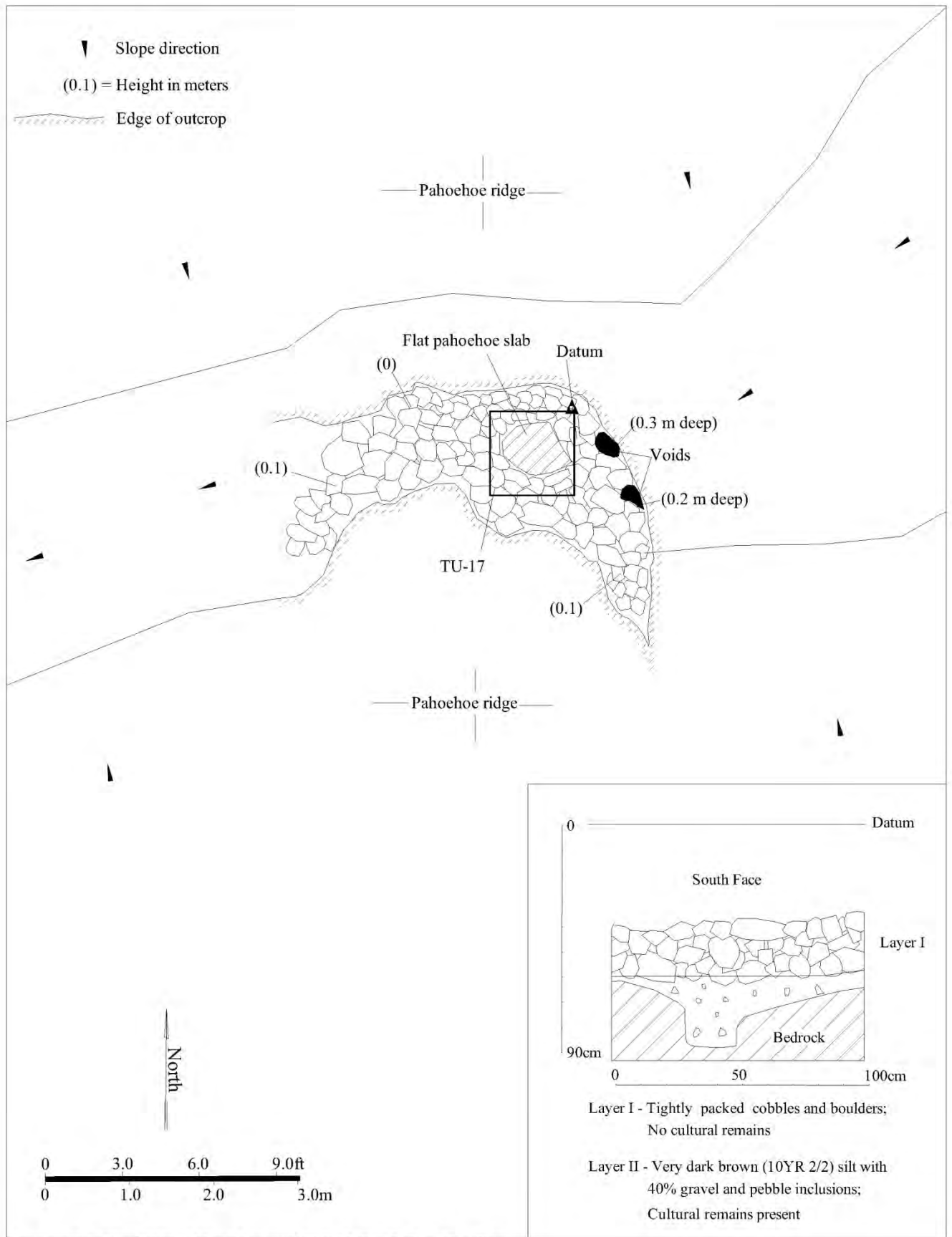


Figure 116. Site 28428 Plan Map and TU-17 South Face Profile



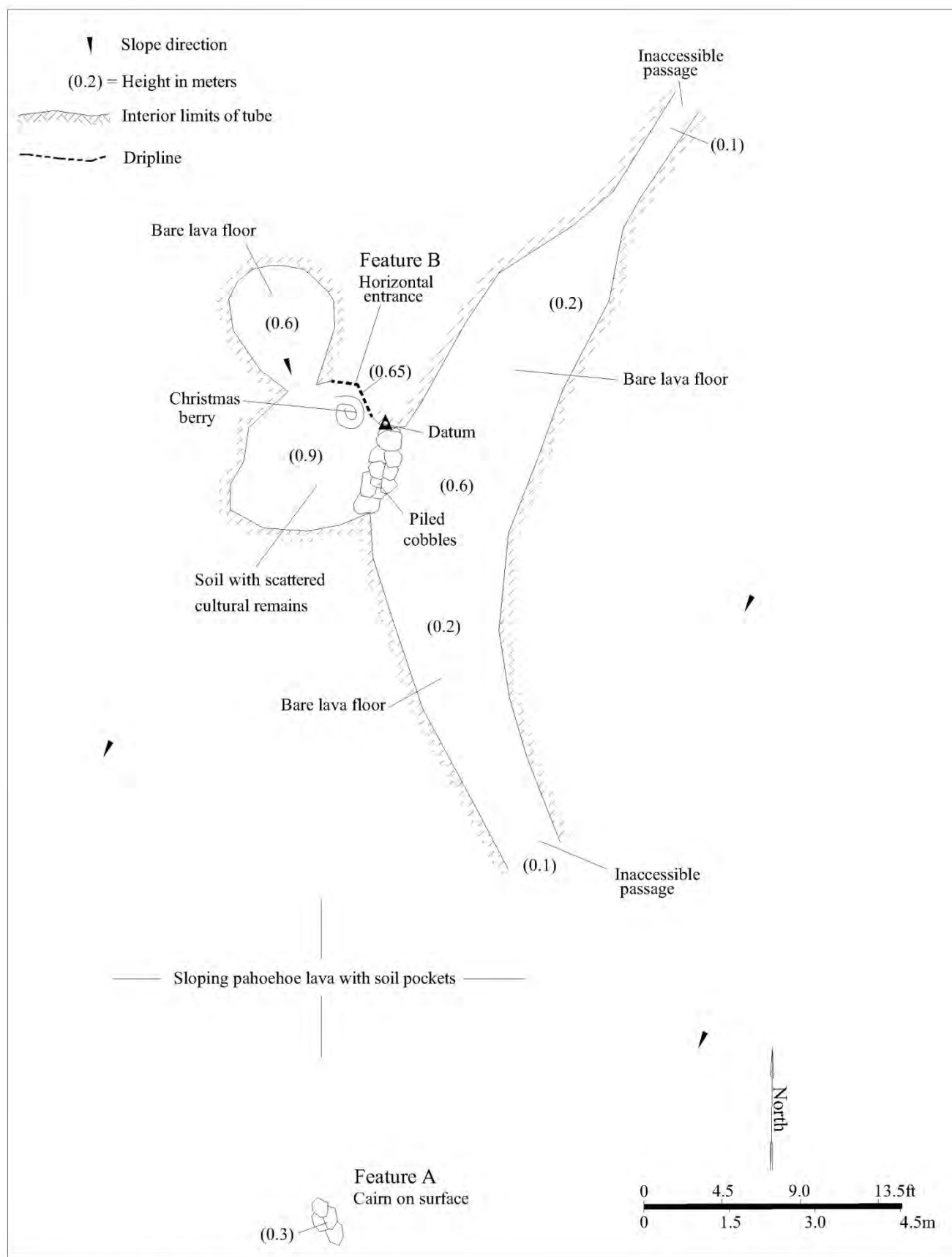


Figure 117. Site 28429 Plan Map

**Overall Dimensions:** 65.0 m long

**Condition:** Good

**Integrity:** Unaltered

**Description:** Site 28430 is a complex comprised of a lava tube (Feature A) and a surface petroglyph (Feature B) located in an area of gently sloping pahoehoe lava in the southeastern portion of the project area. The tube has an overall length of 65 m and an area of 232.1 sq m. The main entrance to the Feature A tube is through a horizontal opening at the western end that is on the side of an outcrop (*Figure 118*). This entrance is 6.6 m wide (north-northeast by south-southwest) and 1.2 m wide with roof fall located inside and outside the dripline. This opens onto a linear chamber that is 49.5 m long (east-west) and 1.9 to 4.3 m wide. The floor throughout this chamber is bare lava and the ceiling heights range from 0.2 m at the eastern end to 2.1 m at its highest point. A small, secondary entrance is located at the east end of the main tube, measuring 0.85 m wide and 0.7 m in height.

There are four concentrations of goat bones on the floor of the tube within 10.0 m of the western entrance. A large roof fall slab is located to the east of the goat bones with areas that appear to be filled with cobbles along its north and south sides. There is an area of dark soil with scattered charcoal located 4.0 m east of the roof fall slab. There is an oval rock ring (0.8 m long by 0.6 m wide) adjacent to the south and a cluster of surface charcoal on the bare lava floor to the east.

Two additional oval rock rings are situated 2.8 m to the northeast of the first, ranging in length from 0.72 to 0.8 m and in width from 0.5 to 0.58 m. The westernmost ring has a scatter of charcoal in the interior. There are two more rock rings located 10 m further east. One is oval (0.74 m long by 0.54 m wide) and one is U-shaped (0.6 m long by 0.5 m wide).

There are four concentrations of surface charcoal and a small area of ash situated 3.5 m east of the U-shaped rock ring. There is an area of shallow ashy soil with charcoal located further east, just inside the secondary entrance into the Feature A tube.

There are three side passages that extend off the main chamber, one in the western portion and two in the eastern. The western passage extends to the north from the main chamber and is 14.8 m long (north-south) and 3.4 to 7.4 m wide. The floor is bare lava and the ceiling heights range from 0.3 to 0.8 m. This chamber is bisected by two floor to ceiling columns. Areas of roof fall are located in the northern portion and two concentrations of goat bones are present. A low (0.1 m high) inaccessible passage extends to the north from the northern end of this chamber.

