Ríp on Hegranes: Trench, Coring, & Test Pits: Interim Report 2013 & 2016

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Photo on front page – North wall of test pit # 4 at Rip.

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SKAGAFJÖRÐUR HERITAGE MUSEUM

The Skagafjörður Heritage Museum is a center for research on local history and cultural heritage in the Skagafjörður region, North Iceland. It is affiliated with the National Museum of Iceland and its main exhibition at the old turf farm of Glaumbær is one of the most visited national heritage tourist attractions. The Archaeological Department of the museum was established in 2003 and engages in contract and research driven archaeology both within and outside the region. The core long-term research programs center on fundamental issues surrounding the settlement and early medieval church history of Skagafjörður and the North-Atlantic region with a focus on developing methodological and theoretical approaches to the geography of early Christian cemeteries. The department is involved in multifaceted interdisciplinary collaboration with Icelandic and international institutions and specialists. Its research portfolio includes bioarchaeology, early metal production, settlement studies, as well as the methodological aspects of archaeological surveying.

FISKE CENTER FOR ARCHAEOLOGICAL RESEARCH

The Andrew Fiske Memorial Center for Archaeological Research at the University of Massachusetts Boston was established in 1999 through the generosity of the late Alice Fiske and her family as a living memorial to her late husband Andrew. As an international leader in interdisciplinary research, the Fiske Center promotes a vision of archaeology as a multi-faceted, theoretically rigorous field that integrates a variety of analytical perspectives into its studies of the cultural and biological dimensions of colonization, urbanization, and industrialization that have occurred over the past one thousand years in the Americas and the Atlantic World. As part of a public university, the Fiske Center maintains a program of local archaeology with a special emphasis on research that meets the needs of cities, towns, and Tribal Nations in New England and the greater Northeast. The Fiske Center also seeks to understand the local as part of a broader Atlantic World.

SKAGAFJÖRÐUR CHURCH AND SETTLEMENT SURVEY

The Skagafjörður Church and Settlement Survey (SCASS) seeks to determine if the settlement pattern of the 9th-century colonization of Iceland affected the development of the religious and economic institutions that dominated the 14th century. The research builds on the combined methods and results of two projects. One has focused on Viking Age settlement patterns. The other has been investigating the changing geography of early Christian cemeteries. Together, the research seeks to understand the connections between the Viking settlement hierarchy and the Christian consolidation.

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1.0 INTRODUCTION

Ríp is located in the eastern central part of Hegranes (Figure 1). "Ríp" or "Rípur" (Pálsson 2010:76) perhaps means rocky or rocky ridge. The name of the island is probably derived from the nickname of the supposed first settler of the region, Havardr hegri, translated into English as Havard the heron, (Pálsson and Edwards 1972:90; Zoëga and Bolender 2016; Zoëga, et al. 2015). Today Ríp has been divided into two east-west running sections. This report covers the work at the main farm area of Ríp, specifically coring and test pits. To the north of Ríp is the farm of Beingarður. To the East are the waters of Héraðsvötn, and to the south is the farm of Hamar. On the southwest is the farm of Keldudalur, to the west is the farm of Hróarsdalur, and to the northwest is the farm of Kárastaðir. The farm sits on a north-south running ridge that overlooks Héraðsvötn (Figure 2). The main fields are west, north, and south of the farm area

Ríp is first mentioned in the Sturlunga saga (McGrew and Þórðarson 1970:426) in passing: "Þorbeörn Þórúlfsson, from Ríp, was at the front of the group and was struck by a spear and killed." The Sturlunga saga describes the events of the 1260's and was put together soon after 1300. The first mention of a church at Ríp is from 1318 (Sigurðardóttir 2012). In 1713 the farm was not valued but Magnússon and Vídalín (1930:64) heard that before it became a church farm, it was worth 40 hundreds. The church standing today was built in 1924 (Sigurðardóttir 2011).

Figure 1. Air photo of Hegranes showing modern farm boundaries in yellow.

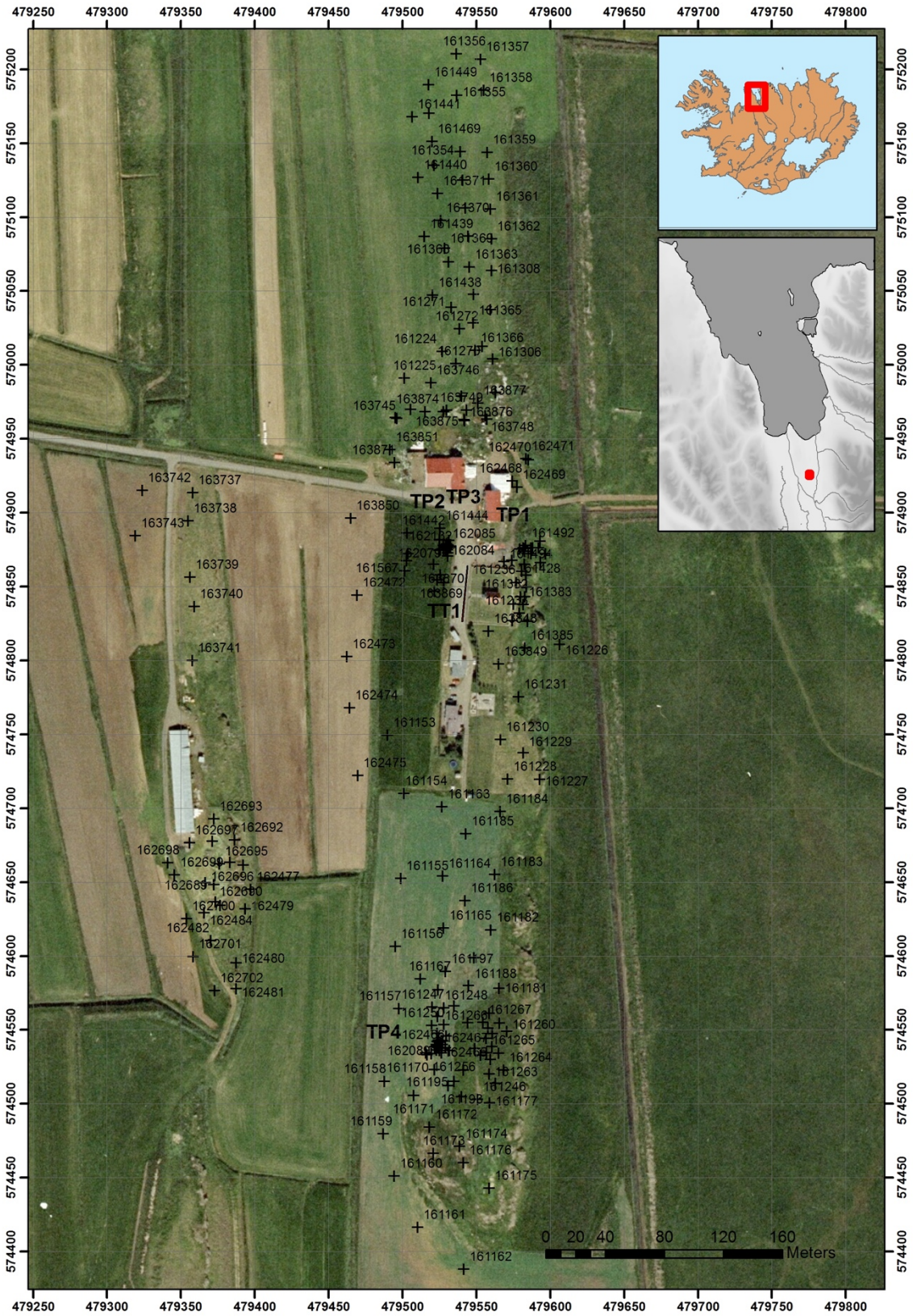


Figure 2. Air photograph of Ríp with cores "+" and their numbers. Insets of Icleand and Skagafjörður show he location of Helluland.

1.1 Geology and tephra

The geology of the region is characterized by Upper Tertiary basic and intermediate extrusive basalts (Feuillet, et al. 2012) overlain by morainic glacial till (Decaulne, et al. 2016). The area was deglaciated by 6100 yr cal.BP and then subject to uplift (Cossart, et al. 2014). Hegranes is probably a large rock drumlin, flyggberg, or rôche moutonnée formation (e.g., Neil 2002), with a long gradual south-side slope and a more sudden fall off on the north with many areas of plucked bedrock on that side of the island. The natural stratigraphy of the near surface of the region consists of a rapidly formed sediment and soil with intermixed tephra layers, along with gravel layers and lenses of glacial origin. The soil is a brown andosol that derives from aeolian sediments of volcanic origin, but is not the direct product of eruptions (Arnalds 2004, 2008; Arnalds, et al. 1995). The andosol is non-cohesive but has an extremely high water-retention capacity (Arnalds 2008).

The settlement and church survey relies heavily on tephra layers preserved in the soil. Skagafjörður has an early tephra sequence that allows for a fine-grained chronology of the changes in early settlement patterns (Larsen, et al. 2002). While tephra deposition can vary over small distances (Davies, et al. 2010) the basic tephra sequence is found throughout Skagafjörður and allows for a common dating system among farms and farmsteads (Þórarinsson 1977).

- Historic:
  - Hekla A.D. 1766. A black tephra usually found in turf or in the upper 10 cm of the soil sequence.
  - Hekla A.D. 1300: A gray-blue to dark black tephra (Larsen 1984; Larsen, et al. 1999; Larsen, et al. 2002; Larsen, et al. 2001; Sveinbjarnardóttir 1992).
  - Hekla A.D. 1104 (H1). This white or yellowish-white tephra is the most consistent in Skagafjörður (Eiriksson, et al. 2000; Thórarinsson 1967) and is readily identifiable in both natural and cultural stratigraphic sequences.
- Landnám sequence (LNS):
  - Vj~1000 tephra. A blue to bluish-black layer whose source has not been determined but is likely to be either from a Grímsvötn and/or Veiðivötn eruption dated to

approximately A.D. 1000 (Boygle 1999; Ólafsson 1985; Sigurgeirsson 1998; Wastegard, et al. 2003). Preliminary analysis of the composition of volcanic glass shards by scanning electron microprobe (SEM) has identified a mixture of shards from both volcanic sources.

- The mid-10th century layer (~950). This blue-green layer that is sporadically found is currently an un-sourced and undated layer that is lies between the LNL and Vj~1000. There are several potential candidates for this layer, including the large A.D. 934 ±2 eruption of Eldgjá. (Fei and Zhou 2006; Hammer, et al. 1980; Thordarson, et al. 2001) or an A.D. 933 ±6 green tephra layer identified in the Lake Mývatn area from Veiðivötn, termed V-Sv ~950 (Sigurgeirsson, et al. 2013). Preliminary analysis by SEM has identified shards primarily from the Grímsvötn source.

- "Landnám" or "settlement" layer (LNL, LTL, also designated as 871). The layer is so-named for its association with the earliest settlements in Iceland (Dugmore and Newton 2012)) and is dated to A.D. 871 ±2, (Grönvold, et al. 1995; Zielinski, et al. 1997, [A.D. 877 ±4]). The tephra originates from the Vatnaöldur fissure swarm associated with the Torfajökull and Bárðarbunga volcanos (Dugmore and Newton 2012; Larsen 1984). In general, this layer consists of two distinct tephras–an olive-green tephra overlying a white tephra. However, in Skagafjörður, only the green portion is present (cf. Hallsdóttir 1987). In many cases this layer and surrounding layers are tightly spaced in a brown organic rich soil matric associated with the environmental changes of colonization.

- Black tephra below the LNL (K800). The earliest tephra in this sequence is a dark black layer probably from the Katla volcano, but is not well dated (Wastegard, et al. 2003). It is usually labeled K800 in profiles.

❖ Prehistoric:

- Hekla 3 (H3). A thick (generally 2-3 cm) white or whitish-yellow tephra dating to about 950 B.C. (Dugmore, et al. 1995).

- Hekla 4 (H4). A thick (generally 1-3 cm) white or yellowish-white tephra dating to about 2300 B.C. (Eiriksson, et al. 2000).

1.2 Farmstead stratigraphy

Chronological phasing of farmstead sizes primarily relies on two tephra layers: the white Hekla A.D. 1104 (H1) and the dark Hekla A.D. 1300. These layers are the most commonly found in cores and often the easiest to identify of the historical tephras. H1 is presented twice as often as Hekla A.D. 1300. Using these tephra layers to date cultural deposits allows for the chronological phasing of farmstead sizes and for farmstead sizes to be compared across contemporary temporal horizons. Their presence also allows for the identification of changes in the size of individual farmsteads. Other tephra layers are used to help identify the overall stratigraphic sequence in the soil cores and to associate specific layers with historical periods. Deposits categorized by these temporal phases are based on whether or not they contained "farmstead" material. The resulting chronology allows for the estimation of farmstead size for three primary periods:

- Pre-A.D. 1104
- A.D. 1104-1300
- Post-A.D. 1300

1.3 Farmstead deposits identified in coring

To determine the location and area of farmstead deposits, the results of cores were divided into three simple categories: "yes," "no," and "maybe" based on the presence of cultural material above or below specific tephra layers (Steinberg, et al. 2016). Small and infrequent anthropogenic inclusions in soils – such as ash, charcoal, and bone – are common near farmsteads and other activity areas. These are good indicators that an activity area or domestic site may be nearby but we do not count infrequent inclusions as contributing to the areal extent of the farmstead. Higher concentrations of anthropogenic inclusions, midden deposits, turf, and floors are included in farm mound deposits.

For the "Pre-A.D. 1104" period a "Yes" cores presented cultural deposits below the H1 (or an earlier) tephra. "Maybe" cores indicated early cultural deposits, as determined by depth or association with another tephra such as the 1766 or 1300 tephra, but without the presence of a clearly defined H1 tephra layer. The absence of the H1 in a context of a cultural deposit is mostly because it was not preserved or the core did not penetrate deeply enough to encounter it (i.e., refusal within more recent deposits). A "no" core resulted when no cultural layers

were present in the core or where there was no cultural layer below the H1. Almost all "no" cores had the H1, or some other tephra that allowed for the assessment of this important negative evidence. The same logic was used for the "A.D. 1104-1300" and the "Post-A.D. 1300" farmstead distributions based on coring.

For the purposes of the coring survey, farmstead or farm mound deposits include:

- Turf deposits: any evidence for a turf structure, including collapsed or levelled turf, are considered evidence of farm buildings. The organic content and percentage of soil in turf deposits is variable. Sometimes tephra layers are present in turf, which can provide a terminus post quem (TPQ) date for the deposit. Dating turf deposits is not without difficulties. As a rule, a turf farmstead deposit containing a tephra layer is a positive farm mound location (yes) for the period(s) after the latest identified tephra. In the absence of in situ tephra, the rest of the deposit is characterized as a potential farm mound (maybe). For example, in a core with turf including what was identified as the H 1300 tephra as the only "farmstead deposit" would be coded as "Yes" for post-1300 but also "Maybe" for the pre-1104 and 1104-1300 phases because of the inherently uncertainty of a field identification of a single dark tephra.

- Low density cultural layers (LDC): defined by anthropogenic inclusions amounting to 10-50% of the soil matrix. These are assumed to result from indistinct and extensive depositional events that suggest regular activity typical of farmsteads or other farm production areas. Sometimes this deposit has a "mixed" character.

- Middens: defined by anthropogenic inclusions amounting to more than 50% of the soil matrix that suggest the regular deposition of household or production area waste. Middens are the result of distinct and intensive depositional events associated with purposeful disposal. In both LDC and Midden layers that are punctuated by tephra layers, for purposes of farm mound dating, the deposits are assumed to be continuous, occurring immediately before and after the date of the tephra deposition. For example, in a midden deposit with only H1 present, surrounded on either side by midden, both "Pre 1104, and "1104-1300" would be positive ("yes") while "Post-A.D. 1300" would be "maybe."

- Floor: characterized by dense, compacted, and/or greasy cultural layers indicative of floors, extramural activity areas, or areas of intense deposition of organic materials. These deposits are often thin but are very distinct.

A farmstead's perimeter for a given time period was determined by the results of the plotted cores taken around a site. The perimeter was plotted half way between a "yes" and "no" core, or on a "maybe" core between a "yes" and "no" core. The continuous area within the perimeter was calculated to produce the maximum possible area of a farmstead.

2.0 LAND SURVEYING AND ESTABLISHMENT OF GRIDS

All land-survey data were collected based on the ISN93 coordinate system. Core locations were determined in several ways. For cores that were taken away from the main farm buildings, the internal GPS receiver in the iPhones or iPads were used to record the coring data. Within Ríp grass fields, most cores were collected on rough 50 x 50 m grid spacing. Judgmentally placed cores around the farm buildings were originally located with an iPad and then those locations refined by either a Topcon Hiper SR DGPS using the ISMAR differential station at Stoð ehf in Sauðárkrókur or a Trimble Geo XH which was equipped with a Zepher antenna in order to improve upon the accuracy of the locational data.

3.0 CORING

At Ríp, 242 cores were taken during the 2016 field season (Table A2, Figure 2). In those cores 402 tephra layers were identified (Table A3) and 1005 stratigraphic layers (Table A4). There were 46 cores that revealed turf deposits. Only two coring locations presented floor deposits. Core 161366, about 75 m north of the standing barn (140 m north of the churchyard) had a 6 cm thick floor at about 25 cm, below an in situ H1 tephra layer. Core 162132, just 70 cm south of test pit 2, presented a 3 cm floor like deposit. The results of test pit 2 and 3 suggest that this is probably a dense midden like deposit. Overall, 159 cores contained some sort of cultural deposit (65%) while only 83 cores had no cultural deposits (Figure 5). Most of the cores with cultural deposits were in the area of the modern farm buildings (Figure 6) but there was also a substantial concentration 150 m to the south of the main area of farm buildings on a low ridge, where TP 4 (see below) would be placed. This southern area is termed Ríp 2 (Figure 7).

As for tephra layers, 6 cores encountered an in situ 1766 tephra (about 2.4%), which is normally very difficult to identify in cores. Of the 8962 cores taken in Skagafjörður by the SCASS and SASS teams, about 641 (7%) contained this tephra. Along the same lines, 42 cores encountered the 1300 tephra (17%), much higher than the 9% average that are presented in Skagafjörður as a whole. In situ H1 tephra layer was the most common historic tephra identified. It appeared in 120 different cores (almost 50%), while H3/H4 was in 105. Forty-nine cores encountered a single in situ dark tephra from between the H1 and the time of settlement. Twenty-three of these were identified in the field as the "1000" layer, twenty-two as the "950" layer. Four cores presented with two distinct in situ dark tephra layers between the H1 and the LNS. Only one core revealed a distinct LTL and twenty-seven others the LNS, which appeared as a dark distinct mixed layer. On the whole, tephra preservation seems to be very good at Ríp.

The cores taken in Ríp bottom out at an average of 57.8 cm (SD=36) below the ground surface onto gravel (Figure 8, Figure 9, and Figure 10). The overall average for cores for the SCASS survey is 62.6 cm (SD=94) suggesting that in general, Rip is just slightly shallower than the average deposit. The 159 cores that contained cultural material averaged 64.9 cm, (SD=35.2), about 47% or 20.8 cm deeper than those without cultural material (n=83, Avg = 44.1, SD=33.8). For the whole SCASS survey, the average core with cultural material (Avg =79.3 cm, SD=38.9) is almost 17 cm deeper than those without cultural material.