The second side passage is located in the east portion of the main chamber, extending to the south from the southern wall. It is 8.4 m long (north-northwest by south-southeast), 0.85 to 4.6 m wide, with a bare lava floor and ceiling heights that range from 0.5 to 0.6 m. No cultural remains were present. The third passage is located opposite the second, along the north side of the main tube. It extends 4.75 m to the east-northeast then turns to the north for an additional 1.2 m where it becomes inaccessible due to its low ceiling (0.1 m). The tube is 0.6 to 0.8 m wide, 0.4 m in height with a bare lava floor and no cultural remains.

The Feature B petroglyph is located 8.9 m north-northeast of the entrance to the Feature A lava tube, on a level pahoehoe lava outcrop. The petroglyph is an anthropomorphic image that is 31 cm long and 23 cm wide. It has a torso with arms, legs and a head. No cultural remains were found in association with the petroglyph.

Site 28430 is interpreted as a temporary habitation site with an associated rock art component. The Feature A lava tube is assigned a temporary habitation function due to its formal type and cultural remains within its interior. The presence of the rock rings in Feature A also indicates the tube was used to collect water. The Feature B petroglyph is assigned a rock art function due to its formal type and appearance. The site is assessed as significant for its information content. It is unaltered and in good condition.

**State No.:** 28431 (1278)

**Site Type:** Lava Tube

**Functional Interpretation:** Temporary Habitation

**Topography:** Pahoehoe lava sloping gently to west

**Elevation:** 400ft

**Coordinates:** E=186664, N=2176357



**Vegetation:** Christmas berry, *haole koa*, *alahe'e*, *noni*, grasses

**Probable Age:** Prehistoric

**Overall Dimensions:** 7.7 m by 4.7 m

**Condition:** Good

**Integrity:** Unaltered

**Description:** Site 28431 is a lava tube located in an area of gently sloping pahoehoe lava in the southeastern portion of the project area. The tube has an overall length of 7.7 m and an area of 12.5 sq m. The entrance to the tube is through an opening on the side of an outcrop that is 4.7 m wide and 0.1 to 0.75 m in height (*Figure 119*). This opens onto an irregularly-shaped chamber that is 7.7 m long (northeast by southwest) and from 0.65 to 4.7 m wide. The ceiling heights range from 0.15 m at the southwest to 0.8 m in the center. Roof fall is present on the floor adjacent to the entrance to the southwest. The remainder of the floor is a level soil with scattered *kukui* nut shells and charcoal. There is a small concentration of ash on the floor near the southwestern end.

Site 28431 is interpreted as a temporary habitation shelter. This is based on its formal type and on the presence of the cultural remains. The site is unaltered and in good condition. It is assessed as significant for information content.

**State No.:** 28432 (T-1157, 1254, 1852)

**Site Type:** Cart Path

**Functional Interpretation:** Transportation

**Topography:** Pahoehoe lava sloping to southwest

**Elevation:** 350-375ft

**Coordinates:** Southwest end - E=186536, N=2176108

**Vegetation:** Christmas berry, *haole koa*, *alahe'e*, grasses

**Probable Age:** Historic

**Overall Dimensions:** 150.0 m by 3.8 m

**Condition:** Fair

**Integrity:** Unaltered

**Description:** Site 28432 is a linear cart path located in the approximate center of the project area. The site is three obvious modified sections that have been built over low, difficult to traverse areas, connected by relatively smooth sloping soil and pahoehoe lava. The extent of the cart path is depicted in *Figure 8b*, as are the location of the three modified areas (Features A-C).

The Feature A section is located at the southwestern end of the cart path. No evidence of the path was found further to the southwest. This section is built against the southern side of a raised bedrock outcrop (0.5 m in height) and is 9.4 m long (northeast by southwest) and 1.5 to 3.4 m wide (*Figure 120*). There is a stacked and faced cobble and small boulder retaining wall extending along the southeastern side of the structure that is 0.4 to 1.0 m in height above the surrounding ground surface. An alignment of small boulders and cobbles borders the terrace along the southwest side that is 2.4 m long (north-south) and 0.2 m in height. The remaining sides of the terrace are level with the adjacent outcrop.

The surface of the section is a gently sloping cobble, pebble and small boulder pavement with no cultural remains present. The interior travel space between the walls is 0.95 to 2.8 m wide. There is a cluster of flat pahoehoe slabs present on the surface of the structure along the southeastern side. This cluster is 1.4 m long (northeast by southwest) and 0.45 to 0.75 m wide. No cultural remains were present.

The Feature B modified section is located 62.5 m to the northeast of Feature A, across an area of sloping pahoehoe lava. This section is 9.3 m in length (north-south) and 3.4 m wide and is bordered along the east and west sides by low stone walls (*Figure 121*). The walls are constructed of stacked cobbles and small boulders and are 0.7 to 1.2 m wide and 0.25 to 0.7 m in height. Facing is present along the exterior east and west sides. The interior surface is a sloping soil in the southern portion and pahoehoe outcrop in the northern portion. The interior travel space is 1.6 m wide. No cultural remains were present on the surface.

The Feature C section is situated 51.6 m to the northeast, separated by areas of sloping soil and pahoehoe lava. This section is 13.8 m in length (northeast by southwest) by 3.8 m wide and is bordered along the northwest and southeast sides by low walls (*Figure 122*). The walls are constructed of stacked cobbles and small boulders and are 0.7 to 1.0 m wide and 0.25 to 0.5 m in height. Portions of the exterior northwest and southeast sides are faced as is