The distribution of cultural material in cores in relationship to various tephra layers is difficult to assess at Ríp because of the substantial modern activity south of the church. In this analysis (Figure 11), the cultural deposits east of the modern farmhouses are connected with the deposits around the church, especially for the pre-1104 depots, which yield a substantially larger mound area than if those deposits are not connected (Table 1). For the pre-1104 period, the main farm mound area is calculated as 24,990 m^2, with two small areas (565 m^2& 310 m^2) that make up Ríp 2, for a total of 25,865 m^2. For the 1100-1300 period the mound stayed the same at about 25,870 m^2 with a slightly smaller northern footprint (20,050 m^2), and the two parts of Ríp 2 merged into a larger area (5,480 m^2). For the post 1300 period the farmstead area shrinks by over 69% to 17,750 m^2.

Figure 3. Area around modern farm buildings showing core locations.

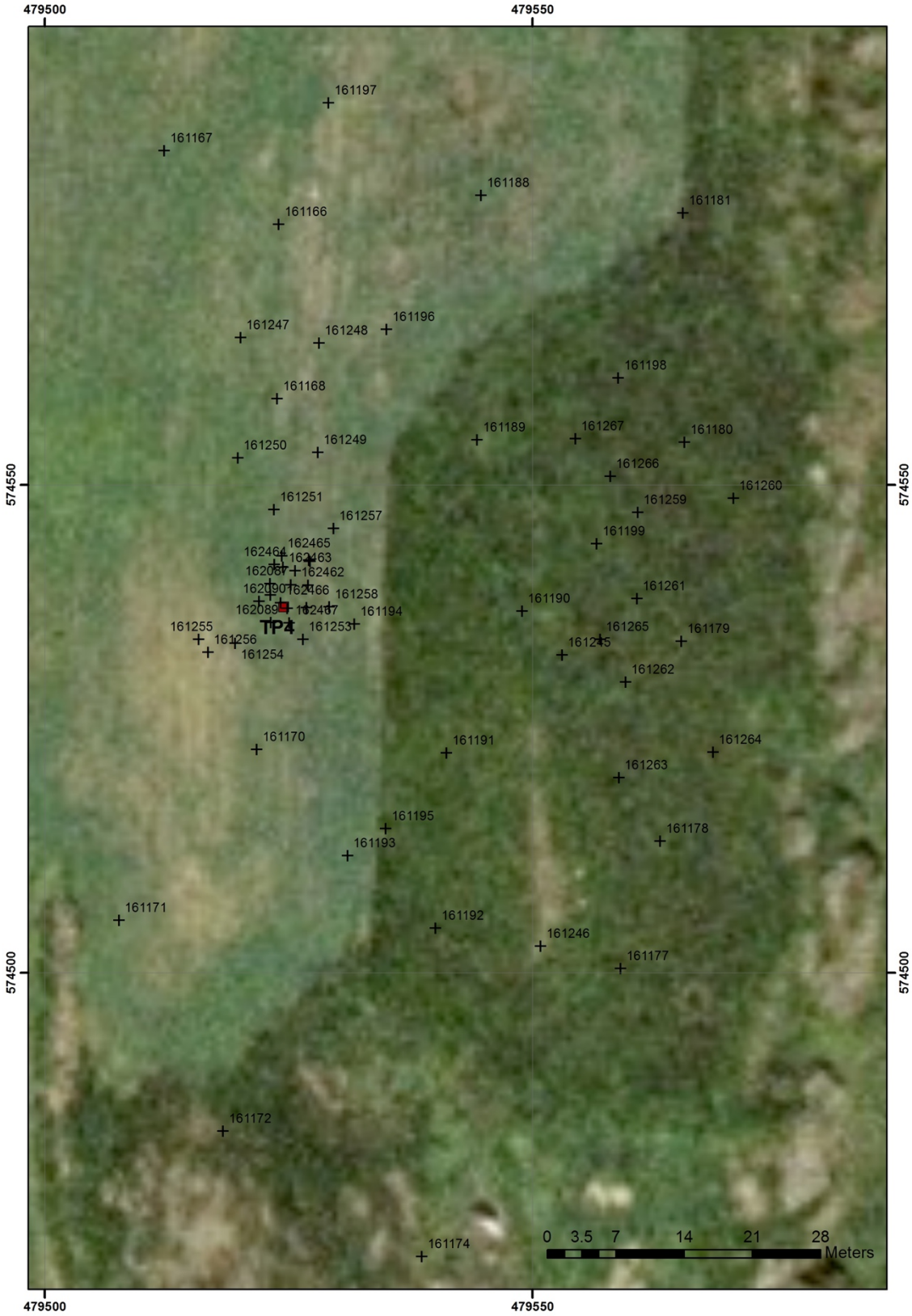


Figure 4. Area around Ríp 2 showing core locations.

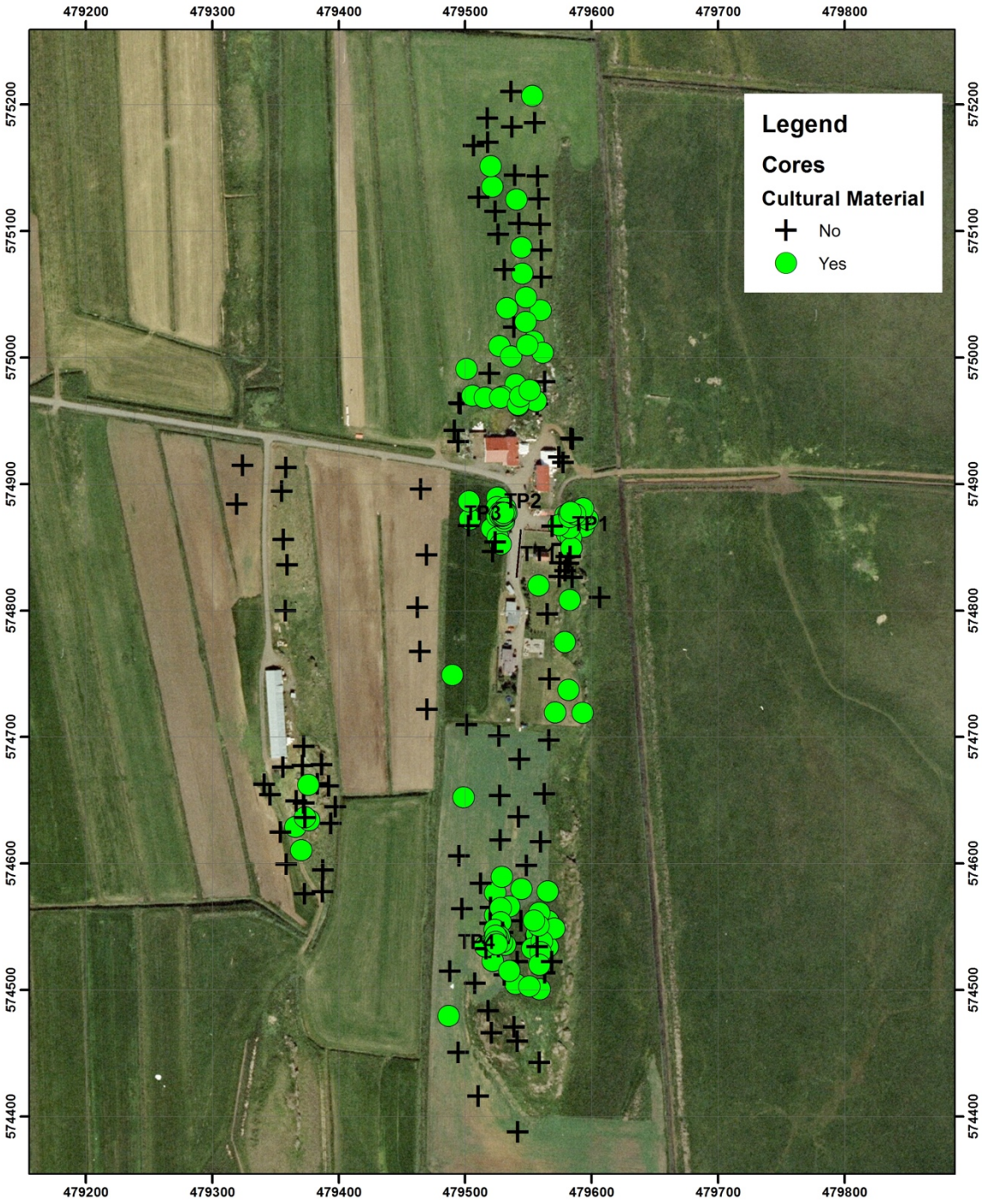


Figure 5. Distribution of cultural material in cores.

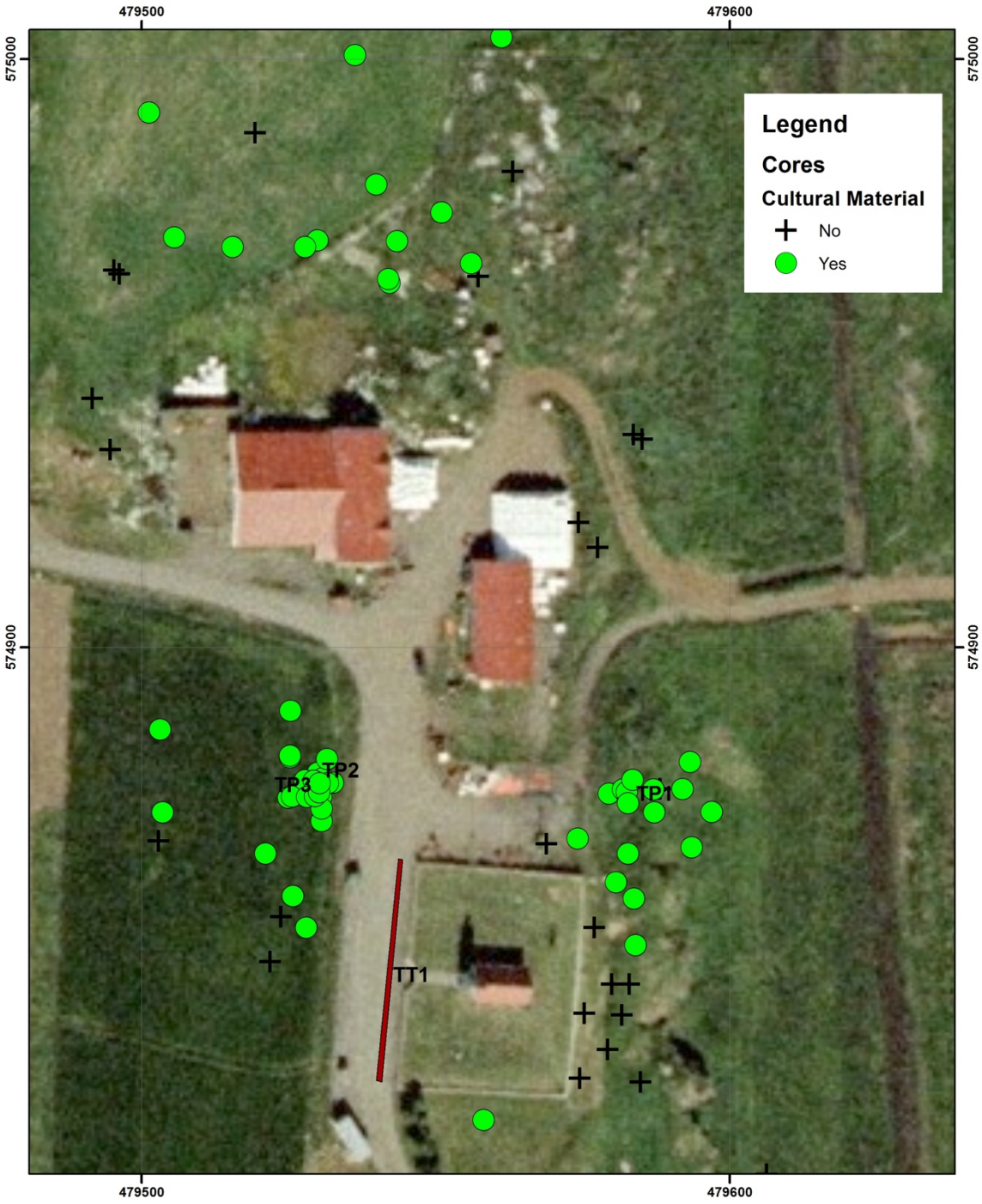


Figure 6. Distribution of cultural material in cores around farm buildings.

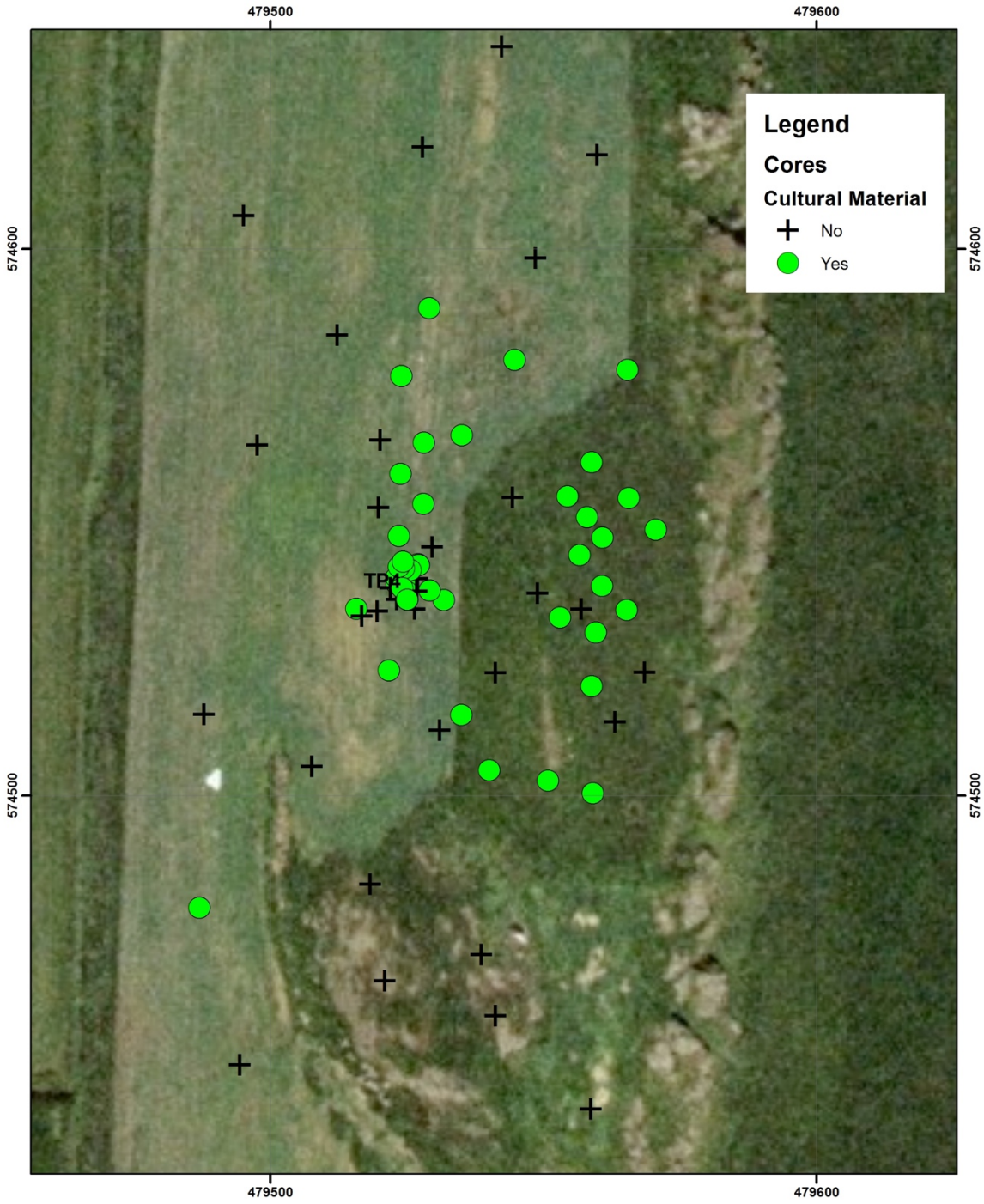


Figure 7. Distribution of cultural material in cores around Ríp 2.

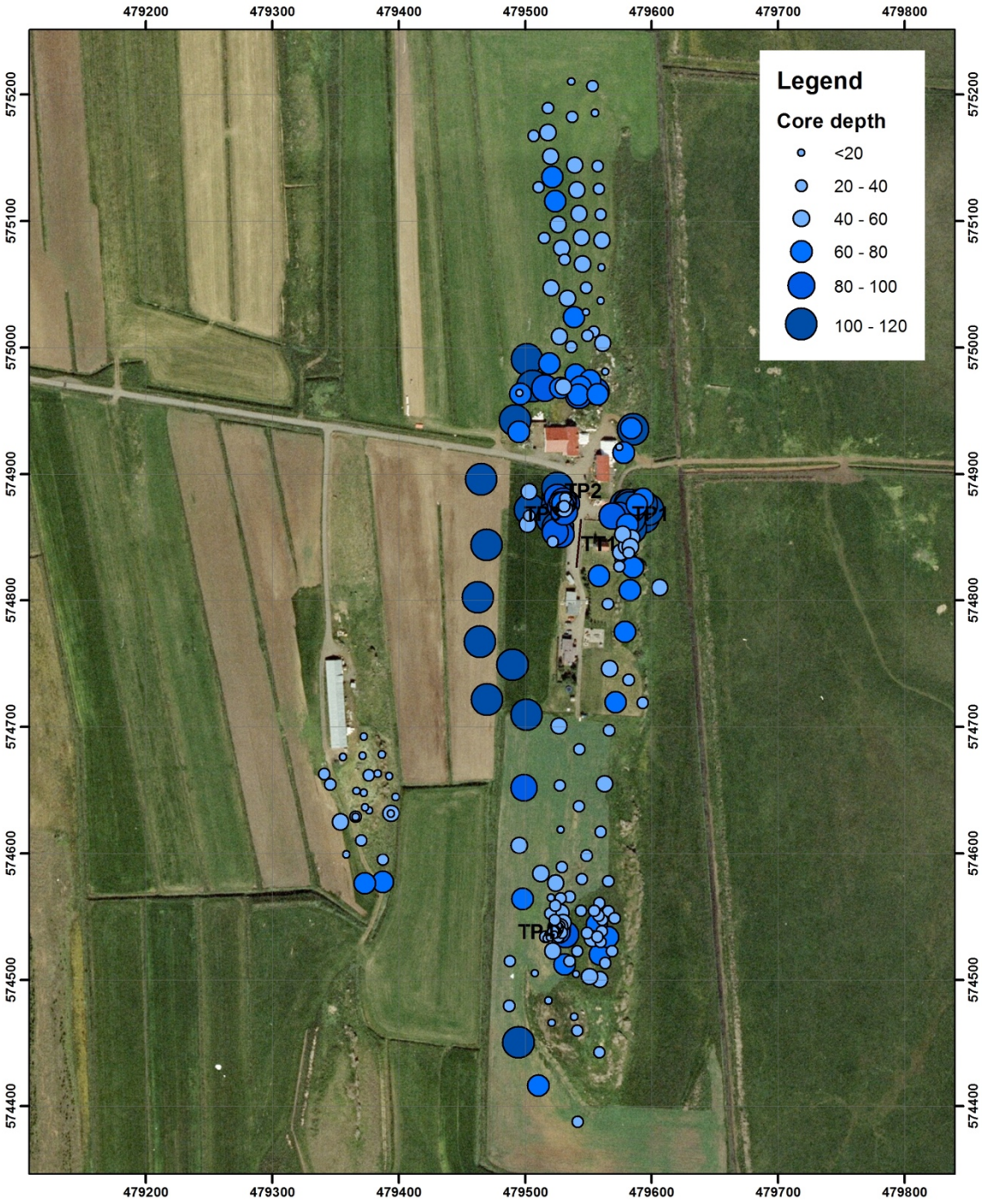


Figure 8. Depth of cores.

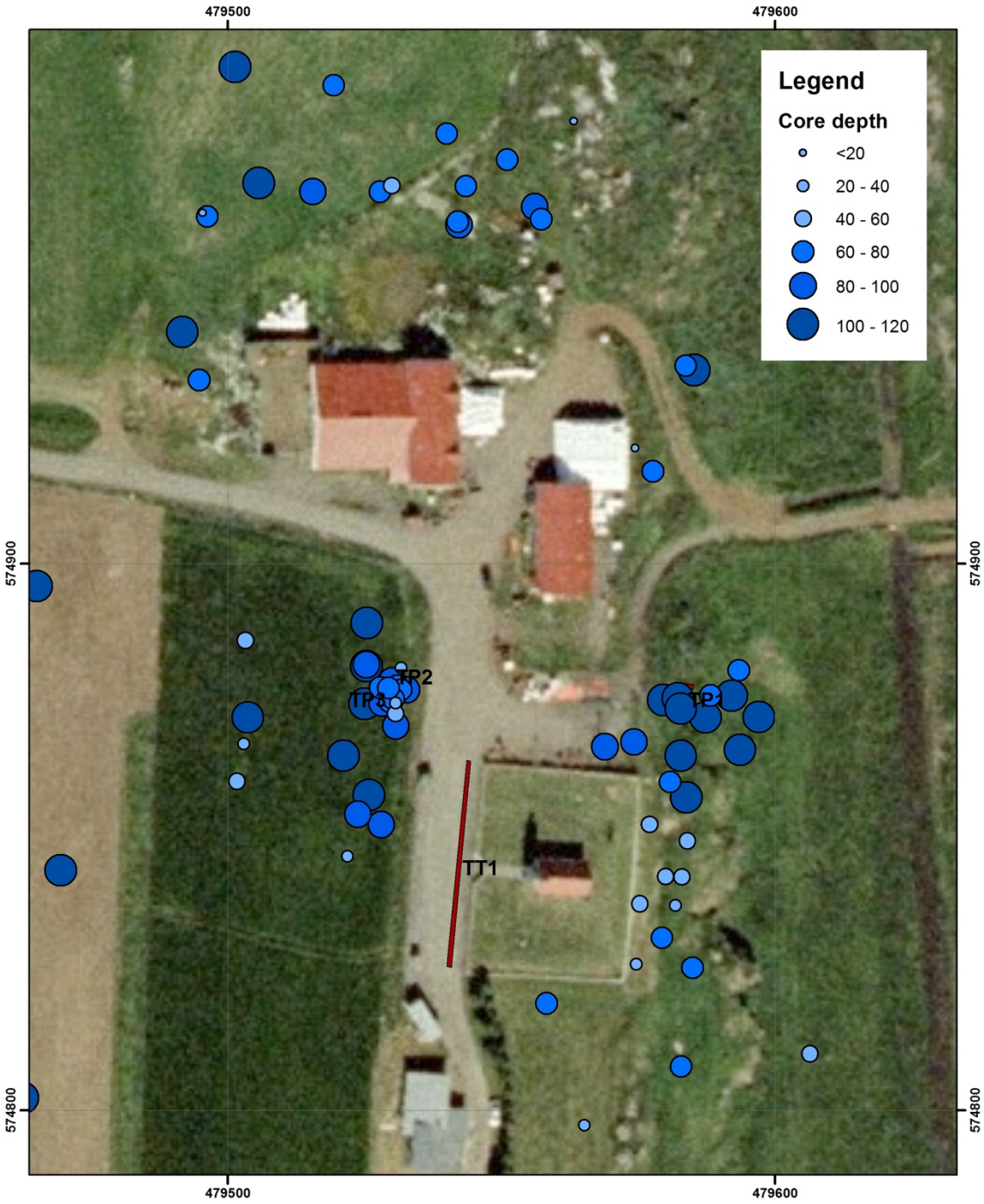


Figure 9. Depth of cores (cm) around farm buildings.

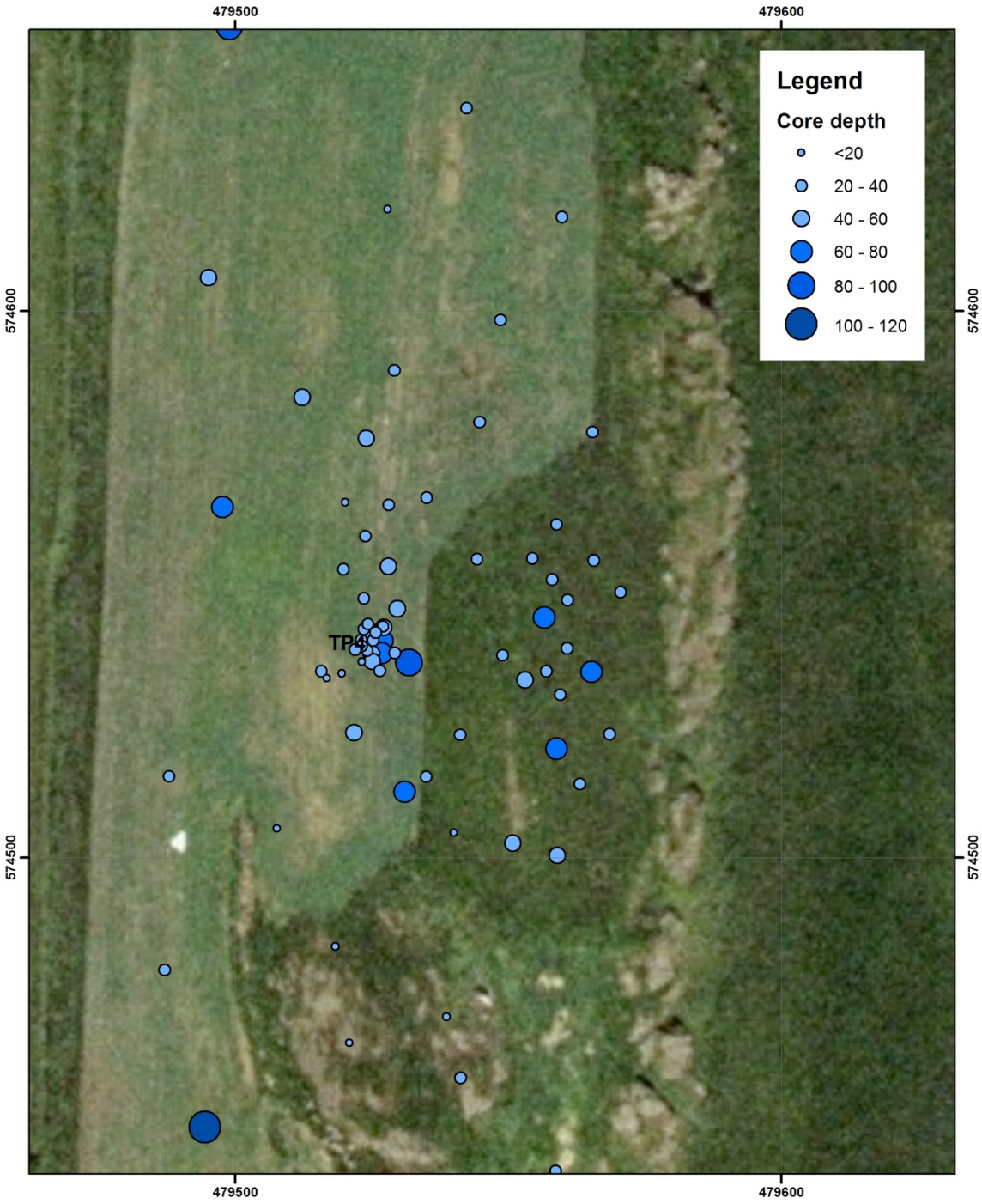


Figure 10. Depth of cores (cm) around Ríp 2.

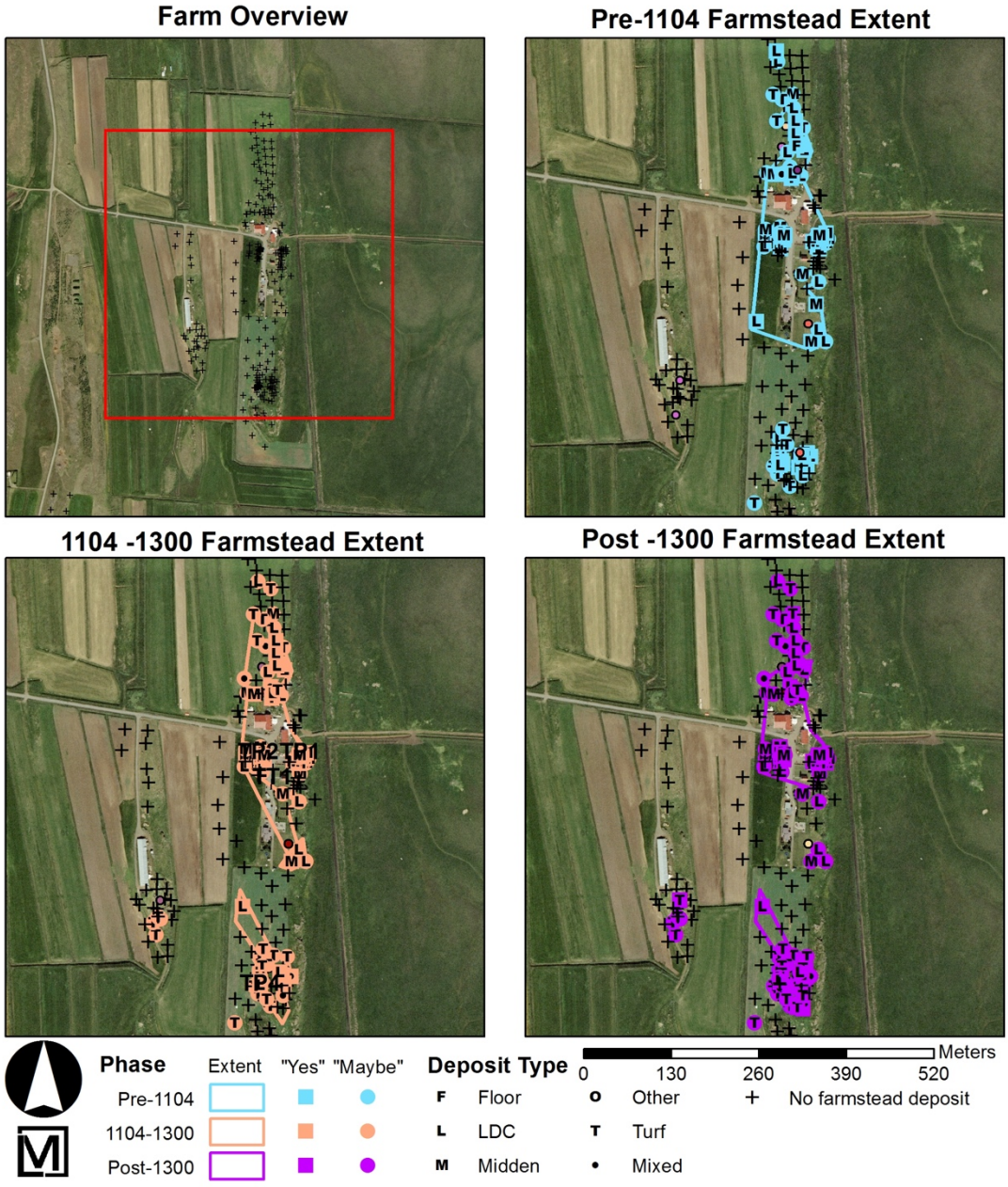


Figure 11. Farm mound sizes for different time periods based on coring at Ríp.

Table 1. Farmstead sizes by time period

Area	Date	Size (sq m)
Ríp	Pre-1104	24,991
Ríp 2	Pre-1104	565
Ríp 2	Pre-1104	312
		25,868
Ríp	1104-1300	20,060
Ríp 2	1104-1300	5,480
		25,540
Ríp	Post-1300	12,644
Ríp 2	Post-1300	5,103
		17,748

4.0 TEST EXCAVATIONS

The SCASS project has excavated in five different areas in Ríp since 2013. In 2013 a hot water trench was examined (TT1) immediately west of the churchyard. In 2016 four 1x1 test pits were excavated. Test pit 1 (TP1) was placed on the east cliff into deposits northeast of the churchyard. Test pits 2 and 3 (TP2 & TP3) were placed into the central lawn area northwest of the churchyard. Test pit 4 (TP4) was placed about 150 m south of the main farm area into a separate and distinct activity area (Ríp 2).

4.1 Hot Water Trench (TT1)

In 2013, a trench was excavated for a hot water pipe, that ran immediately west of the churchyard (Figure 12). The trench was 33 m long, running north-south (Figure 13). The trench crosscut a series of structural features that were briefly examined and sampled by the SCASS team and are difficult to piece together into a coherent description. In general, there seems to be a pre-1104 domestic building in the southern part of the trench and a post-1104 barn in the northern part of the trench. Flotation samples were taken from two locations (which have been floated, but not processed). Three GPR profiles were taken on the bottom of the trench, but did not yield interpretable information.

The southern first three meters had substantial gravel and disturbed deposits, that indistinctly became the remnants of a poorly preserved turf wall from about 4 to 8 meters from the southern end of the hot water trench. At the bottom of the trench at about 6.2 m from the

south, several boulders were found in the trench floor. This suggests that the turf wall had a single course stone base. Just north of this probable turf wall was a distinct mottled upcast deposit with H3/H4 splotches (Figure 14). North of the upcast (about 12 m north of the south end of the trench) begins a compact, peat ash charcoal layer, that is probably a floor, most likely associated with the turf walls on either side of it. This floor appears to have been abandoned by 1104, as an in situ H1 tephra layer overlays the feature. The floor runs north for less than 2 m. A very poorly preserved turf wall between 14 and 18 m from the south end of the trench may mark the end of this structure. Assuming that the turf walls were about 2 m thick, and they appear in the trench profile as about 4 m thick, the trench could have bisected the walls at about a 60° angle. But, given the poor preservation and potential turf spread, the angle could have been closer to 90°. The north part of the potential structure clearly overlies a previous activity area.

This previous activity area, recorded as LCD, begins under the north turf deposit, and extends north for 11 m (to about 29 m north of the south end of the hot water trench). This LCD deposit is probably an extramural activity area, likely associated with the structure to the south, as well as others in the area, both earlier and later. This LCD deposit has several breaks, distinct charcoal deposits, peat ash lenses, and cuts, but good tephra preservation (Figure 15). At about 27 m from the south end of trench, the tephra layers are particularly thick (Figure 16).

North of the LCD deposit, starting at about 29 m north of the south end of the trench, is a series of rocks, both in the trench floor and sidewall, as well as disturbed turf deposits. The 1104 white tephra layer, that has been relatively continuous, gives way to a turf deposit that has a clear dark tephra in it (which is either the "1000" or the 1300). Below the turf deposits, is a white fibrous layer that may be hay or other organic deposit. All of these observations, suggest that there is some sort of structure at the north end of the trench, probably associated with animals.

No finds were recorded from the test trench. Five flotation samples were taken from the test trench (Table B7). Sample #1 was taken from just under the northern wall at 18 m north of the south end of the trench. Samples 2 through 5 were taken at 21 m north of the south end of the test trench (Figure 17). Sample #2 from between the 1104 and the "1000", #2 from between the "1000" and the "950", #3 from below the "950," sample #4 was excavated into

the trench floor into a cultural deposit, and sample #5, also excavated into the trench floor, into what appeared to be a sterile stratum below the cultural layers.

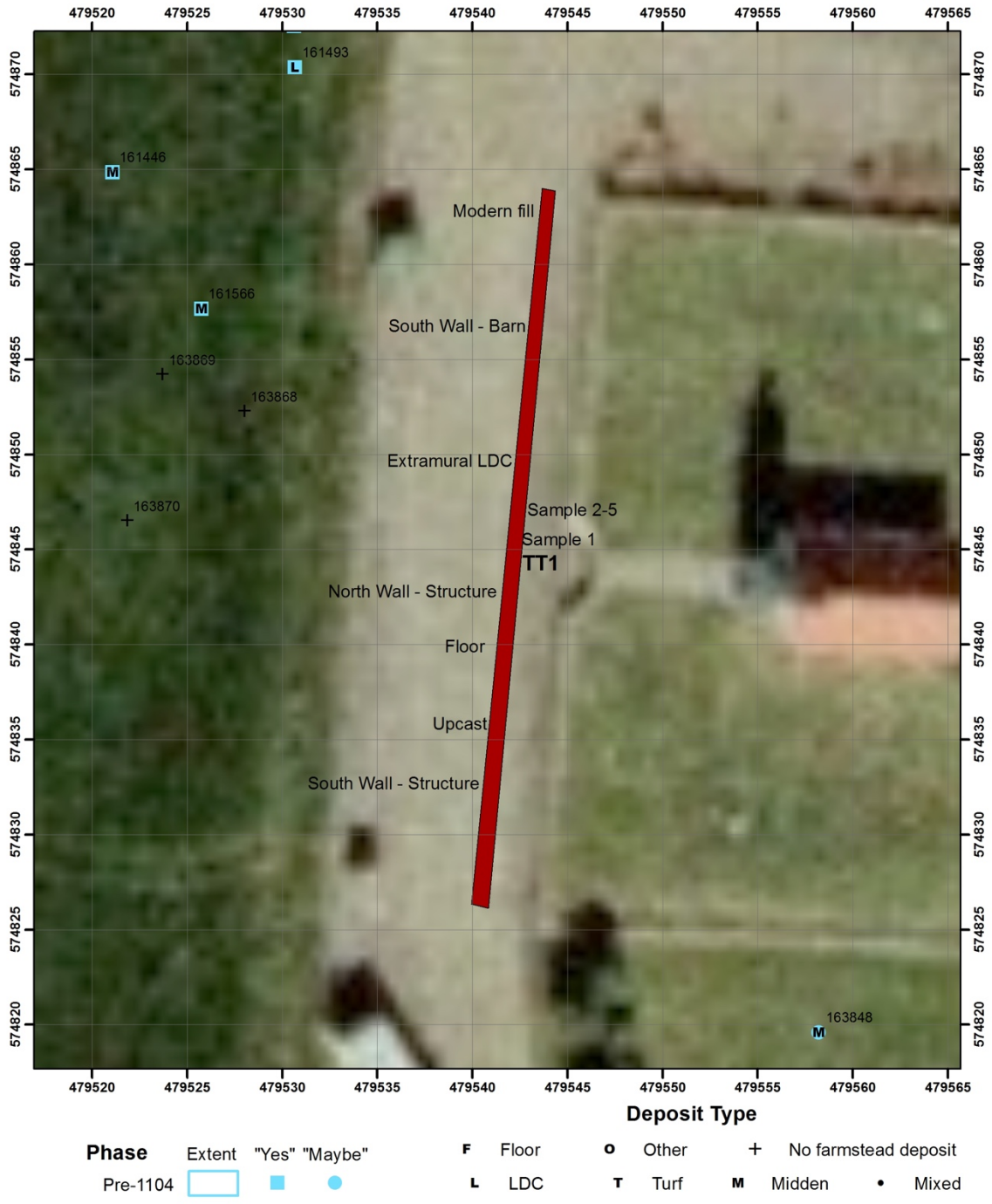


Figure 12. Location and interpretation of 2013 trench.