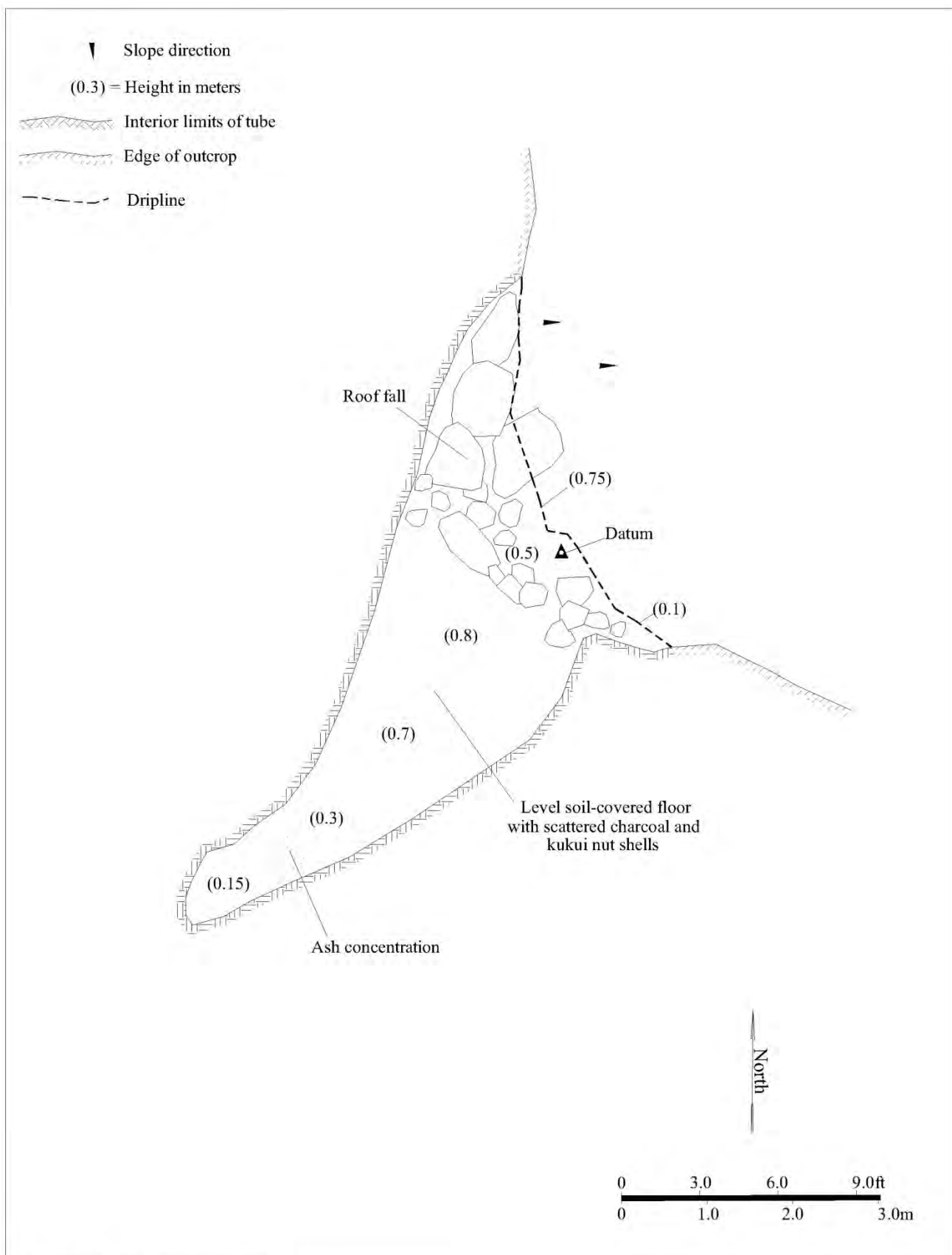


Figure 119. Site 28431 Plan Map

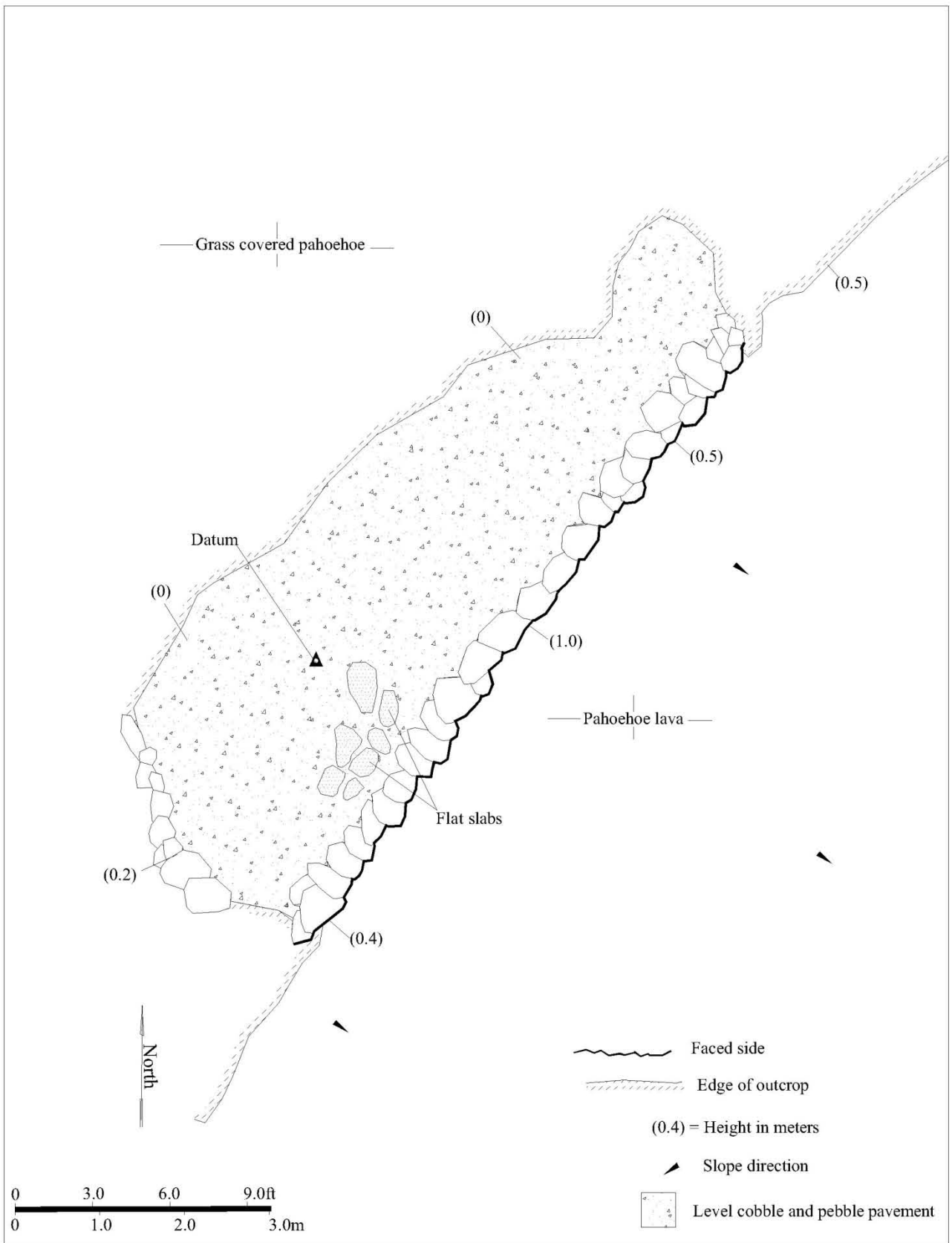


Figure 120. Site 28432, Feature A Plan Map

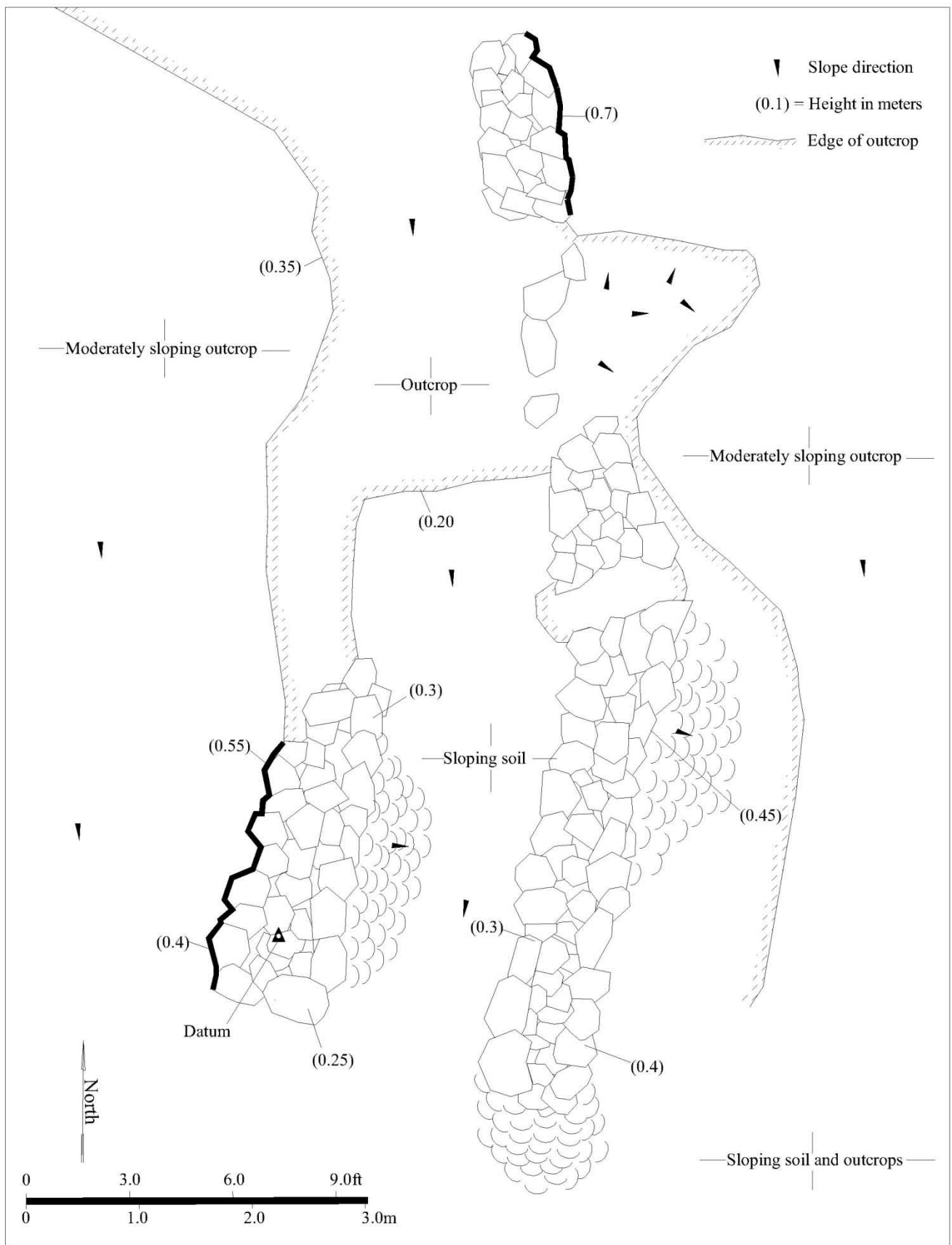


Figure 121. Site 28432, Feature B Plan Map

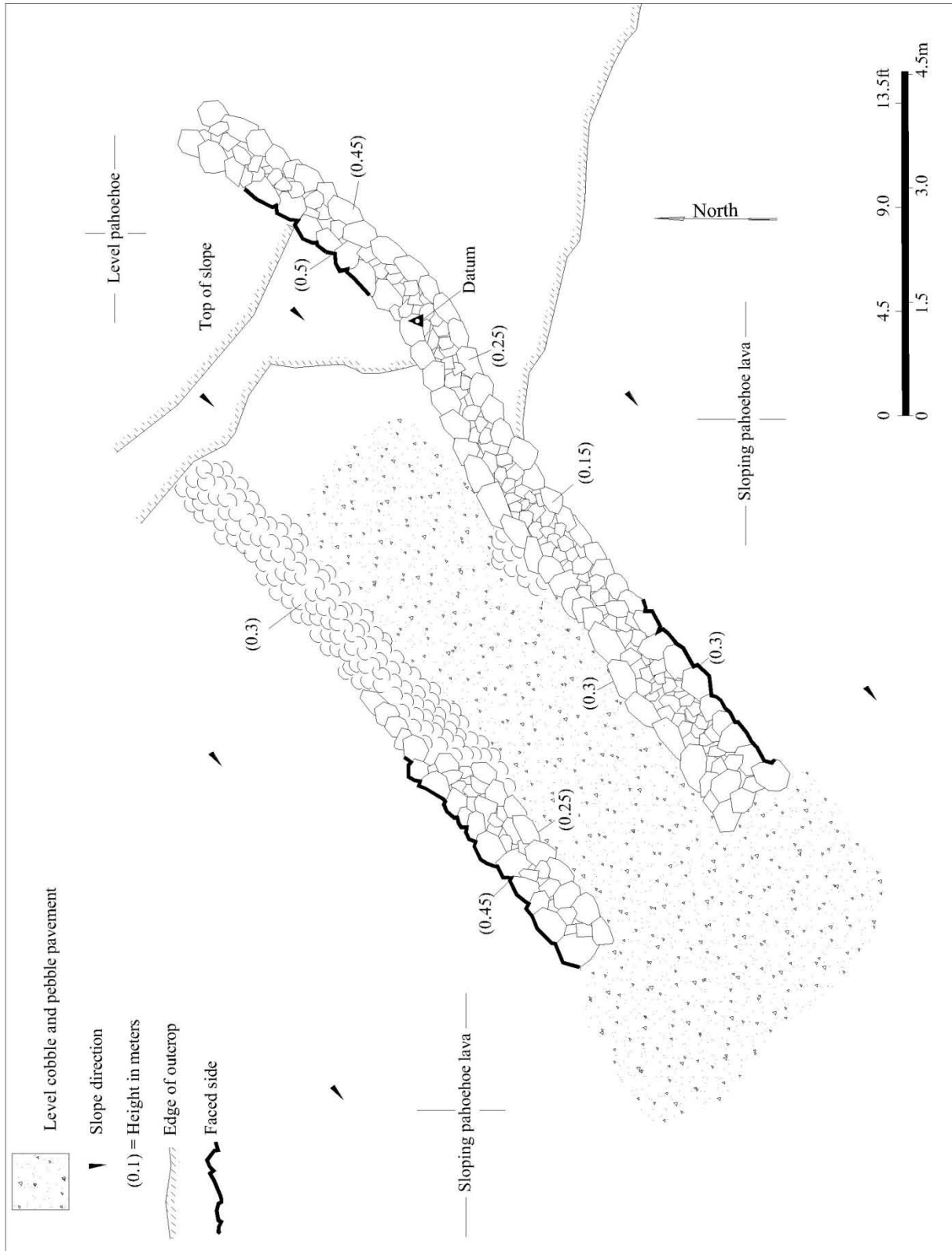


Figure 122. Site 28432, Feature C Plan Map



the interior side of the southeast wall. The interior surface of most of the cart path is a level cobble and pebble pavement. This interior travel space is 1.8 m wide. The northeastern end is sloping pahoehoe outcrop that ends in an area of level pahoehoe. No cultural remains were present on the surface of the site. No evidence of the cart path was noted to the northeast of Feature C.