Figure 13. Photo of 2013 hot water trench at Ríp taken from the north, facing south.

Figure 14. photo of upcast in east wall, just north of indistinct turf wall.

Figure 15. Close up of LCD from 23 m north of south end of trench, showing upper H1 (white) and "1000" (gray) tephras.

Figure 16. LCD with tephra sequence from 27 m north of south end of trench.

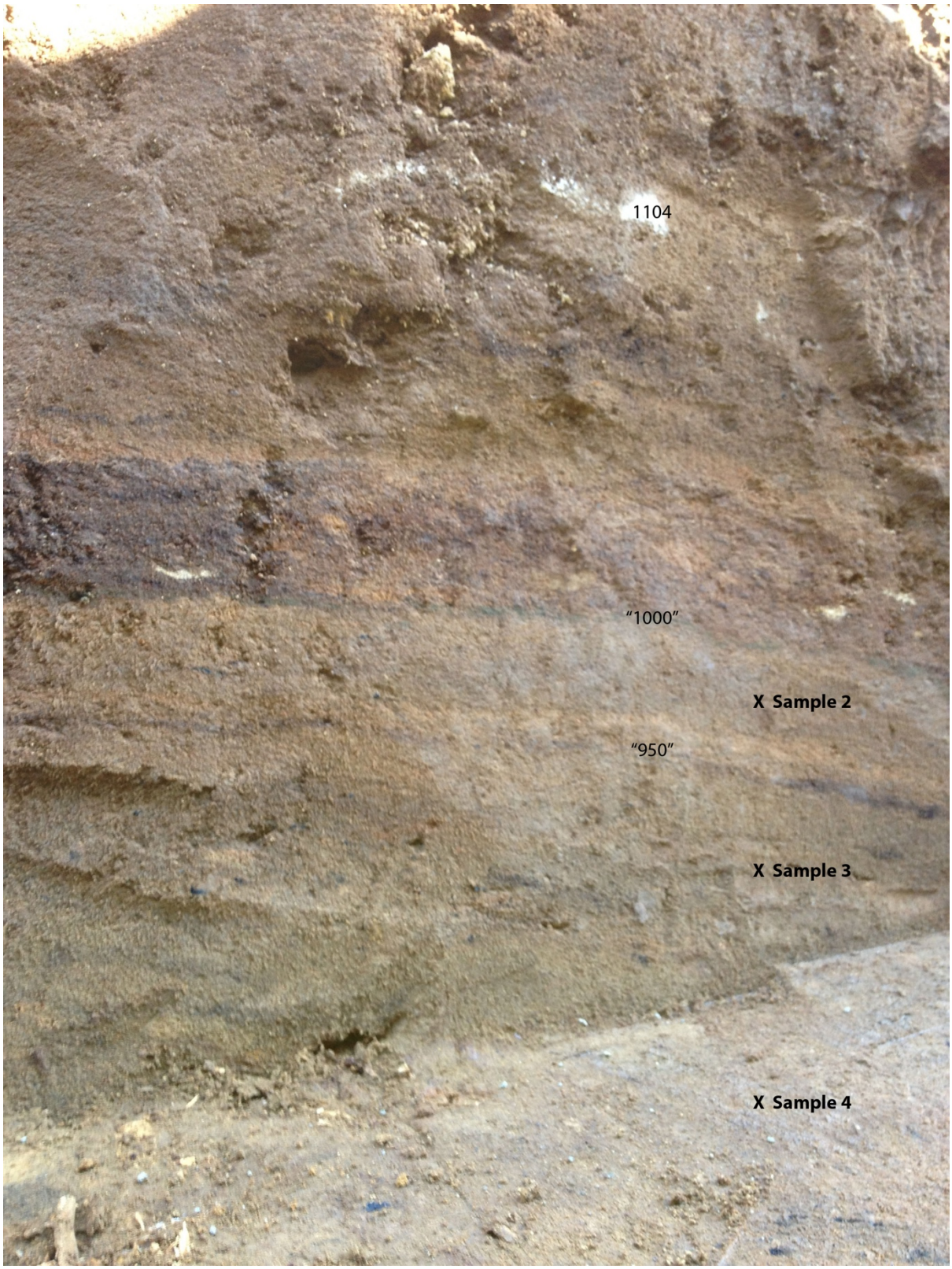
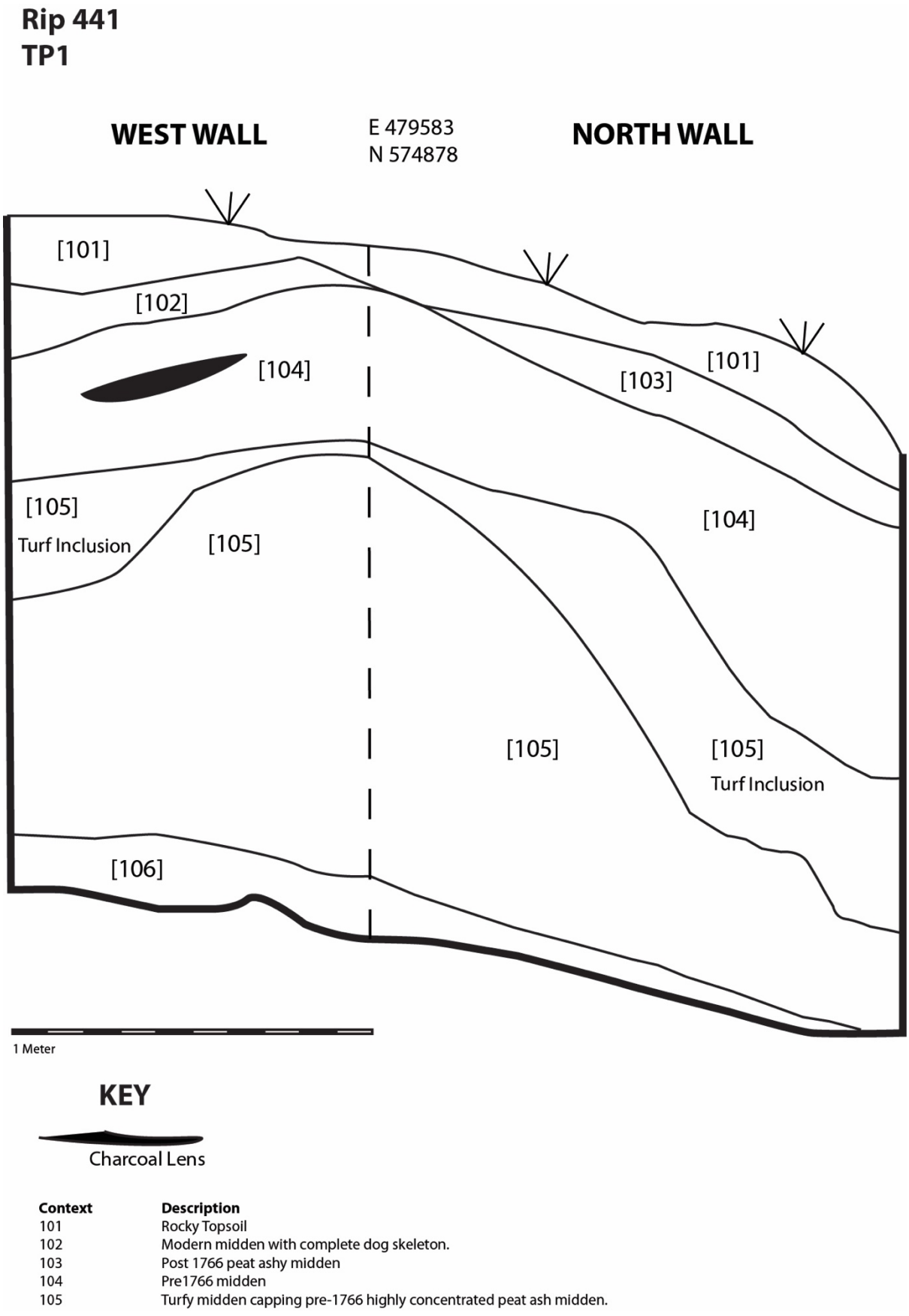


Figure 17. Stratigraphy and samples taken from east wall at 21 cm north of south end of trench.

4.2 Test pit 1

The first test pit (TP1) was placed on the east side of the ridge that runs to the east of the farm buildings. It was placed based on the results of core 161489 and those in the immediate area (Figure 18). Core 161489 presented 130, H1, and "1000" with midden and aeolian lenses interspersed. The unit was on a seep east cliff. As it turned out, the sequence was modern (Figure 19), and the tephra layers were in turf blocks (Figure 20). The topsoil [101] was about 12 cm deep and midden deposits, with a complete dog skeleton, were identified in the underlying layer [102]. More midden in [103] which was on top of an in situ 1766 tephra. Below, the tephra, was [104], which had a substantial ash and charcoal layer at about 60 cm bgs. Context [105], almost 2 m below the ground surface contained a substantial turf layer that had patches of the 1300 tephra as well as substantial peat ash. Context [106] was an arbitrary layer, and continued the deposits of [105]. Under [106] was bedrock. Most of the finds from Ríp come from TP1 (Table B8). Eleven flotation samples (Table B7) were taken from TP1.

Figure 18. Location of test pit 1 in relation to cores.



Context	Description
101	Rocky Topsoil
102	Modern midden with complete dog skeleton.
103	Post 1766 peat ashy midden
104	Pre1766 midden
105	Turfy midden capping pre-1766 highly concentrated peat ash midden.

Figure 19. Profile of west and north wall of TP 1

Figure 20. Bottom of [104] in TP1 showing 1300 tephra in turf.

4.3 Test pit 2 and 3

Test pit 2 and 3 (TP2 & TP3) are adjacent, and treated together because they have the same initial sequence. Test pit 2 was not completed. Test pit 2 (and 3) were placed based on the

results of core 162132, as well as the surrounding cores, because of the deep midden, potential floor, and good tephra preservation, especially in core 162085 which had the H1, "1000," and a good LNS (Figure 21). The 1300 tephra was not identified in any of the adjacent cores or in either pit. There were several finds from TP2 [102] including a blue glass bead. One floatation sample and one sample bag of animal bones were collected. Test pit 2 was discontinued after the completion of [102] because the 1104 tephra, just below, clearly showed that some sort of utility line had been run through it (Figure 22). After the completion of TP2 [102] test pit 3, in the sq meter just to the west, was opened.

Test Pit 3 exhibited the same initial sequence (Figure 23) as TP2. No finds or samples were collected from the top 10 cm [101]. From [102] 10-50 cm bgs several artifacts were collected (Figure 24, Figure 25, & Figure 26) along with two floatation samples and an animal bone sample. Below the 1104 tephra, the stratigraphy gets a little complicated. Contexts [103], in the northeast, and [105], in the southwest, were between the 1104 and "1000" tephra layers and were about 10 cm deep and were sampled for floatation. Context [104] was between the "1000" and the "950" tephra layer. It was sampled for floatation, as was the "950" tephra. Contexts [106] and [108] were below [104] and the "950" tephra and were both sampled for flotation. Context [109], below [106], was a small peat ash deposit in the northwest corner of the unit. Contexts [106], [108], & [109] are all on top of a LNS (Figure 27) and [111] is a gravel deposit in the northwest corner of the unit. Context 110, on top of the limit of excavation (the lowest level) and is a dark organic layer in the subsoil. The sequences in TP2 and TP3 suggest a complete and continuous depositional sequence perhaps from the earliest settlement to sometime a little after AD 1104. It is assumed that the upper layers, including the 1300 tephra have been bulldozed away.

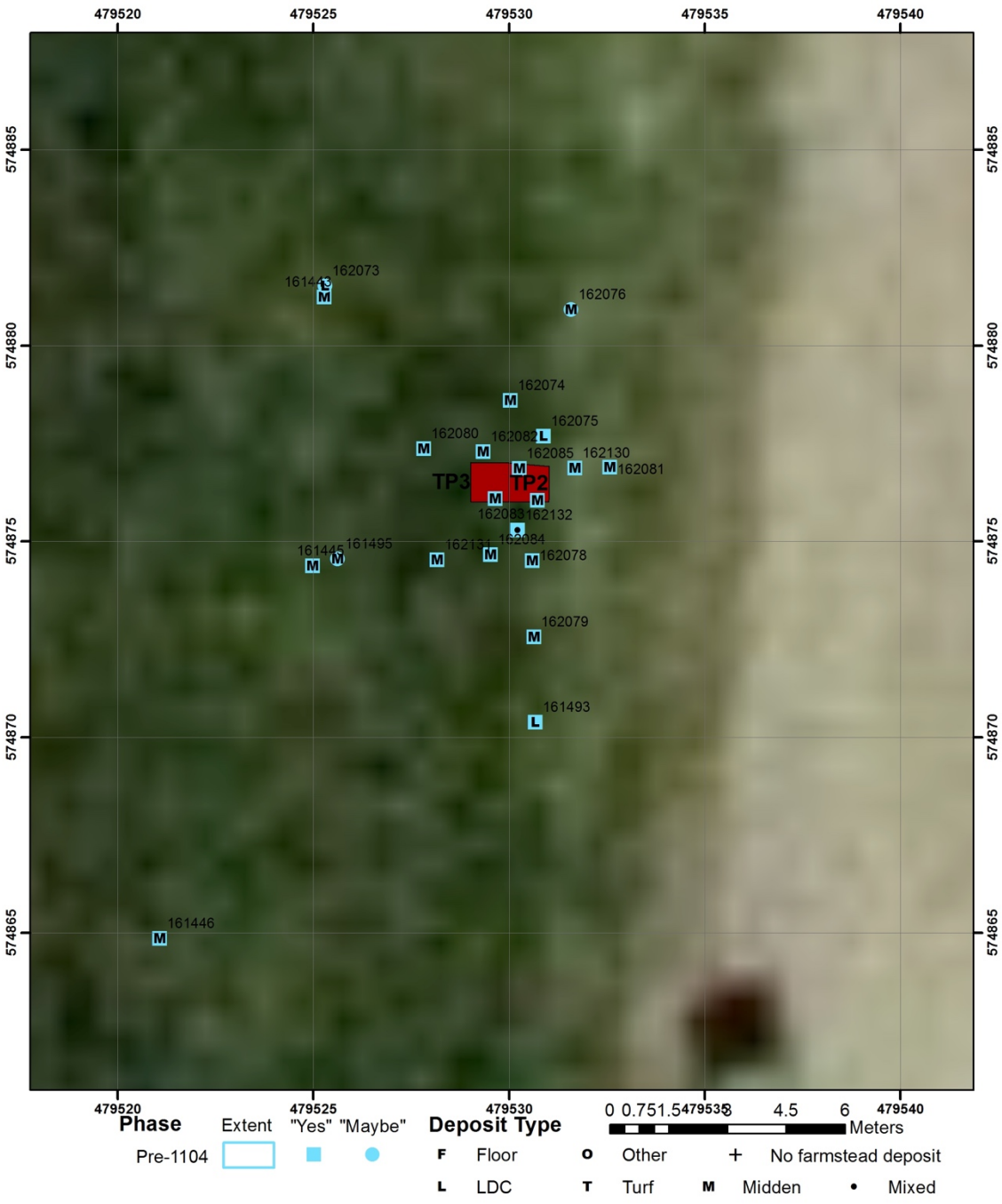


Figure 21. Location of test pit 2 and 3 in relation to cores.

Figure 22. Test pit 2, looking south showing break in 1104 tephra layer

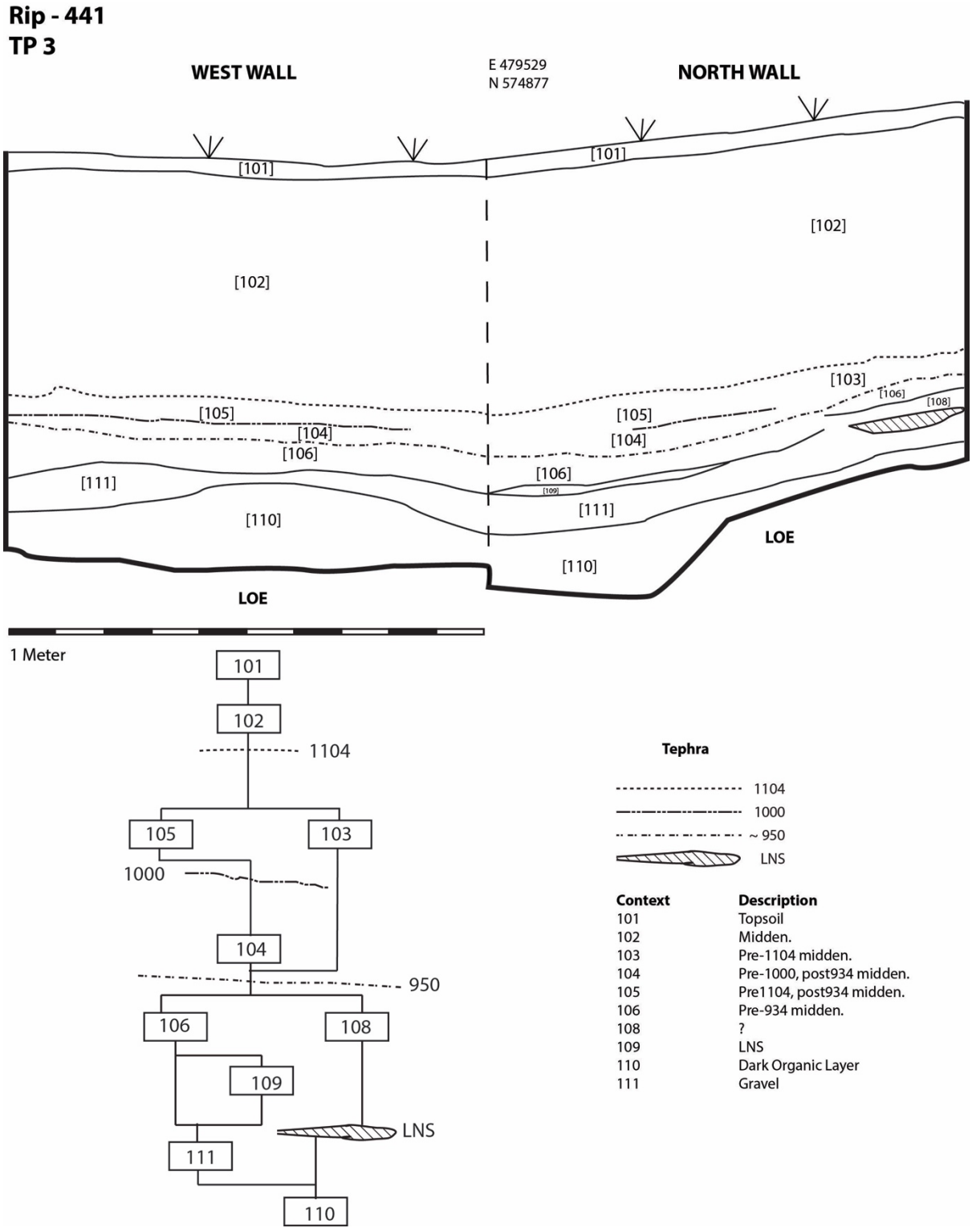


Figure 23. Profile of west and north wall of TP 3

Figure 24. From [102] find #1. Piece of spindle whorl.