Site 28432 is interpreted as an historic transportation route that once extended through a portion of the project area. This is based on its formal type and appearance. As no evidence of the cart path was present to the southwest of Feature A or northeast of Feature C, it is possible that the site is unfinished. The site is classified as a Type D trail as defined by Apple (1965). According to Apple, this type of trail is a Type C trail wide enough for two horse travel that was modified to accommodate the use of wheeled vehicles and dates to the late nineteenth to early twentieth century. The site is unaltered and fair condition. It is assessed as significant for its information content.

**State No.:** 28433 (T-1290)

**Site Type:** Complex (2)

**Functional Interpretation:** Permanent Habitation

**Topography** Pahoehoe and a'a lava sloping to southwest

**Elevation:** 363ft

**Coordinates:** E=186529, N=2176220

**Vegetation:** Christmas berry *haole koa*, *alahe'e*, *klu*, grasses

**Probable Age:** Prehistoric

**Overall Dimensions:** 10.7 by 4.25 m

**Condition:** Fair

**Integrity:** Unaltered

**Description:** Site 28433 is a complex of two features located in the central portion of the project area at the interface between an a'a lava flow and a pahoehoe flow. The site consists of a terrace (Feature A) and a cupboard (Feature B) located in an area 10.7 m long (north-south) and 4.25 m wide (*Figure 123*).

Feature A is a rectangular-shape terrace located at the north end of the site. It is built on an a'a lava flow that abuts a pahoehoe flow to the north. It is rectangular in shape and is 4.0 m long by 3.1 to 3.65 m wide. There is a stacked cobble and small boulder retaining wall along the southwest side that is 0.2 to 0.35 m in height. The southeast side is collapsed (0.2 m high) and the north and northeast sides are level with the adjacent outcrop. The surface is a level cobble and pebble pavement with no cultural remains present.

A 1.0 by 1.0 m test unit (TU-69) was excavated into the center of the terrace revealing a single layer over bedrock (see *Figure 123*). Layer I consists of 0.67 to 0.89 m of tightly packed cobbles, pebbles and small boulders. No cultural remains were present.

Feature B is a small cupboard located on the a'a lava 5.5 m to the south-southwest of Feature A. It is a partially open lava blister with a flat pahoehoe slab that was placed over the open portion to create the cupboard. The interior is 1.6 m long (east-west), 0.7 m wide and 0.3 m high. Scattered goat bones are present inside.

Site 28433 is interpreted as a complex of permanent habitation features. Although slightly smaller than typical house foundation (14.6 sq m), Feature A's formal type and substantial construction (paved surface) suggest it functioned in this capacity. The Feature B cupboard is interpreted as an associated storage feature based on its appearance and proximity to Feature A. The site is unaltered, in fair condition and is assessed as significant for its information content.

**State No.:** 28434 (T-1171)

**Site Type:** Lava Tube

**Functional Interpretation:** Temporary Habitation

**Topography** Pahoehoe flow with shallow soil and outcrops sloping to south-southwest

**Elevation:** 362-373 ft

**Coordinates:** E=186620, N=2176169

**Vegetation:** Christmas berry, *alahe'e*, *noni*, *uhaloa* and various grasses

**Probable Age:** Prehistoric

**Overall Dimensions:** 54.2 m long

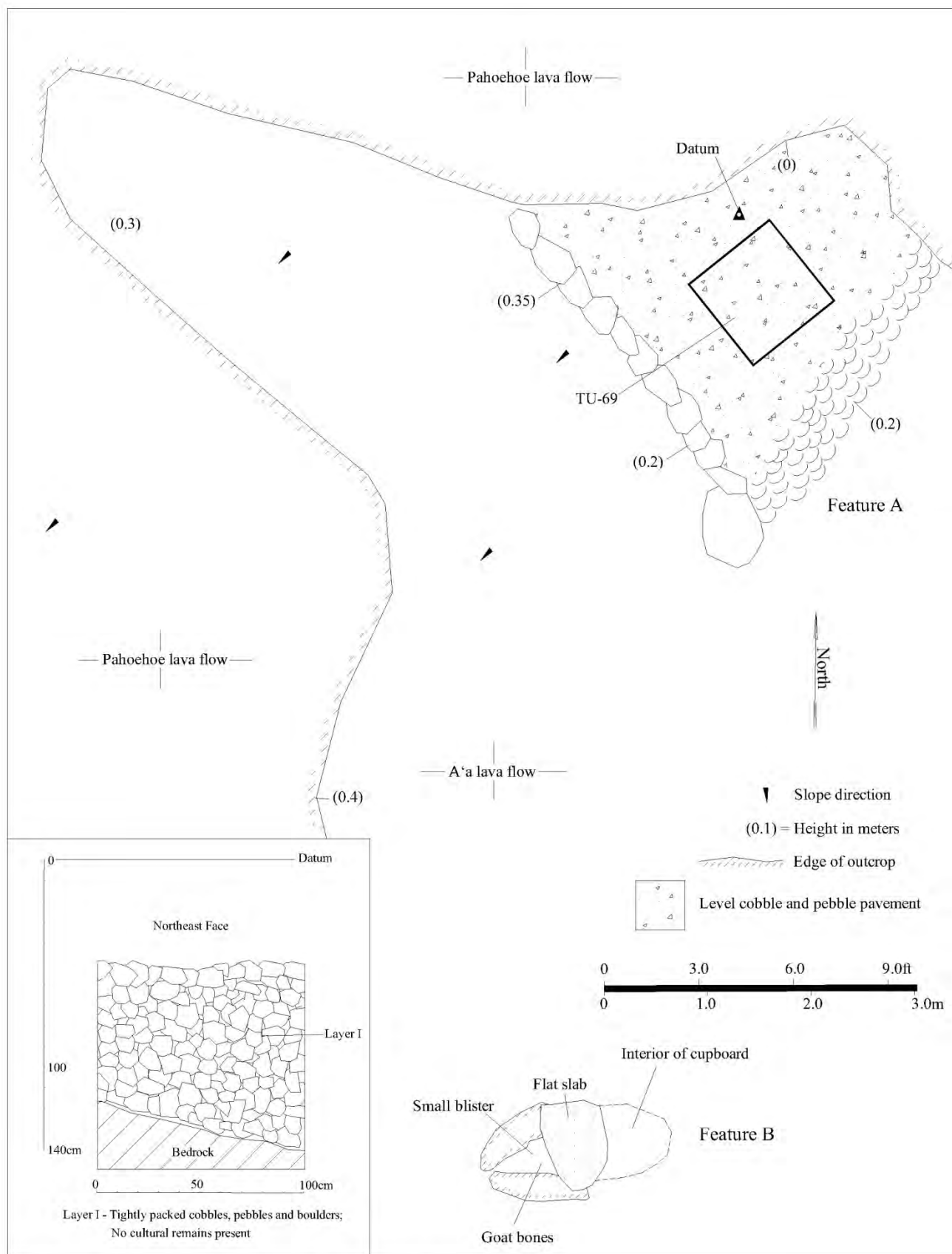


Figure 123. Site 28433 Plan Map and TU-69 Northeast Face Profile

**Condition:** Good

**Integrity:** Unaltered

**Description:** Site 28434 consists of a lava tube located in the south-central portion of the project area. The tube has an overall length of 54.2 m and an area of 294.8 sq m. The tube is accessible from three vertical entries in the central portion of the tube (*Figure 124*). The north entrance is the smallest at 0.6 m in diameter, and provides access into a sitting-height (1.25 m) area within the light zone of the entrance. Collapsed roof debris litters the chamber floor around the north entrance. Small patches of a shallow soil deposits are present on the floor to the northeast and southeast of the entry and charcoal fragments were observed in the soil deposit at the entrance to a small un-traversable side chamber to the southeast. The light zone around the north entrance is within a 1.5 m radius of the opening. The northern end of the tube is accessible by crawling from the north entry for c. 7.0 m before it becomes too narrow to traverse. All but 1.5 m of the north end of the tube is within the dark zone. The floor is bare lava and a concentration of goat and rodent bones mark the southern end of the dark zone. Beyond that, a *kukui* nutshell and non-cultural small mammal bones are exposed on the tube floor near the northern traversable extent of the tube.

The central entrance to the lava tube is located 11.5 m SSW of the north entrance and all but c. 4.0 m is within the light zone or twilight zone of the two entrances. Much of the floor between the two entrances is bare lava, with a 5.0 by 0.5 m patch of shallow soil accumulated on the floor in the center of the passage. The central entrance is 1.8 m long (N-S) by 0.8 m wide and provides a vertical entry from the ground surface to the tube floor 0.65 m below. The central entrance provides sitting space and only crawling access to the main tube where the ceiling is low (0.5 m) and the floor is littered with collapsed rubble. The light zone covers a c. 1.5 m radius from the entry and the twilight zone extends another 1.5 m to the north and south. On the east side of the central entry marine shells (*Cypraea*, *Drupa*, *Isognomon*) and urchin exoskeleton fragments are scattered over the roof fall debris. A concentration of *kukui* nutshells and a sparse scatter of charcoal are located on the south side of the scattered shells. A shallow soil deposit covers the floor around the eastern and southern perimeter of the entrance and defines the southern extent of the light zone around the central entry.