Figure 25. Texties from [102] finds # 2 and #3.

Figure 26. Whalebone tool from [102] find #4

Figure 27. Left: photo of LNS and opening of [109]. Right: rhoto of west sidewall of TP3.

4.4 Test pit 4

Test pit 4 was placed to assess and date a potential domestic occupation about 150 m south of the main farm buildings. The test pit was placed on the basis of cores 162466 and 162088 (Figure 28), which both presented about 8 cm of distinct cultural deposits above and below a well-defined H1. This description was confirmed with the excavated profile (Figure 29).

The topsoil [101] of TP4 was not screened or sampled, while the rest of the contexts and H1 was screened and sampled for flotation. Context [102] contained a very ephemeral 1300 and

bottomed out on H1 and was about 10 cm thick. A small glazed stoneware ceramic piece was recovered from [102]. Context [103] was also about 10 cm thick and lay between the 1104 and "1000" tephra layers. Context [104], also about 10 cm thick, was between the "1000" and either the "950" or the H3. It appeared to be sterile. In general, the area around TP4 would suggest a low impact habitation from sometime after 1104 that started sometime after AD 1000.

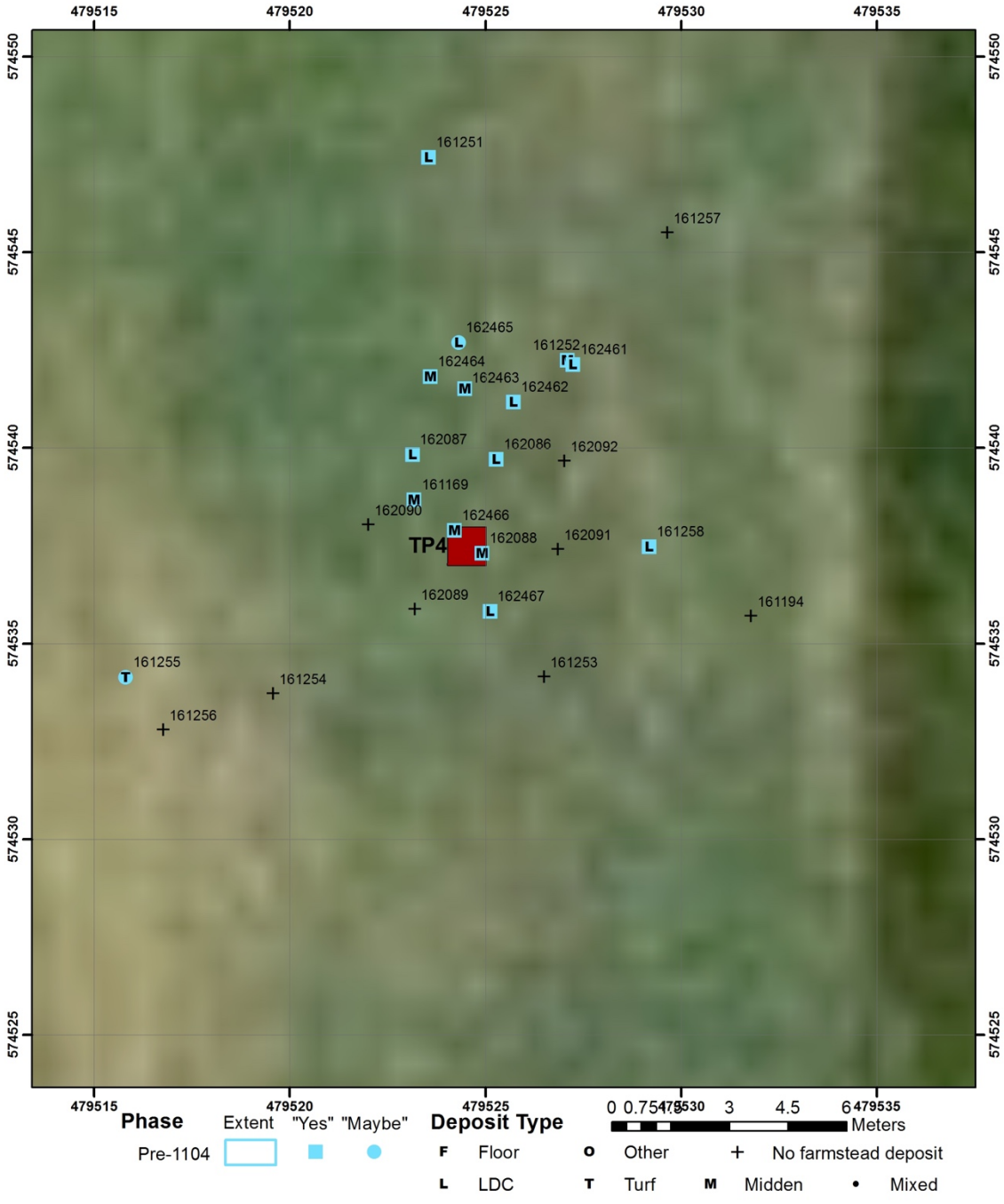


Figure 28. Test pit 4 location in relation to cores.

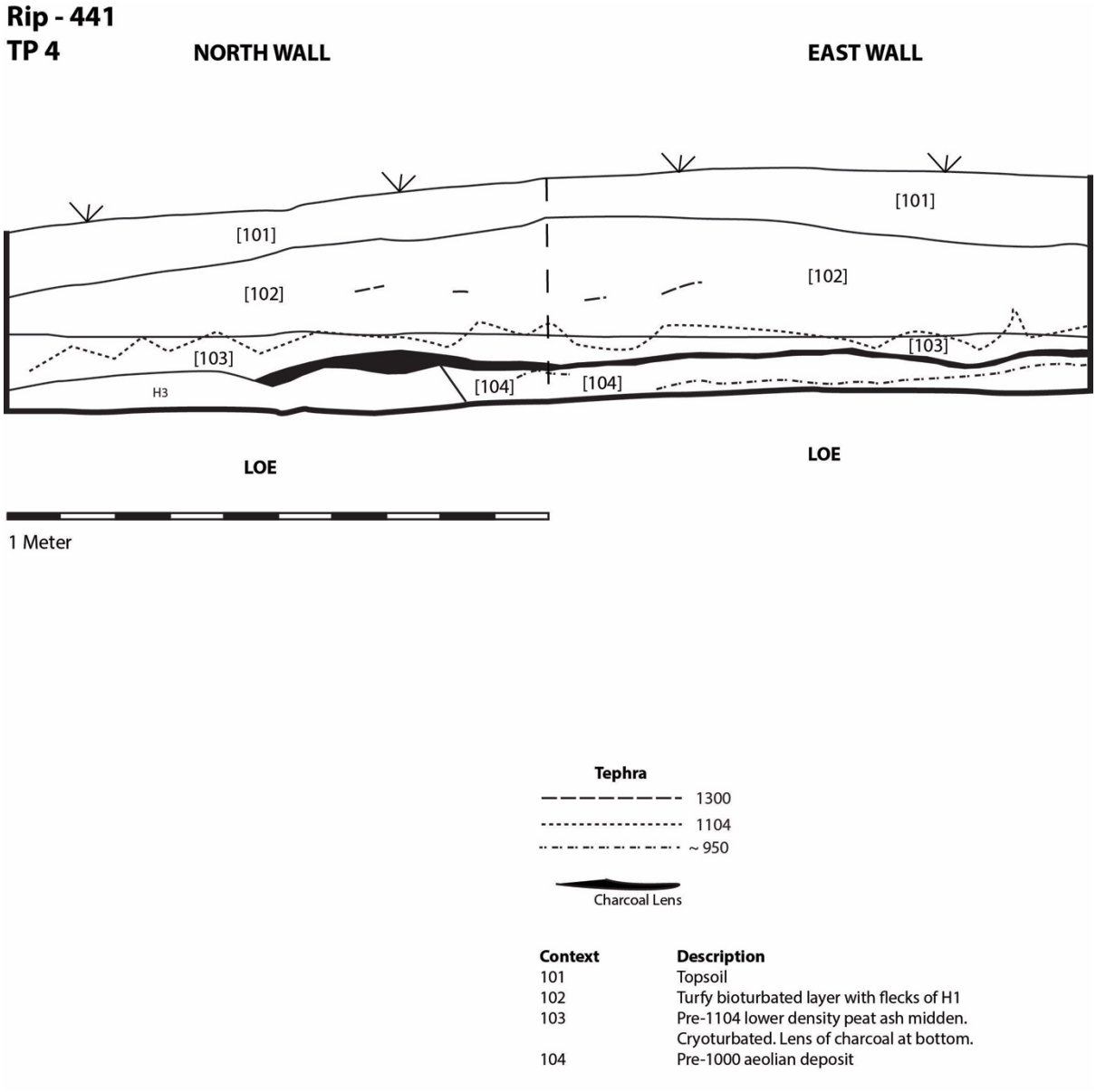


Figure 29. Profile of north and east wall of TP 4

Figure 30. Photo of east wall of TP4

Figure 31. Photo of north wall of TP4

5.0 CONCLUSIONS

Overall, Ríp would appear to be an extensive, early and relatively stable occupation. The long, thin north-south orientation of the farmmound makes it difficult to assess the changes in size through time. Much of the earliest midden deposits seem to be just north and west of the church, with most of the more recent layers mechanically removed, leaving the earliest occupations easily accessible. The areas north of the modern barns seem to have thin but extensive early domestic occupations, but more work is needed. Most importantly, the area east of the modern houses should be further cored to establish if there is a connection with the more southerly domestic deposits.

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APPENDIX A – CORING DATA

Table A2. Coring locations

Core Number	ISNet East	ISNet North	End Depth
161153	479490.0031	574748.9644	120
161154	479501.1785	574709.7479	120
161155	479498.9784	574652.1161	90
161156	479495.1584	574606.0922	60
161157	479497.6682	574564.1492	65
161158	479487.9374	574514.8219	22
161159	479487.0893	574479.3698	40
161160	479494.4761	574450.6613	110
161161	479510.286	574416.2069	80
161162	479541.5009	574387.6652	40
161163	479526.7787	574700.7587	45
161164	479527.4132	574653.6998	40
161165	479527.9025	574618.6843	12
161166	479524.0014	574576.6906	42
161167	479512.2979	574584.2282	41
161168	479523.8459	574558.8053	27
161169	479523.176	574538.674	36
161170	479521.7542	574522.8347	42
161171	479507.6483	574505.3166	7
161172	479518.305	574483.7214	12
161173	479520.9405	574466.0853	20
161174	479538.6826	574470.8665	15
161175	479558.6762	574442.627	40
161176	479541.2717	574459.698	40
161177	479559.0362	574500.3832	60
161178	479563.1087	574513.4647	40
161179	479565.26	574533.915	61
161180	479565.6112	574554.3563	40
161181	479565.422	574577.8332	40
161182	479559.8117	574617.2333	30
161183	479562.5602	574654.9021	60
161184	479566.2636	574697.5819	40
161185	479542.9764	574682.3581	40
161186	479542.382	574637.092	32
161187	479548.5485	574598.3569	33
161188	479544.7374	574579.6512	32
161189	479544.331	574554.5658	35
161190	479548.945	574537.0273	40
161191	479541.2075	574522.4748	26
161192	479540.0694	574504.5308	20
161193	479531.0667	574511.9777	75
161194	479531.7797	574535.6985	84
161195	479534.9896	574514.7133	40
161196	479535.0738	574565.8927	40

Core Number	ISNet East	ISNet North	End Depth
161197	479529.1202	574589.1274	40
161198	479558.818	574560.9311	40
161199	479556.5971	574543.9199	70
161223	479554.1278	575012.3299	39
161224	479527.1539	575008.7286	60
161225	479501.2749	574990.8474	120
161226	479606.318	574810.4115	55
161227	479592.8591	574719.045	39
161228	479571.3473	574719.333	78
161229	479581.8611	574737.1106	35
161230	479566.5117	574746.0448	52
161231	479578.7354	574774.9528	75
161232	479574.5413	574826.7678	40
161233	479579.2902	574831.5905	80
161234	479575.2972	574837.8129	42
161235	479580.0082	574842.7655	42
161236	479580.716	574860.0371	70
161245	479553.053	574532.5383	55
161246	479550.8652	574502.6708	50
161247	479520.1278	574565.0628	18
161248	479528.1527	574564.5148	40
161249	479528.035	574553.3132	50
161250	479519.8343	574552.7366	40
161251	479523.5482	574547.4229	33
161252	479527.0906	574542.2436	40
161253	479526.4944	574534.1472	40
161254	479519.5708	574533.716	13
161255	479515.8085	574534.1385	40
161256	479516.7649	574532.7937	20
161257	479529.6477	574545.4987	43
161258	479529.1872	574537.4738	40
161259	479560.8061	574547.1596	40
161260	479570.5978	574548.5829	40
161261	479560.7276	574538.3311	40
161262	479559.5731	574529.7609	40
161263	479558.8736	574519.94	80
161264	479568.5166	574522.571	40
161265	479556.9655	574534.1204	40
161266	479557.9807	574550.8568	40
161267	479554.4387	574554.7228	40
161268	479576.9867	574852.3295	42
161269	479539.9465	574978.6484	80
161270	479536.2839	575000.5991	40
161271	479533.2187	575038.7744	60
161272	479538.6665	575024.035	65
161305	479563.1348	574980.9069	18
161306	479561.212	575003.6546	60
161307	479559.5722	575037.1339	20

Core Number	ISNet East	ISNet North	End Depth
161308	479560.4435	575063.4838	11
161309	479544.4271	575086.7974	42
161310	479503.6226	574871.8652	120
161352	479542.6916	575105.8212	58
161353	479540.7503	575124.6824	52
161354	479539.3438	575144.1311	47
161355	479536.9393	575182.1979	40
161356	479536.4365	575210.2616	15
161357	479552.9988	575206.5534	38
161358	479555.0977	575185.5984	20
161359	479557.4347	575143.3891	38
161360	479558.4913	575125.4698	25
161361	479559.528	575105.1344	22
161362	479560.4903	575084.9672	45
161363	479545.214	575066.0233	53
161364	479548.223	575047.443	35
161365	479548.0187	575028.0049	20
161366	479549.2427	575009.6081	35
161367			40
161368	479531.1686	575069.4697	30
161369	479528.5549	575078.6339	42
161370	479526.0696	575097.4301	42
161371	479523.809	575115.6441	62
161372	479579.5	574875.1	120
161373	479582.2264	574875.3884	120
161374	479588.1761	574875.9377	75
161375	479587.1899	574871.863	120
161376	479593.5388	574865.935	120
161377	479596.9419	574871.9318	120
161378	479592.0282	574875.8332	119
161379	479593.2829	574880.4767	80
161380	479583.7001	574857.2512	120
161381	479583.9852	574849.3401	54
161382	479582.9793	574842.7143	42
161383	479581.7053	574837.5009	40
161384	479584.8323	574826.1125	65
161385	479582.7963	574807.9865	80
161386			57
161387	479582.7166	574864.8869	115
161427	479581.8614	574875.7709	200
161428	479574.193	574867.4082	100
161438	479520.535	575046.826	55
161439	479514.9689	575086.6426	40
161440	479510.7556	575126.5148	40
161441	479506.5966	575167.5175	40
161442	479503.184	574885.973	45
161443	479525.285	574881.236	120
161444	479525.356	574889.136	120

Core Number	ISNet East	ISNet North	End Depth
161445	479524.985	574874.379	120
161446	479521.083	574864.855	120
161447	479521.5402	575134.8551	74
161448	479517.9408	575170.0747	52
161449	479517.721	575189.331	36
161469	479520.084	575150.885	45
161489	479582.515	574875.325	160
161490	479582.738	574873.478	114
161491	479587.077	574875.75	180
161492	479583.543	574877.388	215
161493	479530.676	574870.378	84
161494	479568.851	574866.555	100
161495	479525.625	574874.556	130
161566	479525.75	574857.667	120
161567	479501.628	574860.21	60
161568	479502.881	574867.075	40
162073	479525.301	574881.529	97
162074	479530.035	574878.597	90
162075	479530.888	574877.685	80
162076	479531.592	574880.921	40
162077	479530.725	574876.043	70
162078	479530.594	574874.509	40
162079	479530.637	574872.557	56
162080	479527.828	574877.367	73
162081	479532.581	574876.893	95
162082	479529.343	574877.287	64
162083	479529.65	574876.092	80
162084	479529.532	574874.663	68
162085	479530.265	574876.862	70
162086	479525.277	574539.714	40
162087	479523.138	574539.833	40
162088	479524.914	574537.311	57
162089	479523.195	574535.875	19
162090	479522.01	574538.037	21
162091	479526.849	574537.409	65
162092	479527.01	574539.663	80
162130	479531.688	574876.87	70
162131	479528.17	574874.532	90
162132	479530.228	574875.29	65
162461	479527.24	574542.131	41
162462	479525.72	574541.173	40
162463	479524.469	574541.515	42
162464	479523.591	574541.819	40
162465	479524.317	574542.694	40
162466	479524.212	574537.888	40
162467	479525.119	574535.824	46
162468	479574.3197	574921.2011	10
162469	479577.6009	574916.9409	80

Core Number	ISNet East	ISNet North	End Depth
162470	479585.1807	574935.3973	120
162471	479583.6686	574936.1884	65
162472	479469.4255	574843.8876	120
162473	479462.4635	574802.3459	120
162474	479464.2872	574767.544	120
162475	479469.8518	574721.8998	120
162476	479392.3395	574661.2328	12
162477	479397.4655	574644.694	12
162478	479393.6937	574631.6748	12
162479	479393.6937	574631.6748	60
162480	479387.592	574594.9219	30
162481	479387.4235	574577.6401	80
162482	479370.3148	574610.2089	40
162483	479365.8479	574628.8617	10
162484	479365.8479	574628.8617	30
162686	479376.6921	574633.9139	20
162687	479373.4442	574636.39	15
162688	479373.4442	574636.39	5
162689	479372.3299	574647.8828	4
162690	479372.3299	574647.8828	16
162691	479383.338	574663.0807	10
162692	479386.4809	574678.2228	10
162693	479372.4164	574692.4835	10
162694	479371.481	574677.3257	20
162695	479376.1556	574662.0166	40
162696	479366.4994	574649.3737	10
162697	479355.9276	574676.2096	0
162698	479341.16	574662.711	30
162699	479345.8392	574654.538	30
162700	479353.9537	574624.932	50
162701	479358.5095	574599.3654	15
162702	479372.971	574576.1815	65
163716			108
163744	479495.338	574964.1284	8
163745	479496.253	574963.453	80
163746	479519.3244	574987.4866	80
163747	479557.2301	574963.0235	65
163748	479556.0501	574965.2619	90
163749	479543.4759	574969.03	70
163848	479558.2158	574819.5908	80
163849	479565.1286	574797.2564	40
163850	479465.0779	574895.9039	120
163851	479491.6834	574942.3345	120
163852	479515.5081	574968.0004	82
163868	479528.0297	574852.2831	90
163869	479523.7202	574854.209	90
163870	479521.8725	574846.5282	40
163871	479494.7087	574933.5809	80

Core Number	ISNet East	ISNet North	End Depth
163872	479505.5862	574969.6313	120
163873	479529.9102	574969.1254	60
163874	479527.787	574968.0254	70
163875	479542.1841	574961.9028	82
163876	479541.9589	574962.5734	70
163877	479551.0521	574973.8828	80

Table A3. Tephra layers in cores

Core Number	Depth	Tephra Layer	Description
161153	23	934/950	
161154	30	1300	
161155	19	1300	
161155	34	H1	
161155	41	H3	
161155	44	H4	
161156	33	H1	
161156	39	H3	
161157	20	1300	
161157	41	H3	
161157	50	H4	
161160	42	H1	
161160	79	H3	
161161	39	H3	
161161	55	H4	
161162	8	H1	
161162	21	H3	
161163	14	H1	
161163	17	1000	
161163	28	H3	
161164	7	1766	
161166	21	1000	Possibly 934
161166	23	H3	
161166	32	H4	
161167	38	H3	
161169	16	H1	
161170	30	H3	
161170	38	H4	
161172	7	1766	
161176	18	1766	
161177	27	1300	
161177	50	H3	
161177	58	H4	
161178	23	H1	
161178	38	H3	
161179	17	1300	
161179	25	H1	

Core Number	Depth	Tephra Layer	Description
161179	33	1000	Possibly 934
161179	44	H3	
161180	21	H1	
161180	26	934/950	Possibly LNL
161180	36	H3	
161181	24	H1	
161182	21	H1	
161183	25	H1	
161183	35	LNS	
161184	18	1300	
161184	26	H1	
161184	30	934/950	
161185	14	H1	
161185	23	H3	
161185	24	H4	
161186	16	H1	
161186	18	H3	
161187	24	1300	
161188	28	H1	
161189	26	1300	
161189	33	H1	
161190	13	H1	Blown
161190	25	H3	
161191	20	H1	
161193	21	H1	
161193	35	H3	
161193	41	H4	
161194	20	1300	
161194	30	H1	
161194	55	H3	
161194	58	H4	
161195	22	H1	
161195	30	H3	
161195	38	H4	
161196	22	H3	
161196	31	H4	
161197	25	1000	
161197	26	934/950	
161197	27	LNL	
161197	27	LNS	
161198	21	1300	
161199	18	H1	
161199	23	LNS	
161199	38	H3	
161199	42	H4	
161223	17	H1	
161223	21	1000	
161223	36	H3	

Core Number	Depth	Tephra Layer	Description
161226	40	H3	
161226	50	H4	
161227	35	H3	
161228	35	H1	
161228	47	H3	
161228	52	H4	
161229	30	H3	
161230	35	H1	
161231	25	H1	
161231	53	LNS	
161231	65	H3	
161233	33	H1	
161233	46	H3	
161233	49	H4	
161234	15	H1	
161234	30	H3	
161235	20	1300	
161235	25	H1	
161236	37	1300	
161236	48	1000	
161236	52	H3	
161245	40	H1	
161246	25	1300	
161246	29	H1	
161246	41	H3	
161247	15	H3	
161248	20	H1	
161248	35	H3	
161248	39	H4	
161249	27	1300	
161249	33	H1	
161249	45	H3	
161249	49	H4	
161250	25	H3	
161251	22	H1	
161252	16	1300	
161252	23	H1	
161252	28	934/950	
161253	18	1300	
161253	26	H1	
161253	34	934/950	
161255	23	H3	
161256	15	1300	
161256	20	H1	
161257	27	1300	
161257	31	H1	
161257	34	934/950	
161258	30	H1	

Core Number	Depth	Tephra Layer	Description
161259	19	H1	
161259	26	934/950	Patchy
161259	38	H3	
161260	20	H1	
161260	35	H3	
161261	27	H1	
161262	22	1300	
161262	26	H1	
161262	38	H3	
161263	32	1300	
161263	41	LNS	
161263	44	H3	
161264	19	H1	
161264	22	934/950	
161264	28	LNS	
161264	31	H3	
161265	22	1300	
161265	27	H1	
161265	38	H3	
161266	24	H1	
161266	38	H3	
161267	23	H1	
161267	38	LNS	
161268	20	H1	
161269	14	1300	
161269	40	H3	
161269	47	H4	
161270	24	H3	
161270	29	H4	
161271	27	H1	
161271	38	H3	
161271	50	H4	
161272	23	H1	
161272	24	H3	
161272	33	H4	
161306	37	H1	
161306	41	1000	
161306	45	LNS	
161306	55	H3	
161310	70	H1	
161310	78	LNS	
161310	105	H3	
161310	111	H4	
161352	45	H3	Very diffuse
161354	40	H1	
161355	9	1766	
161355	30	H3	
161355	33	H4	

Core Number	Depth	Tephra Layer	Description
161357	17	H1	Speck
161357	30	unknown	1000?
161357	35	unknown	Land am?
161359	23	H1	Striated
161360	20	H1	
161361	16	H1	
161364	16	H1	
161364	30	H3	
161365	10	H1	
161366	18	H1	
161367			
161367			
161370	30	H3	
161370	32	H4	
161371	18	H3	
161371	31	H4	
161376	110	1766	
161378	119	H1	Possibly in turf
161379	73	H1	
161380	103	1300	
161380	105	H1	
161380	107	934/950	Patchy
161380	108	LNS	
161381	44	H1	
161381	47	934/950	Patchy
161382	30	H1	
161383	30	H1	
161383	33	934/950	
161384	27	1300	
161384	36	H1	
161384	46	LNS	
161384	53	H3	
161385	51	H3	
161385	54	H4	
161386	24	H1	
161386	31	H3	
161387	79	1300	
161387	92	H1	
161387	95	934/950	
161387	104	H3	
161427	89	H1	Possibly in turf
161427	99	934/950	
161428	57	1300	
161428	71	H1	
161428	74	934/950	
161440	17	H3	
161440	25	H4	
161441	14	H1	

Core Number	Depth	Tephra Layer	Description
161441	31	H3	
161443	9	1300	
161443	64	H1	
161443	79	1000	
161443	95	934/950	
161443	105	H3	
161443	109	H4	
161444	69	1300	
161445	95	1300	
161445	106	H1	
161445	112	1000	
161446	95	1000	
161446	100	LNS	
161446	105	H3	
161446	110	H4	
161447	41	H3	
161447	54	H4	
161448	37	H3	Could be leached H1
161449	34	H3	
161469	14	H1	
161469	28	H3	
161489	70	1300	
161489	86	H1	
161489	149	1000	Patchy
161490	65	H1	Possibly
161490	110	H1	Possibly
161491	123	1300	
161491	150	H1	
161491	163	934/950	Fleck
161492	60	1766	
161492	90	1300	
161492	124	H1	
161492	154	934/950	
161493	24	1300	
161493	48	H1	
161493	55	1000	
161493	58	934/950	
161493	72	H3	
161494	81	LNS	
161494	82	H3	
161494	85	H4	
161495	91	1300	
161495	104	LNS	
161495	106	H3	
161566	72	H1	
161566	78	1000	
161566	100	H3	
161566	104	H4	

Core Number	Depth	Tephra Layer	Description
162073	48	1300	
162073	83	934/950	
162073	86	H3	
162074	21	934/950	
162074	50	H1	Possibly in turf
162075	21	1300	
162075	37	H1	
162075	43	1000	
162075	54	LNS	
162075	64	H3	
162077	32	H1	
162077	44	1000	Could be 934
162077	52	H3	
162077	55	H4	
162078	30	H1	
162078	38	1000	Possibly the 934
162079	36	H1	
162079	41	1000	Could be 934
162080	48	H1	
162080	56	1000	Possibly 934
162080	65	LNS	
162080	76	H3	
162081	55	1000	
162081	60	934/950	
162081	70	LNS	
162082	45	H1	
162082	54	1000	Could be 934
162083	44	H1	
162083	52	1000	
162083	60	H3	
162084	39	H1	
162084	44	1000	Could be 934
162084	56	LNS	
162084	60	H3	
162085	39	H1	
162085	45	1000	
162085	53	LNS	
162085	58	H3	
162086	15	1300	
162086	20	H1	
162086	37	LNS	
162086	39	H3	
162087	10	H1	
162088	26.5	H1	
162088	35	934/950	
162089	18	H1	
162090	19	H3	
162091	2	H3	

Core Number	Depth	Tephra Layer	Description
162091	31	H1	
162091	48	H4	
162092	28	H1	
162092	49	H3	
162092	51	H4	
162130	25	H1	
162130	35	1000	
162130	38	LNS	
162130	55	H3	
162130	60	H4	
162131	50	1000	
162131	75	LNS	
162131	80	H3	
162132	15	1300	
162132	33	H1	
162132	60	H3	
162461	18	H1	
162461	39	LNS	
162461	40	H3	
162462	32	H1	
162463	23	H1	
162463	31	934/950	
162463	39	LNS	
162464	16	H1	Bioturbated
162466	13	1300	
162466	20	H1	
162466	22	1000	Possible
162466	24	934/950	
162466	38	H3	
162467	17	1300	
162467	27	H1	
162467	32	934/950	
162467	44	H3	
162470	60	LNS	
162479	30	H3	
162480	28	H3	
162481	16	1300	
162481	41	H1	
162481	78	H3	
162482	36	H3	
162690	12	H1	
162700	16	H1	
162700	30	H3	
162702	18	H1	
162702	27	H3	
163716	57	H1	
163716	80	1000	
163745	13	H1	

Core Number	Depth	Tephra Layer	Description
163745	67	H3	
163745	73	H4	
163746	24	H1	
163747	27	H1	
163747	56	H3	
163748	33	H3	
163749	28	H1	
163749	38	H3	
163848	60	LNS	
163848	72	H3	
163848	78	H4	
163852	63	H1	
163852	76	LNS	
163852	79	H3	
163868	56	H1	
163868	87	H3	
163871	50	H1	
163872	77	unknown	
163872	79	H3	
163873	23	1300	
163873	39	H3	Possibly H1
163874	19	H1	
163875	18	H1	
163876	38	H3	
163876	44	H4	
163877			
163877			
163877	49	H3	
163877	52	H4	

Table A4. Stratigraphic layers in cores.

Core Number	top depth	bottom	Category	Description	Tephra in Turf
161153	0	7	Root Mat		
161153	7	13	Disturbed		
161153	13	24	Aeolian Deposit		
161153	24	27	Low Density Cultural		
161153	27	110	Bog		
161153	110	120	Gley		
161154	0	10	Root Mat		
161154	10	14	Disturbed		
161154	14	45	Bog		
161154	45	120	Bog		
161155	0	7	Root Mat		
161155	7	18	Low Density Cultural		
161155	18	28	Aeolian Deposit	Boggy	
161155	28	31	Low Density Cultural		
161155	31	90	Bog		
161155	90	90	Rock		
161156	0	8	Root Mat		
161156	8	33	Aeolian Deposit		
161156	33	60	Bog		
161156	60	60	Rock		
161157	0	10	Root Mat		
161157	10	40	Aeolian Deposit		
161157	40	65	Bog		
161157	65	65	Rock		
161158	0	7	Root Mat		
161158	7	22	Aeolian Deposit		
161158	22	22	Gravel		
161159	0	10	Root Mat		
161159	10	24	Aeolian Deposit		

Core Number	top depth	bottom	Category	Description	Tephra in Turf
161159	24	30	Turf		
161159	30	40	Aeolian Deposit		
161159	40	40	Rock		
161160	0	7	Root Mat		
161160	7	34	Aeolian Deposit		
161160	34	100	Bog		
161160	100	110	Clay		
161160	110	110	Rock		
161161	0	6	Root Mat		
161161	6	18	Aeolian Deposit		
161161	18	58	Aeolian Deposit		
161161	58	80	Gley		
161161	80	80	Rock		
161162	0	5	Root Mat		
161162	5	29	Aeolian Deposit	Boggy	
161162	29	38	Gley		
161162	38	40	Sand		
161162	40	40	Rock		
161163	0	6	Root Mat		
161163	6	17	Aeolian Deposit		
161163	17	28	Aeolian Deposit		
161163	28	45	Subsoil		
161163	45	45	Rock		
161164	0	6	Root Mat		
161164	6	30	Aeolian Deposit		
161164	30	40	Subsoil		
161164	40	40	Rock		
161165	0	7	Root Mat		
161165	7	12	Disturbed		
161165	12	12	Rock		
161166	0	6	Root Mat		

Core Number	top depth	bottom	Category	Description	Tephra in Turf
161166	6	14	Turf	1104 H1	
161166	14	21	Low Density Cultural		
161166	21	38	Aeolian Deposit		
161166	38	42	Subsoil		
161166	42	42	Rock		
161167	0	8	Root Mat		
161167	8	39	Aeolian Deposit		
161167	39	41	Subsoil		
161167	41	41	Rock		
161168	0	10	Root Mat		
161168	10	15	Aeolian Deposit		
161168	15	17	Low Density Cultural		
161168	17	27	Aeolian Deposit		
161168	27	27	Rock		
161169	0	14	Root Mat		
161169	14	16	Disturbed		
161169	16	22	Low Density Cultural		
161169	22	24	Midden		
161169	24	36	Aeolian Deposit		
161169	36	36	Rock		
161170	0	7	Root Mat		
161170	7	10	Turf		
161170	10	22	Aeolian Deposit		
161170	22	42	Subsoil		
161170	42	42	Rock		
161171	0	7	Root Mat		
161171	7	7	Rock		
161172	0	12	Root Mat		
161172	12	12	Rock		
161173	0	16	Root Mat		

Core Number	top depth	bottom	Category	Description	Tephra in Turf
161173	16	20	Subsoil		
161173	20	20	Rock		
161174	0	14	Root Mat		
161174	14	15	Aeolian Deposit		
161174	15	15	Rock		
161175	0	12	Root Mat		
161175	12	40	Aeolian Deposit		
161175	40	40	Rock		
161176	0	14	Root Mat		
161176	14	40	Aeolian Deposit		
161176	40	40	Rock		
161177	0	9	Root Mat		
161177	9	21	Turf	1300	
161177	21	40	Aeolian Deposit		
161177	40	60	Subsoil		
161177	60	60	Rock		
161178	0	12	Root Mat		
161178	12	32	Aeolian Deposit		
161178	32	40	Subsoil		
161178	40	40	Rock		
161179	0	12	Root Mat		
161179	12	29	Aeolian Deposit		
161179	29	33	Low Density Cultural		
161179	33	40	Aeolian Deposit		
161179	40	61	Subsoil		
161179	61	61	Rock		
161180	0	8	Root Mat		
161180	8	23	Aeolian Deposit		
161180	23	28	Low Density Cultural		
161180	28	40	Aeolian Deposit		
161180	40	40	Rock		

Core Number	top depth	bottom	Category	Description	Tephra in Turf
161181	0	12	Root Mat		
161181	12	17	Turf		
161181	17	40	Aeolian Deposit		
161181	40	40	Rock		
161182	0	10	Root Mat		
161182	10	28	Aeolian Deposit		
161182	28	30	Subsoil		
161182	30	30	Rock		
161183	0	7	Root Mat		
161183	7	15	Disturbed		
161183	15	35	Aeolian Deposit		
161183	35	60	Subsoil		
161183	60	60	Rock		
161184	0	15	Root Mat		
161184	15	40	Aeolian Deposit		
161184	40	40	Rock		
161185	0	6	Root Mat		
161185	6	17	Aeolian Deposit		
161185	17	40	Subsoil		
161185	40	40	Rock		
161186	0	8	Root Mat		
161186	8	18	Aeolian Deposit		
161186	18	32	Subsoil		
161186	32	32	Rock		
161187	0	9	Root Mat		
161187	9	27	Aeolian Deposit		
161187	27	33	Subsoil		
161187	33	33	Rock		
161188	0	5	Root Mat		
161188	5	28	Turf		
161188	28	32	Aeolian Deposit		

Core Number	top depth	bottom	Category	Description	Tephra in Turf
161188	32	32	Rock		
161189	0	10	Root Mat		
161189	10	35	Aeolian Deposit		
161189	35	35	Rock		
161190	0	9	Root Mat		
161190	9	19	Aeolian Deposit		
161190	19	40	Subsoil		
161191	0	5	Root Mat		
161191	5	26	Aeolian Deposit		
161191	26	26	Rock		
161192	0	5	Root Mat		
161192	5	16	Aeolian Deposit		
161192	16	20	Turf		
161192	20	20	Rock		
161193	0	8	Root Mat		
161193	8	27	Aeolian Deposit		
161193	27	35	Aeolian Deposit		
161193	35	75	Subsoil		
161193	75	75	Rock		
161194	0	6	Root Mat		
161194	6	15	Aeolian Deposit		
161194	15	19	Turf		
161194	19	40	Aeolian Deposit		
161194	40	84	Subsoil		
161194	84	84	Rock		
161195	0	6	Root Mat		
161195	6	22	Turf		
161195	22	25	Aeolian Deposit		
161195	25	40	Subsoil		
161195	40	40	Rock		
161196	0	4	Root Mat		

Core Number	top depth	bottom	Category	Description	Tephra in Turf
161196	4	7	Turf	H1	
161196	7	40	Subsoil		
161196	40	40	Rock		
161197	0	6	Root Mat		
161197	6	9	Turf	H1	
161197	9	38	Aeolian Deposit		
161197	38	40	Subsoil		
161197	40	40	Rock		
161198	0	5	Root Mat		
161198	5	20	Turf		
161198	20	31	Aeolian Deposit		
161198	31	40	Subsoil		
161198	40	40	Rock		
161199	0	6	Root Mat		
161199	6	15	Aeolian Deposit		
161199	15	23	Low Density Cultural		
161199	23	40	Aeolian Deposit		
161199	40	70	Subsoil		
161199	70	70	Rock		
161223	0	5	Root Mat		
161223	5	16	Disturbed		
161223	16	21	Low Density Cultural		
161223	21	39	Aeolian Deposit		
161223	39	39	Rock		
161224	0	10	Root Mat		
161224	5	12	Low Density Cultural		
161224	12	35	Turf		
161224	35	50	Aeolian Deposit		
161224	50	55	Clay		
161224	55	60	Iron Pan		
161225	0	8	Root Mat		