The south vertical entry is located c. 14.0 m south of the central entrance and provides access to the larger of the two side chambers that intersect the main passage. The vertical drop is 1.15 m from the ground surface to the chamber floor below and the entry is c. 1.0 m in diameter. The chamber is very low, with a ceiling height of c. 1.0 m or less on the south side of the entrance. Two small floor-to-ceiling columns dominate the center of the chamber to the east and south of the south entry and divide the chamber into east and west halves. Collapsed rubble overlies the chamber floor in the west half of the chamber frames an area within which scattered cultural material is exposed along and within a shallow soil deposit. Cultural material includes an avian bone, a pencil urchin spine possibly used as an abrader, *Isognomon* shells, a *kukui* nutshell and scattered charcoal. A waterworn basalt pebble and a *Porites* sp. coral pebble abrader are exposed on the chamber floor peripheral to the main cultural concentration, near the southern end of the chamber. The chamber is only sitting-height on the west side and the east side is only accessible by crawling. The passage from the large eastern chamber to the main passage is narrowed to c. 1.0 m in width due to collapsed roof fall debris that partially blocks the passage and the low ceiling (0.65 m) requires crawling to access the main tube.

The passage between the south and central entries is accessible by crawling through a narrow passage that is wholly within the lava tube's dark zone. The passage between the two entries is bifurcated by a large floor-to-ceiling column 6.0 m long and 1.8 m wide. On the east side, *kukui* nutshells and charcoal fragments are associated with a small shallow soil deposit on the bare lava floor. On the west side, an avian bone, charcoal fragments and *kukui* nutshells are exposed on the floor at the northwest end of the column. The southwest end of the column marks an inaccessible passage on the west side of tube because of the low ceiling height (0.25 m). The main passage of the tube continues SSW for an additional 16.3 m before becoming un-traversable and is wholly within the dark zone. The floor is bare lava with scattered roof fall in the vicinity of the south entrance. Urchin and charcoal fragments are exposed on the floor at the southern-most traversable end of the lava tube.

Site 28434 is interpreted as a temporary habitation shelter based on its formal type and associated cultural material. The site is unaltered and in good condition and is assessed significant for its information content.

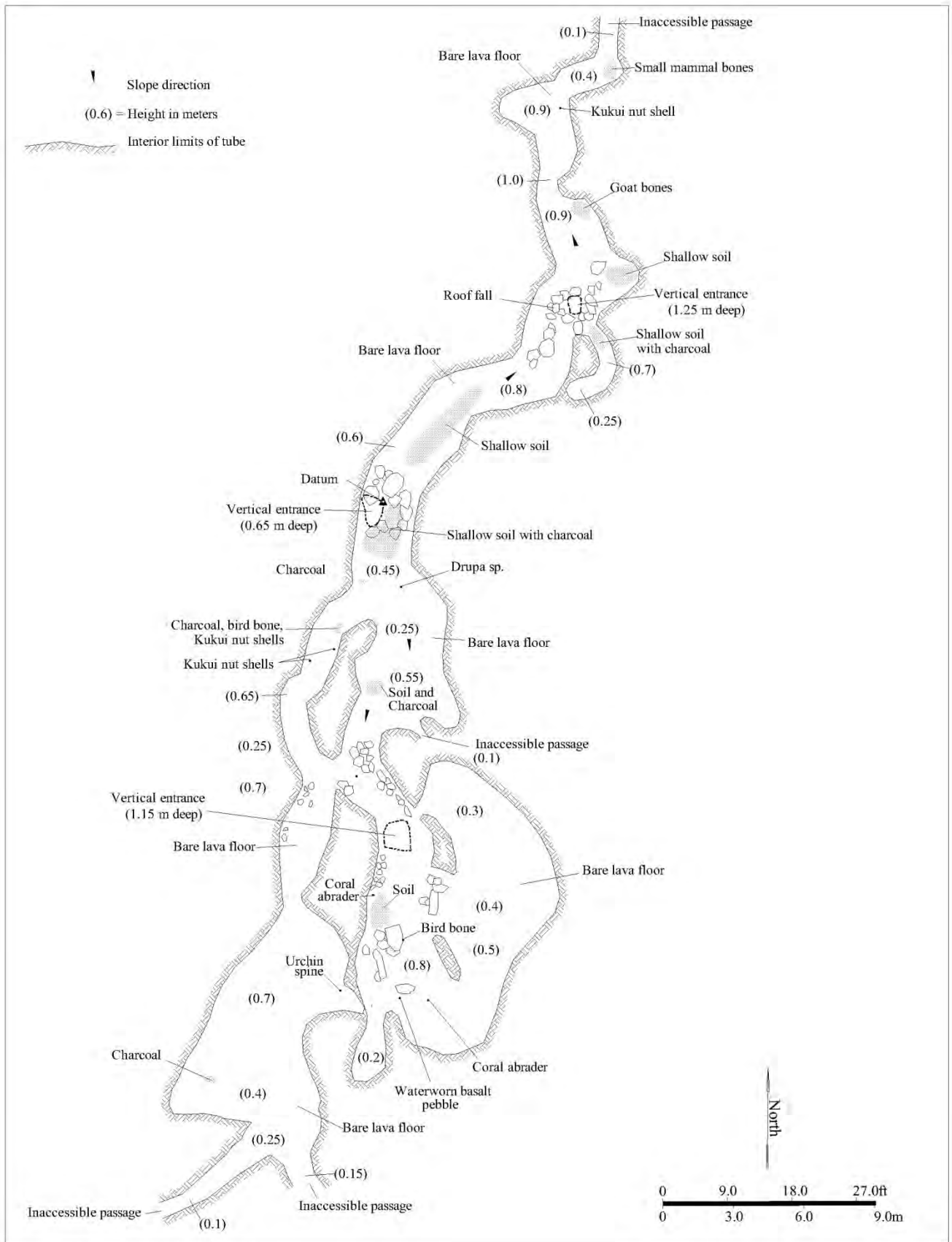


Figure 124. Site 28434 Plan Map

**State No.:** 28435 (T-1152)  
**Site Type:** Trail  
**Functional Interpretation:** Transportation  
**Topography** A'a lava flow  
**Elevation:** 308 ft  
**Coordinates:** - E=186432, N=2176039  
**Vegetation:** Christmas berry, *haole koa*, grasses  
**Probable Age:** Prehistoric  
**Overall Dimensions:** 31.3 m by 0.83 m  
**Condition:** Fair  
**Integrity:** Unaltered

**Description:** Site 28435 is a linear alignment of 58 flat pahoehoe slabs that extend across an area of a'a lava in the southwestern portion of the project area. The trail originates adjacent to a pahoehoe lava flow at the south end and it extends 31.3 m to the northwest, where it terminates at another pahoehoe flow (*Figure 125*). The individual slabs vary in length from 0.22 to 0.83 m and in width from 0.15 to 0.54 m. No cultural remains were present.

The Site 28435 trail is classified as a Type A trail as defined by Apple (1965) that functioned as a single file foot trail constructed during pre-Contact times. It functioned as a path that connects two areas of pahoehoe lava across an uneven a'a lava flow, based on its formal type and appearance. The site is unaltered and in good condition. It is assessed as significant for its information content.

**State No.:** 28436 (T-1146)  
**Site Type:** Lava Tube  
**Functional Interpretation:** Temporary Habitation  
**Topography:** Soil and outcrops sloping gently to west  
**Elevation:** 340ft  
**Coordinates:** E=186516, N=2176042  
**Vegetation:** Christmas berry, *haole koa*, *alahe'e*, grasses  
**Probable Age:** Prehistoric  
**Overall Dimensions:** 9.9 m by 2.5 m  
**Condition:** Good  
**Integrity:** Unaltered

**Description:** Site 28436 is a small lava tube situated in the central portion of the project area. The tube has an overall length of 9.9 linear meters and an area of 18.8sq m. The entrance to the tube is through a vertical hole in a surface outcrop that is 2.7 m long (east-west), 0.85 m wide and 0.6 m deep (*Figure 126*). Roof fall is present at the base of the entrance. The tube extends to the south and east from the entrance. The tube to the south is 2.5 m long (east-west) and 1.9 m wide with a bare lava floor and ceiling heights that range from 0.5 to 0.8 m. A fragment of waterworn coral is present on the floor of this portion of the tube, with an area of scattered roof fall to the west.

Three low inaccessible passages extend of this tube; one to the west, one to the south-southwest and one to the south. The passages have ceilings heights of 0.1 to 0.2 m and could not be accessed. Observations made from outside these passages indicate they are at least 1.5 to 2.5 m long and 0.45 to 0.8 m wide with lava floors and no cultural remains.

The tube extending to the east from the entrance is 3.3 m long (east-west) by 1.6 to 2.5 m wide with ceiling heights that range from 0.25 to 0.3 m. The floor in this portion of the tube is a shallow soil deposit with no cultural remains present. Two low inaccessible passages (0.05 to 0.2 m) extend to the east-northeast from this chamber. These tubes are at least 1.6 to 2.5 m long, 0.42 to 1.15 m wide.

Site 28436 is interpreted as a possible temporary habitation shelter. This interpretation is based on its formal type and on the presence of the waterworn coral. The site is unaltered and in good condition. It is assessed as significant for its information content.