Core Number	top depth	bottom	Category		Description	Tephra in Turf
161225	8	12	Disturbed			
161225	12	16	Low Density Cultural			
161225	16	50	Turf	Dry	1104 H1	
161225	55	120	Bog			
161226	0	15	Root Mat			
161226	15	25	Disturbed			
161226	25	55	Aeolian Deposit			
161226	55	55	Rock			
161227	0	10	Root Mat			
161227	10	24	Low Density Cultural			
161227	24	39	Aeolian Deposit			
161227	39	39	Rock			
161228	0	10	Root Mat			
161228	10	25	Disturbed			
161228	25	42	Midden			
161228	42	78	Aeolian Deposit			
161228	78	78	Rock			
161229	0	10	Root Mat			
161229	10	18	Low Density Cultural			
161229	18	35	Aeolian Deposit			
161229	35	35	Rock			
161230	0	10	Root Mat			
161230	10	30	Disturbed			
161230	30	52	Low Density Cultural			
161230	52	52	Rock			
161231	3	28	Disturbed			
161231	28	50	Midden			
161231	50	75	Aeolian Deposit			
161231	75	75	Rock			
161232	0	10	Root Mat			

Core Number	top depth	bottom	Category	Description	Tephra in Turf
161232	10	31	Disturbed		
161232	31	38	Aeolian Deposit		
161232	38	40	Subsoil		
161232	40	40	Rock		
161233	0	6	Root Mat		
161233	6	21	Disturbed		
161233	21	40	Aeolian Deposit		
161233	40	80	Subsoil		
161234	0	9	Root Mat		
161234	9	22	Disturbed		
161234	22	42	Subsoil		
161234	42	42	Rock		
161235	0	10	Root Mat		
161235	10	32	Aeolian Deposit		
161235	32	42	Subsoil		
161235	42	42	Rock		
161236	0	24	Disturbed		
161236	24	45	Aeolian Deposit		
161236	45	49	Low Density Cultural		
161236	49	70	Subsoil		
161236	70	70	Rock		
161245	0	8	Root Mat		
161245	8	20	Aeolian Deposit		
161245	20	28	Turf	1300	
161245	28	38	Aeolian Deposit		
161245	38	41	Low Density Cultural		
161245	41	55	Aeolian Deposit		
161245	55	55	Rock		
161246	0	10	Root Mat		
161246	10	20	Turf		
161246	20	40	Aeolian Deposit		

Core Number	top depth	bottom	Category	Description	Tephra in Turf
161246	40	50	Subsoil		
161246	50	50	Rock		
161247	0	5	Root Mat		
161247	5	15	Aeolian Deposit		
161247	15	18	Subsoil		
161247	18	18	Rock		
161248	0	10	Root Mat		
161248	10	18	Turf		
161248	18	37	Aeolian Deposit		
161248	37	40	Subsoil		
161249	0	8	Root Mat		
161249	8	21	Turf		
161249	21	39	Aeolian Deposit		
161249	39	50	Subsoil		
161249	50	50	Rock		
161250	0	7	Root Mat		
161250	7	16	Aeolian Deposit		
161250	16	40	Subsoil		
161250	40	40	Rock		
161251	0	8	Root Mat		
161251	8	20	Aeolian Deposit		
161251	20	24	Low Density Cultural		
161251	24	33	Aeolian Deposit		
161251	33	33	Rock		
161252	0	6	Root Mat		
161252	6	14	Turf		
161252	14	27	Aeolian Deposit		
161252	27	28	Midden		
161252	28	36	Aeolian Deposit		
161252	36	40	Subsoil		
161252	40	40	Rock		

Core Number	top depth	bottom	Category	Description	Tephra in Turf
161253	0	10	Root Mat		
161253	10	35	Aeolian Deposit		
161253	35	40	Subsoil		
161253	40	40	Rock		
161254	0	10	Root Mat		
161254	10	13	Subsoil		
161254	13	13	Rock		
161255	0	8	Root Mat		
161255	8	18	Turf		
161255	18	40	Subsoil		
161255	40	40	Rock		
161256	0	6	Root Mat		
161256	6	20	Aeolian Deposit		
161256	20	20	Rock		
161257	0	14	Root Mat		
161257	0	43	Aeolian Deposit		
161257	43	43	Rock		
161258	0	14	Root Mat		
161258	14	18	Low Density Cultural		
161258	18	22	Turf		
161258	22	30	Aeolian Deposit		
161258	30	32	Low Density Cultural		
161258	32	40	Aeolian Deposit		
161258	40	40	Rock		
161259	0	10	Root Mat		
161259	10	21	Aeolian Deposit		
161259	21	38	Low Density Cultural		
161259	38	40	Subsoil		
161259	40	40	Rock		
161260	0	8	Root Mat		
161260	8	13	Turf		

Core Number	top depth	bottom	Category	Description	Tephra in Turf
161260	13	18	Aeolian Deposit		
161260	18	22	Low Density Cultural		
161260	22	40	Subsoil		
161261	0	10	Root Mat		
161261	10	24	Aeolian Deposit		
161261	24	29	Low Density Cultural		
161261	29	40	Subsoil		
161261	40	40	Rock		
161262	0	9	Root Mat		
161262	9	23	Aeolian Deposit		
161262	23	31	Low Density Cultural		
161262	31	40	Subsoil		
161262	40	40	Rock		
161263	0	10	Root Mat		
161263	10	25	Turf		
161263	25	31	Aeolian Deposit		
161263	31	35	Low Density Cultural		
161263	35	80	Subsoil		
161263	80	80	Rock		
161264	0	12	Root Mat		
161264	12	22	Aeolian Deposit		
161264	22	40	Subsoil		
161264	40	40	Rock		
161265	0	10	Root Mat		
161265	10	28	Aeolian Deposit		
161265	28	40	Subsoil		
161266	0	9	Root Mat		
161266	9	15	Aeolian Deposit		
161266	15	25	Low Density Cultural		
161266	25	40	Subsoil		
161267	0	10	Root Mat		

Core Number	top depth	bottom	Category	Description	Tephra in Turf
161267	10	16	Aeolian Deposit		
161267	16	23	Low Density Cultural		
161267	23	40	Subsoil		
161268	0	8	Root Mat		
161268	8	20	Disturbed		
161268	20	42	Aeolian Deposit		
161268	42	42	Rock		
161269	0	9	Root Mat		
161269	9	18	Low Density Cultural		
161269	18	36	Aeolian Deposit		
161269	36	37	Low Density Cultural		
161269	37	38	Turf		
161269	38	40	Aeolian Deposit		
161269	40	80	Subsoil		
161269	80	80	Rock		
161270	0	8	Root Mat		
161270	8	20	Aeolian Deposit		
161270	20	22	Low Density Cultural		
161270	22	40	Subsoil		
161271	0	8	Root Mat		
161271	8	12	Turf	Tephra iusions	
161271	12	15	Aeolian Deposit		
161271	15	22	Low Density Cultural		
161271	22	27	Midden		
161271	27	40	Aeolian Deposit		
161271	40	60	Subsoil		
161272	0	8	Root Mat		
161272	8	18	Aeolian Deposit		
161272	18	23	Aeolian Deposit		
161272	23	65	Subsoil		
161272	65	65	Rock		

Core Number	top depth	bottom	Category	Description	Tephra in Turf
161305	0	10	Root Mat		
161305	10	18	Disturbed		
161305	18	18	Rock		
161306	0	9	Root Mat		
161306	9	35	Disturbed		
161306	35	45	Low Density Cultural		
161306	45	60	Aeolian Deposit		
161306	60	60	Rock		
161307	0	10	Root Mat		
161307	10	16	Turf		
161307	16	20	Aeolian Deposit		
161307	20	20	Rock		
161308	0	5	Root Mat		
161308	5	11	Aeolian Deposit		
161308	11	11	Rock		
161309	0	10	Root Mat		
161309	10	17	Disturbed		
161309	17	40	Turf	H1 1300	
161309	40	42	Midden		
161309	42	42	Iron Pan		
161310	0	5	Root Mat		
161310	5	42	Disturbed		
161310	42	80	Midden		
161310	80	115	Bog		
161310	115	120	Clay		
161352	0	8	Root Mat		
161352	8	18	Disturbed		
161352	18	58	Aeolian Deposit		
161352	58	58	Rock		
161353	0	10	Root Mat		

Core Number	top depth	bottom	Category		Description	Tephra in Turf
161353	10	14	Disturbed			
161353	14	36	Turf		H1	
161353	36	52	Aeolian Deposit	Striated		
161353	52	52	Rock			
161354	0	15	Root Mat			
161354	15	20	Disturbed			
161354	20	40	Aeolian Deposit	Striated		
161354	40	47	Aeolian Deposit			
161354	47	47	Rock			
161355	0	9	Root Mat			
161355	9	38	Aeolian Deposit			
161355	38	40	Aeolian Deposit	Gleyey		
161355	40	40	Rock			
161356	0	6	Root Mat			
161356	6	15	Aeolian Deposit			
161356	15	15	Rock			
161357	0	5	Root Mat			
161357	5	18	Aeolian Deposit			
161357	18	38	Turf			
161357	38	38	Rock			
161358	0	5	Root Mat			
161358	5	20	Aeolian Deposit			
161358	20	20	Rock			
161359	0	11	Root Mat			
161359	11	15	Aeolian Deposit			
161359	15	38	Aeolian Deposit			
161359	38	38	Rock			
161360	0	10	Root Mat			
161360	10	25	Aeolian Deposit			
161360	25	25	Rock			
161361	0	15	Root Mat			

Core Number	top depth	bottom	Category	Description	Tephra in Turf
161361	15	22	Aeolian Deposit		
161361	22	22	Rock		
161362	0	5	Root Mat		
161362	5	30	Aeolian Deposit		
161362	30	45	Subsoil		
161362	45	45	Rock		
161363	0	7	Root Mat		
161363	7	15	Disturbed		
161363	15	17	Low Density Cultural		
161363	17	53	Aeolian Deposit		
161363	53	53	Rock		
161364	0	5	Root Mat		
161364	5	15	Aeolian Deposit		
161364	15	25	Low Density Cultural		
161364	25	35	Aeolian Deposit		
161364	35	35	Rock		
161365	0	5	Root Mat		
161365	5	15	Low Density Cultural		
161365	15	20	Aeolian Deposit		
161365	20	20	Rock		
161366	0	5	Root Mat		
161366	5	12	Aeolian Deposit		
161366	12	19	Low Density Cultural		
161366	19	25	Floor		
161366	25	35	Aeolian Deposit		
161367	0	7	Root Mat		
161367	7	14	Disturbed		
161367	14	31	Turf	H1	
161367	31	40	Aeolian Deposit		
161367	40	40	Rock		
161368	0	5	Root Mat		

Core Number	top depth	bottom	Category	Description	Tephra in Turf
161368	5	30	Aeolian Deposit		
161368	30	30	Rock		
161369	0	4	Root Mat		
161369	4	12	Aeolian Deposit		
161369	12	33	Turf		
161369	33	42	Aeolian Deposit		
161369	42	42	Rock		
161370	0	6	Root Mat		
161370	6	14	Aeolian Deposit		
161370	14	36	Aeolian Deposit	Striated	
161370	36	42	Aeolian Deposit	Gleyey	
161370	42	42	Rock		
161371	0	4	Root Mat		
161371	4	18	Aeolian Deposit		
161371	18	42	Aeolian Deposit	Boggy	
161371	42	62	Aeolian Deposit	Gleyey	
161371	62	62	Rock		
161372	0	40	Disturbed		
161372	40	70	Disturbed		
161372	70	90	Midden		
161372	90	115	Low Density Cultural		
161372	115	120	Midden		
161373	0	10	Root Mat		
161373	10	120	Midden		
161374	0	75	Disturbed		
161374	75	75	Rock		
161375	0	50	Disturbed		
161375	50	120	Midden		
161376	0	4	Root Mat		
161376	4	60	Disturbed		
161376	60	120	Midden		

Core Number	top depth	bottom	Category	Description	Tephra in Turf
161377	0	12	Root Mat		
161377	12	28	Disturbed		
161377	28	30	Midden		
161377	30	120	Bog		
161378	0	55	Disturbed		
161378	55	90	Midden		
161378	90	101	Turf		
161378	101	117	Midden		
161378	117	119	Sand		
161379	0	10	Root Mat		
161379	10	32	Disturbed		
161379	32	80	Midden		
161380	0	10	Root Mat		
161380	10	40	Disturbed		
161380	40	102	Midden		
161380	102	108	Low Density Cultural		
161380	108	120	Subsoil		
161381	0	10	Root Mat		
161381	10	23	Disturbed		
161381	23	44	Midden		
161381	44	54	Aeolian Deposit		
161382	0	12	Root Mat		
161382	12	27	Disturbed		
161382	27	42	Aeolian Deposit		
161382	42	42	Rock		
161383	0	12	Root Mat		
161383	12	26	Disturbed		
161383	26	38	Aeolian Deposit		
161383	38	40	Subsoil		
161383	40	40	Rock		
161384	0	12	Root Mat		

Core Number	top depth	bottom	Category	Description	Tephra in Turf
161384	12	20	Disturbed		
161384	20	55	Aeolian Deposit		
161384	55	65	Subsoil		
161384	65	65	Rock		
161385		9	Root Mat		
161385	9	18	Disturbed		
161385	18	46	Aeolian Deposit		
161385	46	47	Low Density Cultural		
161385	47	80	Subsoil		
161386	0	10	Root Mat		
161386	10	24	Disturbed		
161386	24	40	Aeolian Deposit		
161386	40	57	Subsoil		
161386	57	57	Rock		
161387	0	10	Root Mat		
161387	10	18	Disturbed		
161387	18	83	Midden		
161387	83	115	Aeolian Deposit		
161387	115	115	Rock		
161427	0	34	Midden		
161427	34	52	Aeolian Deposit		
161427	52	54	Turf		
161427	54	80	Aeolian Deposit		
161427	80	85	Low Density Cultural		
161427	85	87	Turf	H1	
161427	87	95	Low Density Cultural		
161427	95	170	Midden		
161427	170	200	Subsoil		
161428	0	36	Gravel		
161428	36	78	Midden		
161428	78	88	Aeolian Deposit		

Core Number	top depth	bottom	Category	Description	Tephra in Turf
161428	88	100	Subsoil		
161438	0	15	Root Mat		
161438	15	45	Turf	H1	
161438	45	55	Sand		
161438	55	55	Rock		
161439	0	15	Root Mat		
161439	15	25	Turf	H3/H4	
161439	25	28	Sand		
161439	28	40	Turf	H3/H4	
161439	40	40	Rock		
161440	0	10	Root Mat		
161440	10	31	Aeolian Deposit		
161440	31	40	Bog		
161441	0	5	Root Mat		
161441	5	40	Aeolian Deposit	Boggy	
161442	0	5	Root Mat		
161442	5	35	Disturbed		
161442	35	45	Midden		
161443	0	3	Root Mat		
161443	3	25	Midden		
161443	25	29	Turf	H1	
161443	29	95	Midden		
161443	95	120	Aeolian Deposit		
161444	0	85	Midden		
161444	85	120	Disturbed	Grave Fill	
161445	0	5	Root Mat		
161445	5	120	Midden		
161446	0	4	Root Mat		
161446	4	100	Midden		
161446	100	120	Aeolian Deposit		
161447	0	8	Root Mat		

Core Number	top depth	bottom	Category	Description	Tephra in Turf
161447	8	21	Aeolian Deposit	Striated	
161447	21	23	Low Density Cultural		
161447	23	40	Aeolian Deposit	Gleyey	
161447	40	54	Aeolian Deposit	Boggy	
161447	54	74	Aeolian Deposit	Gleyey	
161447	74	74	Rock		
161448	0	10	Root Mat		
161448	10	18	Aeolian Deposit		
161448	18	52	Aeolian Deposit	Striated	
161448	52	52	Rock		
161449	0	6	Root Mat		
161449	6	15	Aeolian Deposit		
161449	15	36	Aeolian Deposit		
161449	36	36	Rock		
161469	0	6	Root Mat		
161469	6	15	Aeolian Deposit		
161469	15	19	Low Density Cultural		
161469	19	36	Aeolian Deposit	Striated	
161469	36	40	Aeolian Deposit	Boggy	
161469	40	45	Aeolian Deposit	Gleyey	
161469	45	45	Rock		
161489	0	10	Root Mat		
161489	10	40	Midden		
161489	40	60	Aeolian Deposit		
161489	60	80	Low Density Cultural		
161489	80	153	Midden		
161489	153	160	Aeolian Deposit		
161489	160	160	Rock		
161490	0	17	Root Mat		
161490	17	40	Disturbed		
161490	40	66	Low Density Cultural		

Core Number	top depth	bottom	Category	Description	Tephra in Turf
161490	66	114	Midden		
161490	114	114	Rock		
161491	0	15	Root Mat		
161491	15	80	Low Density Cultural		
161491	80	180	Low Density Cultural		
161492	0	20	Root Mat		
161492	20	45	Disturbed		
161492	45	65	Low Density Cultural		
161492	65	210	Midden		
161492	210	215	Subsoil		
161493	0	14	Root Mat		
161493	14	38	Midden		
161493	38	48	Aeolian Deposit		
161493	48	56	Low Density Cultural		
161493	56	84	Aeolian Deposit		
161494	0	40	Gravel		
161494	40	73	Disturbed		
161494	73	100	Aeolian Deposit		
161495	0	7	Root Mat		
161495	7	103	Midden		
161495	103	130	Subsoil		
161566	0	7	Root Mat		
161566	7	25	Disturbed		
161566	25	98	Midden		
161566	98	120	Aeolian Deposit		
161567	0	10	Root Mat		
161567	10	40	Disturbed		
161567	40	60	Low Density Cultural		
161567	60	60	Rock		
161568	0	5	Root Mat		
161568	5	40	Disturbed		

Core Number	top depth	bottom	Category	Description	Tephra in Turf
162073	0	7	Root Mat		
162073	7	78	Midden		
162073	78	80	Low Density Cultural		
162073	80	97	Aeolian Deposit		
162073	97	97	Rock		
162074	0	12	Root Mat		
162074	12	55	Midden		
162074	55	80	Low Density Cultural		
162074	80	90	Aeolian Deposit		
162074	90	90	Rock		
162075	0	9	Root Mat		
162075	9	25	Midden		
162075	25	35	Turf		
162075	35	47	Low Density Cultural		
162075	47	80	Aeolian Deposit		
162076	0	5	Root Mat		
162076	5	40	Midden		
162076	40	40	Rock		
162077	0	9	Root Mat		
162077	9	47	Midden		
162077	47	48	Low Density Cultural		
162077	48	70	Aeolian Deposit		
162077	70	70	Rock		
162078	0	7	Root Mat		
162078	7	40	Midden		
162078	40	40	Rock		
162079	0	10	Root Mat		
162079	10	16	Midden		
162079	16	34	Turf	1300	
162079	34	40	Midden		
162079	40	44	Low Density Cultural		

Core Number	top depth	bottom	Category	Description	Tephra in Turf
162079	44	56	Aeolian Deposit		
162079	56	56	Rock		
162080	0	7	Root Mat		
162080	7	55	Midden		
162080	55	61	Low Density Cultural		
162080	61	73	Aeolian Deposit		
162080	73	73	Rock		
162081	0	10	Root Mat		
162081	10	20	Disturbed		
162081	20	30	Midden		
162081	30	35	Turf		
162081	35	70	Midden		
162081	70	95	Aeolian Deposit		
162081	95	95	Rock		
162082	0	5	Root Mat		
162082	5	58	Midden		
162082	58	62	Low Density Cultural		
162082	62	64	Aeolian Deposit		
162082	64	64	Rock		
162083	0	5	Root Mat		
162083	5	38	Midden		
162083	38	40	Low Density Cultural		
162083	40	56	Midden		
162083	56	80	Aeolian Deposit		
162083	80	80	Rock		
162084	0	5	Root Mat		
162084	5	49	Midden		
162084	49	68	Aeolian Deposit		
162084	68	68	Rock		
162085	0	5	Root Mat		
162085	5	48	Midden		