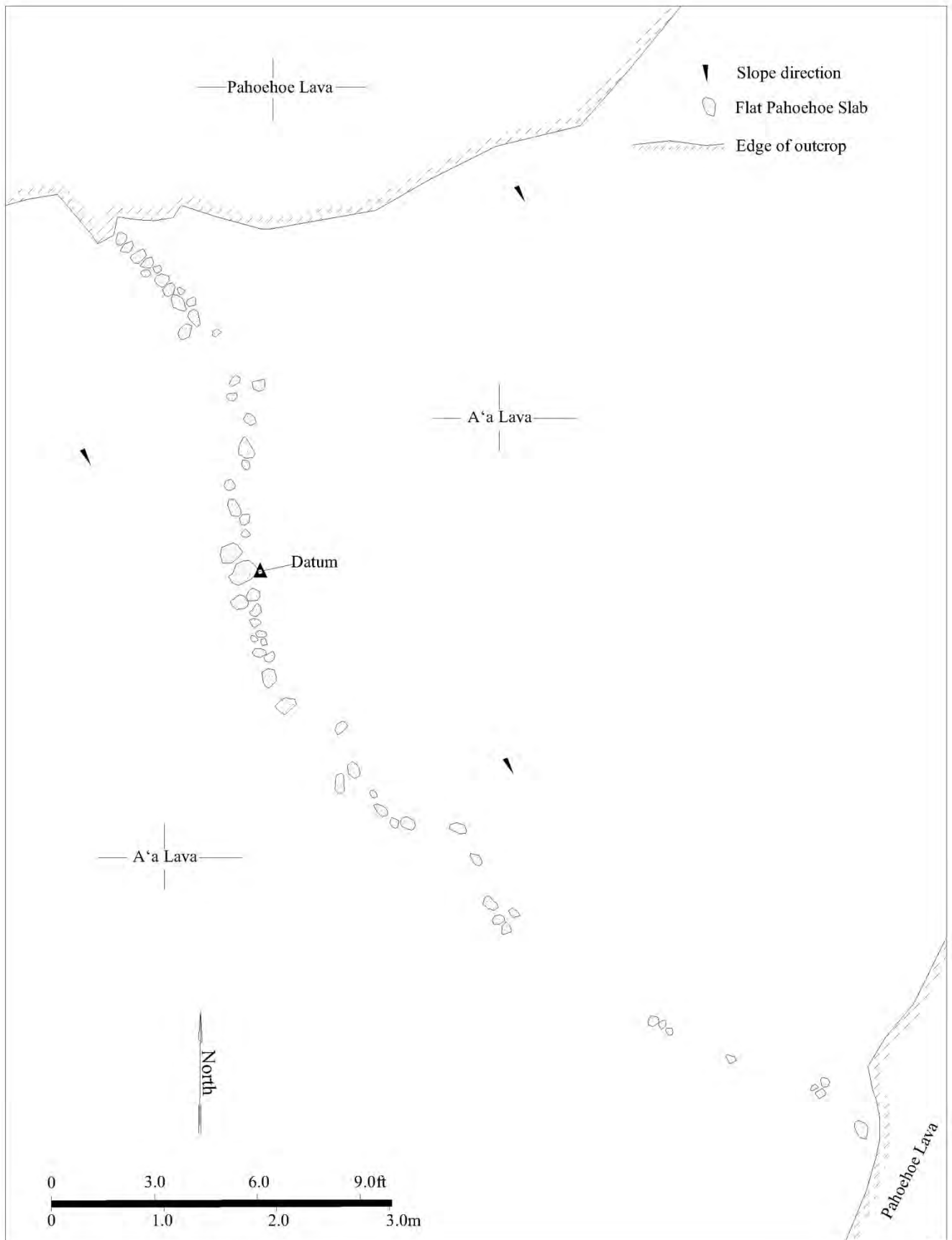


Figure 125. Site 28435 Plan Map

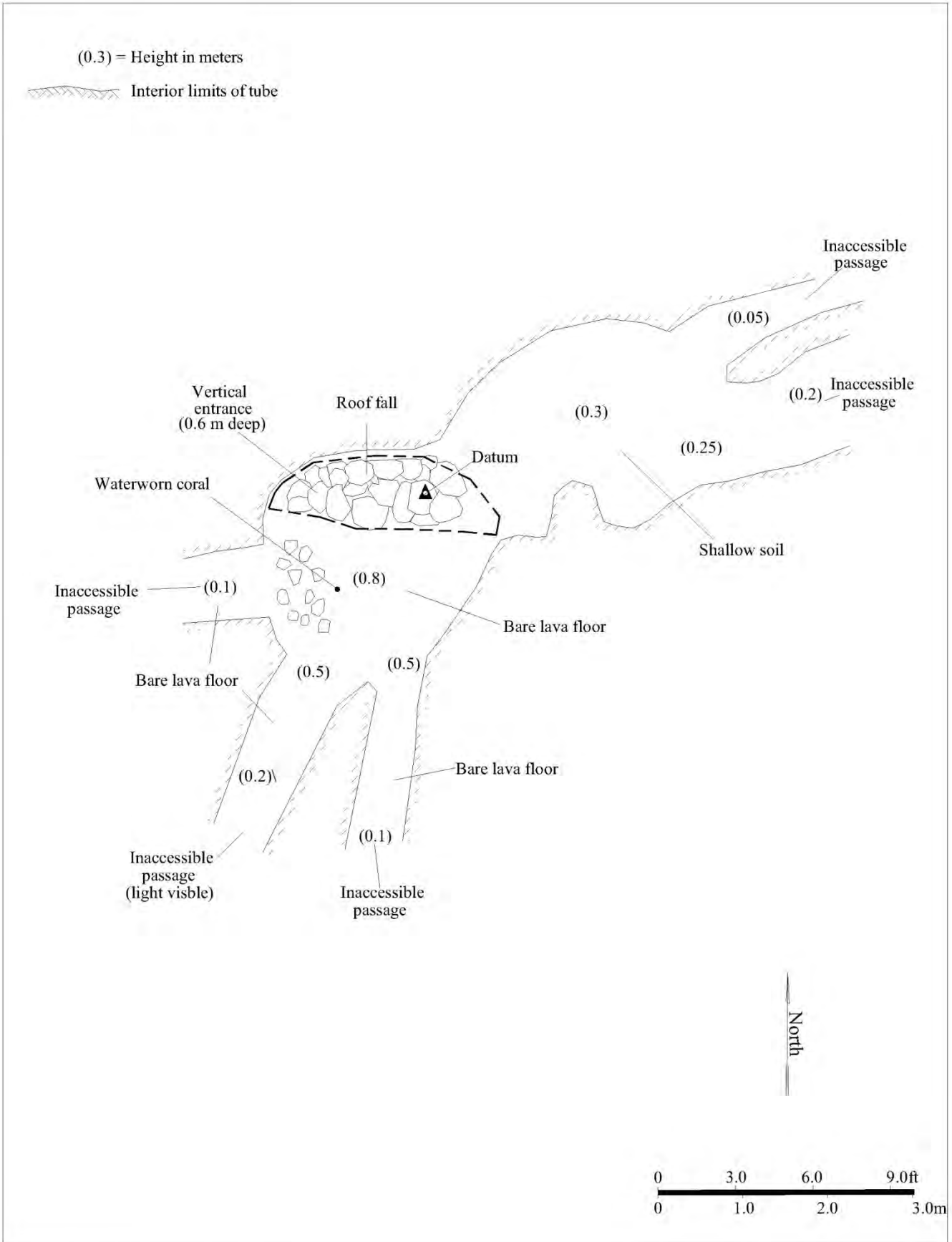


Figure 126. Site 28436 Plan Map

**State No.:** 28437 (T-793)

**Site Type:** Lava Tube

**Functional Interpretation:** Temporary Habitation

**Topography:** Soil and outcrops sloping to west

**Elevation:** 325ft

**Coordinates:** E=186467, N=2175939

**Vegetation:** Christmas berry, *haole koa*, *alahe'e*, grasses

**Probable Age:** Prehistoric

**Overall Dimensions:** 29.5 m by 4.5 m

**Condition:** Good

**Integrity:** Unaltered

**Description:** Site 28437 is a lava tube situated in the southwestern portion of the project area. The tube has an overall length of 29.5 linear meters and an area of 67.9 sq m. The entrance to the tube is through an overhang on the western side of a raised outcrop. This overhang is 5.3 m long (northwest by southeast) and 1.7 m wide with a dripline height of 0.8 m (*Figure 127*). The floor in the overhang is bare lava and the ceiling heights range from 0.5 to 0.6 m. No cultural remains were present.

There is an oval-shaped hole in the floor of the overhang along the northwestern wall. This hole is 1.5 m long (northwest by southeast), 0.95 m wide and 1.0 m deep. This opens onto a roughly oval-shaped chamber that is 10.5 m long (east-northeast by west-southwest) and 1.5 to 5.0 m wide. The floor throughout the majority of the chamber is bare lava except for an area of soil adjacent to the entrance. Roof fall, likely cleared from the central part of the chamber, is located around the north, east and south sides of the soil. Charcoal is scattered over the soil surface and a large *Cypraea sp.* shell is located along the east side. *Kukui* nut shells, a waterworn basalt pebble and a small unidentified bone fragment are located on the lava floor to the east of the soil and a *Cellana sp.* shell is located to the northwest. There is an ash deposit with charcoal located along the north wall of the tube.

Three passages extend off the main chamber; one to the northeast, one to the south and one to the west. The northeastern passage is low and inaccessible with a ceiling height that tapers to 0.15 m. The passage to the south extends in this for 10.7 m where it terminates. This passage is 1.0 to 3.0 m wide with ceiling heights that range from 0.1 m at the southern end to 0.85 m at its highest point. The floor is bare lava with several *kukui* nut shells and the vertebrae from a small mammal present.

The passage that extends to the west from the main chamber is 7.0 m long, 0.6 to 1.5 m wide and 0.4 to 0.45 m in height. The floor is bare lava with several roof fall fragments. A *Cellana sp.* shell is present at the western end of the tube and a concentration of ash is adjacent to it to the east.

Site 28437 is interpreted as a temporary habitation shelter based on its formal type and on the presence of the cultural remains present within it. The site is unaltered, in good condition and is assessed as significant for information content.

**State No.:** 28438 (T-791)

**Site Type:** Complex (2)

**Functional Interpretation:** Permanent Habitation

**Topography:** Soil and outcrops sloping to southwest

**Elevation:** 305ft

**Coordinates:** E=186459, N=2175911

**Vegetation:** Christmas berry, *haole koa*, grasses

**Probable Age:** Prehistoric

**Overall Dimensions:** 16.6 m by 14.2 m

**Condition:** Fair

**Integrity:** Unaltered

**Description:** Site 28438 consists of two features located in the southwestern portion of the project area. The features are comprised of an enclosure (Feature A) and a platform (Feature B) that is built into the enclosure's southwest corner (*Figure 128*). The enclosure is 13.4 to 16.6 m long (north-northwest by south-southeast) and 13.2 to 14.2 m wide. The walls are constructed of stacked cobbles and small boulders and are 0.6 to 1.87 m wide and 0.2 to 0.75 m in height. Remnant facing is present along the interior of the east and west sides and along the exterior of the east,



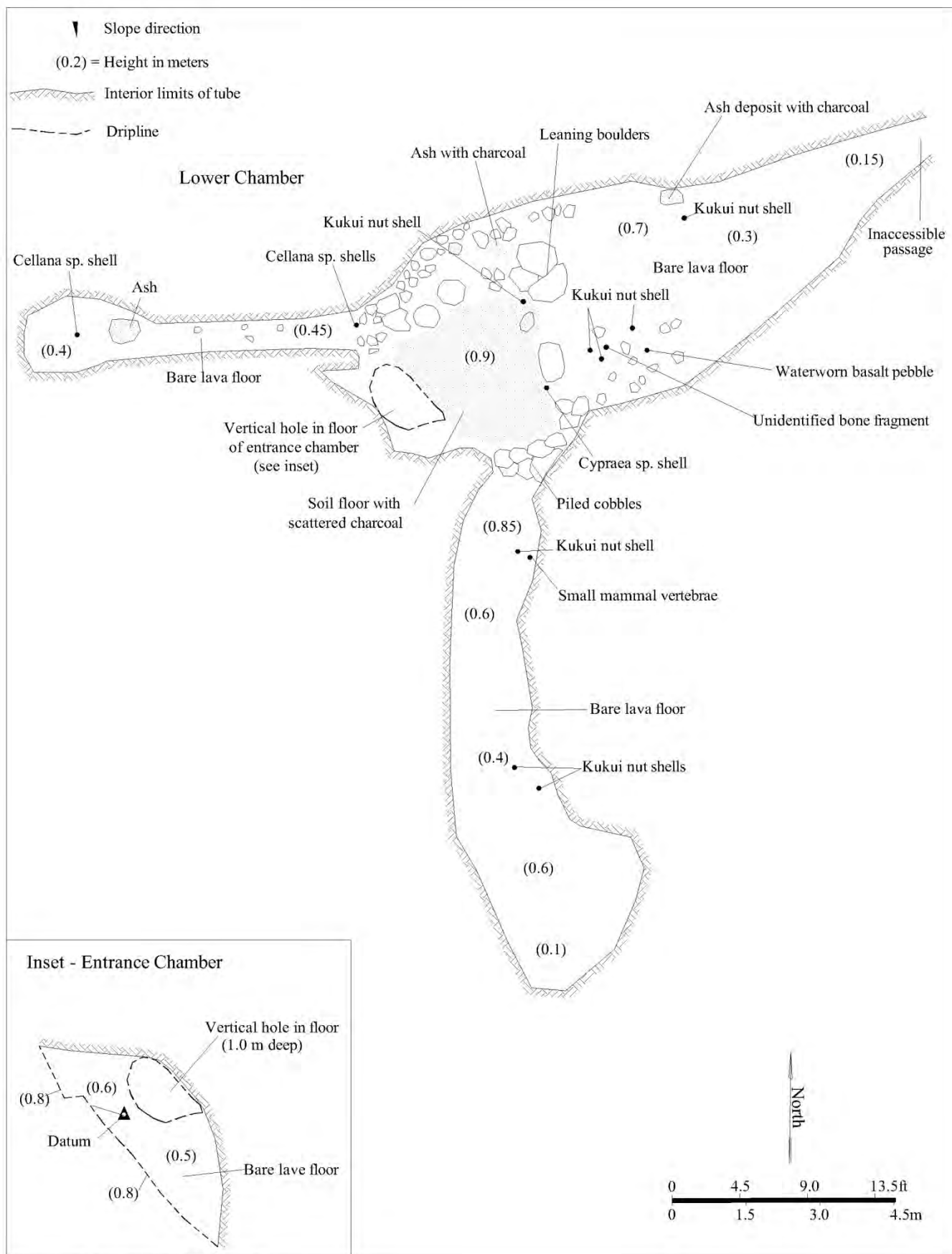


Figure 127. Site 28437 Plan Map

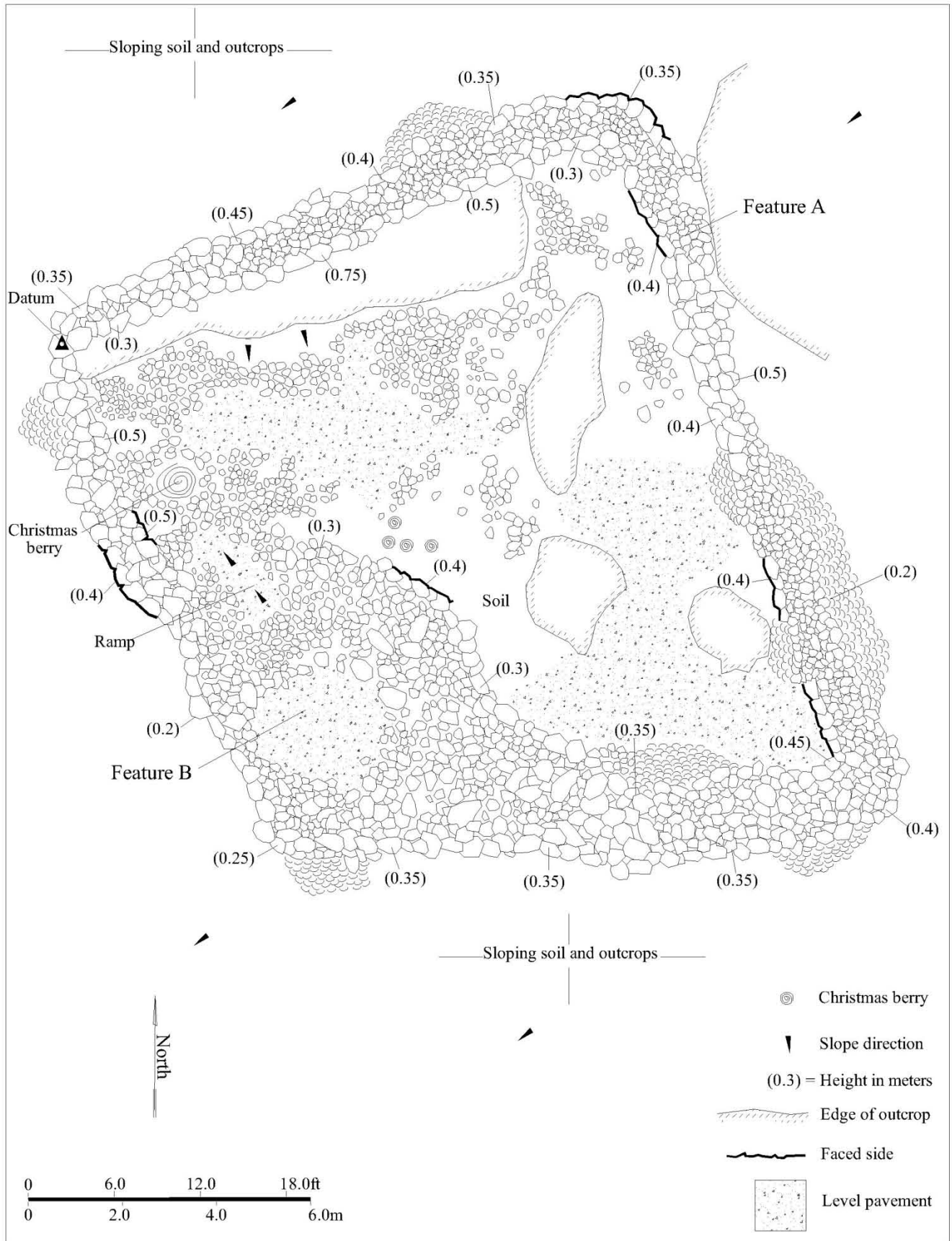


Figure 128. Site 28438 Plan Map

west and south sides. Portions of the interior and exterior sides of the enclosure walls have collapsed. The floor of the enclosure is soil with low bedrock outcrops. Two areas of level cobble and pebble pavement are present. One paved area is situated in the southeastern corner of the enclosure and the other occupies the northwest corner. No cultural remains were present.

Feature B is a platform that is built into the southwestern corner of Feature A. It is rectangular in shape and is 6.6 m long (north-northwest by south-southeast) and 4.6 to 5.7 m wide. The sides are built of stacked cobbles and small boulders and are 0.2 to 0.4 m in height. Facing is present along the northeast side and collapse is present at the southwest corner. The surface is a level cobble and pebble pavement. There is a ramp located along the north side of the platform that slopes down to the north.

Site 28438 is interpreted as a complex of permanent habitation features. The Feature B platform likely served as the foundation for a roofed structure based on formal type, substantial construction (faced sides, paved surface) and area (37.6 sq m). The Feature A enclosure functioned as a yard. This is based on its formal type, substantial construction and large area (235.7 sq m). The site is unaltered and in fair condition. It is assessed as significant for its information content.

**State No.:** 28439 (T-581)

**Site Type:** Complex (2)

**Functional Interpretation:** Temporary Habitation

**Topography:** Level pahoehoe lava flow

**Elevation:** 350ft

**Coordinates:** E=186534, N=2175921

**Vegetation:** Christmas berry, *haole koa*, *alahe'e*, *opiuma*, *noni*, grasses

**Probable Age:** Prehistoric

**Overall Dimensions:** 10.4 m by 7.5 m

**Condition:** Good

**Integrity:** Unaltered

**Description:** Site 28439 is a complex comprised of a lava tube (Feature A) and an adjacent terrace (Feature B) situated in the southwestern portion of the project area (*Figure 129*). The tube has an overall length of 10.4 linear meters and an area of 42.7 sq m. The entrance to the lava tube is through a horizontal entrance at the base of an outcrop that is 3.75 m long (northwest by southeast) and 0.75 to 1.05 m in height. This opens onto a roughly oval-shaped chamber that is 10.4 m in length (northeast by southwest) and 1.15 to 7.5 m wide. The floor throughout the chamber is a shallow soil over bedrock. There is a pile of boulder roof fall against the northern wall and to the south of the entrance.

There are two concentrations of pig bones present on the floor of the tube; one to the west of the entrance and one along the southern wall. A *Cypraea sp.* shell and charcoal is located to the northeast of the first cluster of pig bones and several *kukui* nut shells are located in the vicinity of the second. Scattered charcoal also is present. There is a small raised shelf present along the northwestern wall of the chamber that is 1.25 m long, 0.4 m wide and 0.6 m in height above the floor of the main chamber. A sea urchin body is present on the surface of the shelf.

The Feature B terrace is situated outside the entrance to Feature A. The terrace is rectangular in shape and is 3.15 m long (north-south) and 0.8 to 1.6 m wide. There is a stacked cobble and small boulder retaining wall along the west side of the terrace (0.7 m tall), with the remaining sides bordered by pahoehoe bedrock. The surface of the terrace is uneven cobble and boulder fill. No cultural remains are present.

A 1.0 by 1.0 m test unit (TU-29) was excavated into the terrace in the northern portion revealing two layers over bedrock (see *Figure 129*). Layer I consists of 0.55 to 0.7 m of tightly packed cobbles and boulders with no cultural remains present. Layer II is a 0.09 to 0.18 m thick deposit of black (7.5YR 2.5/1) silt with 25% gravel and pebble inclusions. No cultural remains were present.

Site 28439 is interpreted as a temporary habitation site. The Feature A lava tube likely functioned as a shelter based on its formal type and on the presence of the cultural remains. The Feature B terrace likely was built to create additional living space at the site based on its formal type and association with Feature A. The site is unaltered, in good condition and is assessed as significant for its information content.

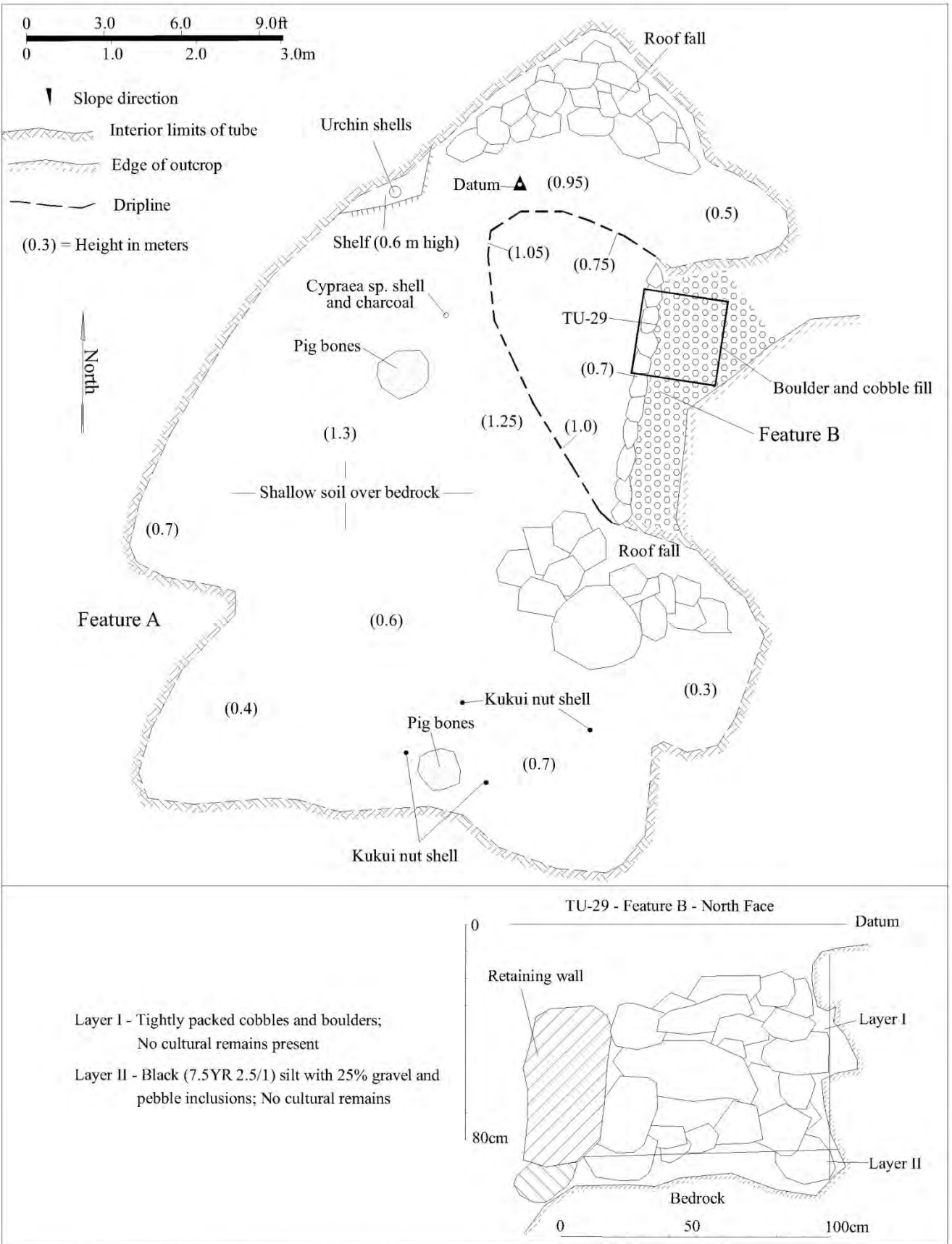


Figure 129. Site 28439 Plan Map and TU-29 North Face Profile

**State No.:** 28440 (T-766)  
**Site Type:** Lava Tube  
**Functional Interpretation:** Temporary Habitation  
**Topography:** Gently sloping pahoehoe lava  
**Elevation:** 356ft  
**Coordinates:** E=186711, N=2176032  
**Vegetation:** Airplant, *alahe'e*, *haole koa*, *noni*, grasses  
**Probable Age:** Prehistoric  
**Overall Dimensions:** 18.2 m long  
**Condition:** Good  
**Integrity:** Unaltered

**Description:** Site 28440 is a lava tube located in the south-central portion of the project area. The tube has an overall length of 18.2 m and an area of 44.4 sq m. The entrance into the tube is through an opening on the eastern side of a shallow rubble filled sinkhole that is 4.7 m long (east-west), 2.6 m wide and 0.4 m deep (*Figure 130*). The entrance is 3.0 m wide and 1.4 m in height, with a flat slab located beneath the dripline at the southern end. A floor to ceiling wall is located below the dripline in the northern portion of the entrance, which probably served to shelter the interior.

The entrance opens onto an oval-shaped chamber that is 8.65 m long (east-west) and 2.85 to 4.0 m wide. The floor just inside the entrance is shallow soil with a *Cypraea sp.* shell and a small mammal bone present along the north wall. A cluster of *kukui* nut shells and charcoal are present on the soil surface in the southern portion of the chamber. The ceiling height averages 1.1 m.

A slab and cobble pavement is located adjacent to the soil area to the east. There is a shallow depression in an area of rubble along the southeast side of the pavement that is 0.5 m in diameter and 0.3 m deep. There is a low shelf above the eastern end of this paved area that extends across the tube in a north-south direction. The main chamber extends beneath this shelf although the height below the shelf is only 0.4 m. The shelf is irregularly-shaped and is 3.8 m long (north-south), 0.655 to 2.5 m wide and 0.4 m in height with a bare lava floor and no cultural remains. A skylight is located in the ceiling at the northern end of the shelf.

The floor of the tube east of the shelf is bare lava and the ceiling heights range from 0.4 to 1.25 m. There is scattered roof fall in the northeastern portion of the chamber and charcoal is present at the eastern end. A second skylight is located in the ceiling to the south of the roof fall. Two inaccessible passages extend off the main chamber; one to the northeast and one to the east. The northeastern passage is 0.6 m wide and 0.1 m in height. The one to the east is 1.3 to 2.0 m wide and extends in this direction for 5.7 m before it becomes impassable due to the low ceiling (0.1). The floor in both of these passages is bare lava with no cultural remains present.

A second shelf is located at the northwestern corner of the main chamber. This shelf is 2.5 m wide and 0.4 m in height with a bare lava floor and no cultural remains. An inaccessible passage (0.1 m in height) extends to the west from the rear of the shelf.

Site 28440 is interpreted as a temporary habitation shelter based on its formal type and on the presence of the internal modifications and cultural remains. The site is unaltered, in good condition and is assessed as significant for its information content.

**State No.:** 28441 (T-1132)  
**Site Type:** Terrace  
**Functional Interpretation:** Temporary Habitation  
**Topography:** Gently sloping pahoehoe lava  
**Elevation:** 352ft  
**Coordinates:** E=1866232, N=2176003  
**Vegetation:** Christmas berry, *kiawe*, *haole koa*, *alahe'e*, grasses  
**Probable Age:** Prehistoric  
**Overall Dimensions:** 4.2 m by 2.5 m  
**Condition:** Fair  
**Integrity:** Unaltered