Core Number	top depth	bottom	Category	Description	Tephra in Turf
162085	48	70	Aeolian Deposit		
162085	70	70	Rock		
162086	0	10	Root Mat		
162086	10	32	Low Density Cultural		
162086	32	40	Aeolian Deposit		
162086	40	40	Rock		
162087	0	7	Root Mat		
162087	7	20	Low Density Cultural		
162087	20	40	Subsoil		
162087	40	40	Rock		
162088	0	6	Root Mat		
162088	6	16	Disturbed		
162088	16	28	Aeolian Deposit		
162088	28	33	Midden		
162088	33	34	Low Density Cultural		
162088	34	57	Aeolian Deposit		
162088	57	57	Rock		
162089	0	6	Root Mat		
162089	6	19	Disturbed		
162089	19	19	Rock		
162090	0	7	Root Mat		
162090	7	21	Disturbed		
162090	21	21	Rock		
162091	0	5	Root Mat		
162091	5	21	Disturbed		
162091	21	65	Aeolian Deposit		
162091	65	65	Rock		
162092	0	5	Root Mat		
162092	5	23	Disturbed		
162092	23	28	Aeolian Deposit		
162092	28	80	Aeolian Deposit		

Core Number	top depth	bottom	Category	Description	Tephra in Turf
162092	80	80	Rock		
162130	0	10	Root Mat		
162130	10	38	Midden		
162130	38	70	Aeolian Deposit		
162130	70	70	Rock		
162131	0	5	Root Mat		
162131	5	60	Midden		
162131	60	70	Low Density Cultural		
162131	70	90	Aeolian Deposit		
162131	90	90	Rock		
162132	0	5	Root Mat		
162132	5	50	Midden		
162132	50	53	Floor		
162132	53	65	Aeolian Deposit		
162132	65	65	Rock		
162461	0	13	Root Mat		
162461	13	23	Low Density Cultural		
162461	23	41	Aeolian Deposit		
162461	41	41	Rock		
162462	0	13	Root Mat		
162462	13	26	Disturbed		
162462	26	32	Aeolian Deposit		
162462	32	38	Low Density Cultural		
162462	38	40	Aeolian Deposit		
162462	40	40	Rock		
162463	0	11	Root Mat		
162463	11	21	Aeolian Deposit		
162463	21	27	Low Density Cultural		
162463	27	31	Midden		
162463	31	42	Aeolian Deposit		
162463	42	42	Rock		

Core Number	top depth	bottom	Category	Description	Tephra in Turf
162464	0	9	Root Mat		
162464	9	16	Aeolian Deposit		
162464	16	20	Midden		
162464	20	40	Aeolian Deposit		
162464	40	40	Rock		
162465	0	7	Root Mat		
162465	7	17	Disturbed		
162465	17	21	Low Density Cultural		
162465	21	40	Aeolian Deposit		
162465	40	40	Rock		
162466	0	6	Root Mat		
162466	6	16	Disturbed		
162466	16	20	Low Density Cultural		
162466	20	23	Midden		
162466	23	40	Aeolian Deposit		
162466	40	40	Rock		
162467	0	9	Root Mat		
162467	9	26	Aeolian Deposit		
162467	26	29	Low Density Cultural		
162467	29	46	Aeolian Deposit		
162467	46	46	Rock		
162468	0	10	Gravel		
162468	10	10	Rock		
162469	0	10	Root Mat		
162469	10	25	Disturbed		
162469	25	40	Aeolian Deposit	Boggy	
162469	40	80	Bog		
162470	0	5	Root Mat		
162470	5	40	Disturbed		
162470	40	100	Aeolian Deposit		
162470	100	120	Aeolian Deposit	Boggy	

Core Number	top depth	bottom	Category	Description	Tephra in Turf
162471	0	7	Root Mat		
162471	7	27	Disturbed		
162471	27	65	Subsoil		
162471	65	65	Rock		
162472	0	5	Root Mat		
162472	5	20	Aeolian Deposit	Boggy	
162472	20	120	Bog		
162473	0	10	Root Mat		
162473	10	33	Aeolian Deposit	Boggy	
162473	33	120	Bog		
162474	0	12	Root Mat		
162474	12	27	Aeolian Deposit	Boggy	
162474	27	120	Bog		
162475	0	15	Root Mat		
162475	15	35	Aeolian Deposit	Boggy	
162475	35	120	Bog		
162476	0	7	Root Mat		
162476	7	12	Aeolian Deposit		
162476	12	12	Rock		
162477	0	10	Root Mat		
162477	10	12	Subsoil		
162477	12	12	Rock		
162478	0	6	Root Mat		
162478	6	12	Aeolian Deposit		
162478	12	12	Rock		
162479	0	10	Root Mat		
162479	10	20	Aeolian Deposit		
162479	20	60	Bog		
162479	60	60	Rock		
162480	0	10	Root Mat		
162480	10	30	Aeolian Deposit		

Core Number	top depth	bottom	Category		Description	Tephra in Turf
162480	30	30	Rock			
162481	0	7	Root Mat			
162481	7	80	Bog	Dry		
162482	0	5	Root Mat			
162482	5	35	Turf		H1	
162482	35	40	Aeolian Deposit			
162482	40	40	Rock			
162483	0	10	Root Mat			
162483	10	10	Rock			
162484	0	5	Root Mat			
162484	5	30	Turf		H1	
162484	30	30	Rock			
162686	0	5	Root Mat			
162686	5	20	Turf		H1	
162686	20	20	Rock			
162687	0	7	Root Mat			
162687	7	15	Turf		H1	
162687	15	15	Rock			
162688	0	5	Root Mat			
162688	5	5	Rock			
162689	0	2	Root Mat			
162689	2	4	Aeolian Deposit			
162689	4	4	Rock			
162690	0	12	Root Mat			
162690	12	16	Aeolian Deposit			
162690	16	16	Rock			
162691	0	10	Root Mat			
162691	10	10	Rock			
162692	0	10	Root Mat			
162692	10	10	Rock			
162693	0	10	Root Mat			

Core Number	top depth	bottom	Category	Description	Tephra in Turf
162693	10	10	Rock		
162694	0	20	Root Mat		
162695	0	40	Turf	1766	
162695	40	40	Rock		
162696	0	10	Other		
162696	10	10	Rock		
162697	0	0	Gravel		
162698	0	5	Root Mat		
162698	5	30	Aeolian Deposit		
162698	30	30	Gravel		
162699	0	5	Root Mat		
162699	5	30	Aeolian Deposit		
162699	30	30	Rock		
162700	0	10	Root Mat		
162700	10	25	Aeolian Deposit		
162700	25	50	Bog	Dry	
162700	50	50	Rock		
162701	0	6	Root Mat		
162701	6	15	Aeolian Deposit		
162701	15	15	Rock		
162702	0	7	Root Mat		
162702	7	40	Bog	Dry	
162702	40	65	Bog		
163716	0	7	Root Mat		
163716	7	102	Midden		
163716	102	108	Low Density Cultural		
163716	108	108	Rock		
163744	0	8	Root Mat		
163744	8	8	Rock		
163745	0	2	Root Mat		
163745	2	80	Aeolian Deposit		

Core Number	top depth	bottom	Category	Description	Tephra in Turf
163746	0	5	Root Mat		
163746	5	25	Aeolian Deposit		
163746	25	80	Bog		
163746	80	80	Rock		
163747	0	5	Root Mat		
163747	5	65	Aeolian Deposit		
163748	0	5	Root Mat		
163748	5	33	Low Density Cultural		
163748	33	40	Aeolian Deposit		
163748	40	90	Subsoil		
163748	90	90	Rock		
163749	0	4	Root Mat		
163749	4	38	Low Density Cultural		
163749	38	70	Aeolian Deposit		
163749	70	70	Rock		
163848	0	10	Root Mat		
163848	10	35	Disturbed		
163848	35	50	Midden		
163848	50	60	Disturbed		
163848	60	80	Aeolian Deposit		
163849	0	10	Root Mat		
163849	0	40	Disturbed		
163849	40	40	Rock		
163850	0	7	Root Mat		
163850	7	120	Bog		
163851	0	7	Root Mat		
163851	7	120	Bog		
163852	0	60	Disturbed		
163852	60	75	Midden		
163852	75	82	Aeolian Deposit		
163852	82	82	Rock		

Core Number	top depth	bottom	Category	Description	Tephra in Turf
163868	0	6	Root Mat		
163868	6	24	Disturbed		
163868	24	56	Low Density Cultural		
163868	56	90	Aeolian Deposit		
163868	90	90	Rock		
163869	0	7	Root Mat		
163869	7	47	Aeolian Deposit		
163869	47	53	Aeolian Deposit		
163869	53	90	Subsoil		
163869	90	90	Rock		
163870	0	5	Root Mat		
163870	5	40	Disturbed		
163871	0	3	Root Mat		
163871	3	80	Bog		
163871	80	80	Gravel		
163872	0	10	Aeolian Deposit		
163872	10	11	Low Density Cultural		
163872	11	30	Aeolian Deposit		
163872	30	40	Bog		
163872	40	70	Aeolian Deposit	Boggy	
163872	70	73	Midden		
163872	73	120	Bog		
163873	0	10	Root Mat		
163873	10	30	Aeolian Deposit		
163873	30	32	Midden		
163873	32	40	Aeolian Deposit		
163873	40	60	Subsoil		
163873	60	60	Rock		
163874	0	5	Root Mat		
163874	5	19	Low Density Cultural		
163874	19	50	Grave Fill		

Core Number	top depth	bottom	Category	Description	Tephra in Turf
163874	50	70	Subsoil		
163874	70	70	Rock		
163875	0	10	Root Mat		
163875	10	25	Low Density Cultural		
163875	25	42	Grave Fill		
163875	42	82	Subsoil		
163875	82	82	Rock		
163876	0	7	Root Mat		
163876	7	11	Aeolian Deposit		
163876	11	32	Turf		
163876	32	38	Aeolian Deposit		
163876	38	70	Aeolian Deposit		
163876	70	70	Rock		
163877	0	8	Root Mat		
163877	8	27	Aeolian Deposit		
163877	27	49	Turf	H1 1000	
163877	49	80	Subsoil		
163877	80	80	Rock		

APPENDIX B – TEST PIT DATA

Table B5. Contexts

EXCAVATION	CONTEXT	TYPE	CLASS	SUBCLASS	METHOD	DATE	ID	STRAT ABOVE	STRAT BELOW
TP1	101	Deposit	Topsoil		Shovel	07/26/2016	AHS		102
TP1	102	Deposit	Midden		Shovel	07/26/2016	AHS	101	103
TP1	103	Deposit	Midden			07/26/2016	AHS	102	1766
TP1	1766	Deposit	Tephra		Trowel	07/26/2016	AHS	103	104
TP1	104	Deposit	Midden		Shovel	07/26/2016	AHS	1766	105
TP1	105	Deposit	Midden		Shovel	07/26/2016	AHS	104	106
TP1	106	Deposit	Midden		Trowel	07/28/2016	AHS	105	107
TP1	107	Deposit			Trowel	07/28/2016	AHS	106	
TP1	108	Deposit							
TP2	101	Deposit	Topsoil		Shovel	07/29/2016	EDJ		102
TP2	102	Deposit	Midden		Shovel	07/29/2016	EDJ	101	1104
TP2	1104	Deposit	Tephra		Shovel	07/29/2016	EDJ	102	103
TP2	103	Deposit	Midden			07/29/2016	EDJ		
TP3	101	Deposit	Topsoil		Shovel	07/30/2016	EDJ		
TP3	102	Deposit	Midden		Shovel	07/30/2016	EDJ	101	1104
TP3	1104	Deposit	Tephra		Shovel	07/30/2016	EDJ	102	103
TP3	103	Deposit	Midden		Trowel Trowel Shovel	07/30/2016	EDJ	1104	934
TP3	934	Deposit	Tephra			07/30/2016	EDJ	103	104
TP3	104	Deposit	Midden		Trowel	07/30/2016	EDJ	1000	934
TP3	105	Deposit	Midden		Trowel	07/30/2016	EDJ	1104	1000
TP3	1000	Deposit					EDJ	105	104
TP3	106	Deposit	Midden		Trowel	08/01/2016	EDJ	934	108
TP3	108	Deposit					EDJ	106	871

EXCAVATION	CONTEXT	TYPE	CLASS	SUBCLASS	METHOD	DATE	ID	STRAT ABOVE	STRAT BELOW
TP3	871	Deposit					EDJ	108	111
TP3	109	Deposit					EDJ	106	111
TP3	110	Deposit					EDJ	111	
TP3	111	Deposit					EDJ	109	110
TP4	101	Deposit	Topsoil		Shovel	08/02/2016	EDJ		102
TP4	102	Deposit	Mixed Turf		Shovel	08/02/2016	EDJ	101	1104
TP4	103	Deposit	Midden		Trowel	08/03/2016	EDJ	1104	1000
TP4	104	Deposit	Aeolian Deposit		Shovel Trowel	08/03/2016	EDJ	103	
TP4	1000	Deposit	Tephra		Trowel	08/03/2016	EDJ		
TP4	1104	Deposit	Tephra		Trowel Leaf/Brush	08/03/2016	EDJ	102	103

Table B6.Photos

EXCAVATION	IMAGE NUMBER	CONTEXT	DATE	DESCRIPTION	ID
TP1	30	101	07/26/2016	Opening of 441TP1	EDJ
TP1	32	104	07/26/2016	1300 in turf layer. Opening of 104	EDJ
TP1	31	1766	07/26/2016	1766 (close of 103)	EDJ
TP1	32	1300	07/26/2016	1300 (close of 104)	EDJ
TP2	23	101	07/29/2016	Opening of 102, close of 101	EDJ
TP2	24	102	07/29/2016	H1	EDJ
TP2	25	102	07/29/2016	H1	EDJ
TP3	26	101	07/30/2016	Opening of unit.	EDJ

EXCAVATION	IMAGE NUMBER	CONTEXT	DATE	DESCRIPTION	ID
TP3	40	109	08/01/2016	LNS, opening 109	EDJ
TP3	41	109	08/01/2016	LNS, opening 109	EDJ
TP3	36	871	08/01/2016	LNS, opening of 108 and 109	EDJ
TP3	37	871	08/01/2016	LNS, opening of 108 and 109	EDJ
TP3	38	871	08/01/2016	LNS, opening of 108 and 109	EDJ
TP3	33	934	08/01/2016	934 Tephra	EDJ
TP3	34	934	08/01/2016	934 Tephra	EDJ
TP3	31	1104	08/01/2016	H1	EDJ
TP3	32	1104	08/01/2016	H1	EDJ
TP4	51	101	08/02/2016	Opening of unit.	EDJ
TP4	52	101	08/02/2016	Opening of unit.	EDJ
TP4	57	102	08/02/2016	opening of 102, close of 101	EDJ
TP4	58	102	08/02/2016	opening of 102, close of 101	EDJ
TP4	59	102	08/02/2016	opening of 102, close of 101	EDJ
TP4	64	103	08/03/2016	Close of 103: 934, H3 and 104	EDJ
TP4	65	103	08/03/2016	Close of 103: 934, H3 and 104	EDJ
TP4	60	1104	08/03/2016	H1 tephra layer, close of 102, open of 103	EDJ
TP4	61	1104	08/03/2016	H1 tephra layer, close of 102, open of 103	EDJ

Table B7. Samples

EXCAVATION	CONTEXT	SAMPLE	BAGS	DATE	ID	TYPE	DESCRIPTION
Trench	1	1	1	07/27/2013	JMS	Flotation	Below 1000 @ 18 m on tape
Trench	2	2	1	07/27/2013	JMS	Flotation	Below 1000, above 940. 21m on tape
Trench	3	3	1	07/27/2013	JMS	Flotation	Below 950 @ 21m on tape
Trench	4	4	1	07/27/2013	JMS	Flotation	Below 950 @ 21 m on tape. 5 cm below
Trench	5	5	1	07/27/2013	JMS	Flotation	@ 21 m 10cm below 940. 21m on tape (sterile).
TP1	102	1	1	07/26/2016	EDJ	Bone, Animal	Half of articulated dog-- modern
TP1	103	2	1	07/26/2016	EDJ	Bone, Animal	Post 1766 midden bones
TP1	104	4	1	07/26/2016	EDJ	Bone, Animal	Pre-1766 bones
TP1	105	5	1	07/26/2016	EDJ	Bone, Animal	Pre-1766 Bones
TP1	105	6	1	07/26/2016	EDJ	Flotation	Pre 1300
TP1	105	7		06/27/2016	EDJ	Flotation	Mid context
TP1	106	8		06/28/2016	EDJ	Flotation	Opening of 106
TP1	106	9	1	06/28/2016	EDJ	Bone, Animal	Pre-1766 Bones
TP1	106	10		06/28/2016	EDJ	Flotation	Above greenish tephra. Later determined to be in turf.
TP1	107	11		08/29/2016	EDJ	Flotation	Below greenish tephra. Later determined to be in turf
TP1	1766	3	1	07/26/2016	EDJ	Tephra	1766
TP2	102	1		07/29/2016	EDJ	Bone, Animal	
TP2	102	2		06/29/2016	EDJ	Flotation	From just above 1104.
TP3	102	1	1	07/30/2016	EDJ	Flotation	
TP3	102	2		07/30/2016	EDJ	Bone, Animal	
TP3	102	3	2	07/30/2016	EDJ	Flotation	Float from just above H1
TP3	103	4	2	07/30/2016	EDJ	Flotation	Just below 1104
TP3	103	5	2	07/30/2016	EDJ	Flotation	Just above 934
TP3	104	6	2	07/30/2016	EDJ	Flotation	Pre1000, post934 float
TP3	105	7	1	07/30/2016	EDJ	Flotation	Pre1104, post1000

EXCAVATION	CONTEXT	SAMPLE	BAGS	DATE	ID	TYPE	DESCRIPTION
TP3	106	9	2	08/01/2016	EDJ	Flotation	Pre934 midden.
TP3	106	10		08/01/2016	EDJ	Flotation	Bottom of 106.
TP3	108	12		08/01/2016	EDJ	Flotation	Pre-934 AD/LDC
TP3	109	11		08/01/2016	EDJ	Flotation	Peat ashy patch in NW corner near bottom.
TP3	110	15		08/01/2016	EDJ	Flotation	Dark organic layer in subsoil.
TP3	111	14		08/01/2016	EDJ	Flotation	Gravel in NW corner
TP3	871	13		08/01/2016	EDJ	Flotation	LNS
TP3	934	8	1	07/30/2016	EDJ	Flotation	934
TP4	102	1	2	08/03/2016	EDJ	Flotation	Bottom of 102
TP4	103	3	2	08/03/2016	EDJ	Flotation	Pre-1104 midden. mid-context.
TP4	103	4	2	08/03/2016	EDJ	Flotation	Pre-1104, bottom of 103, above 1000.
TP4	103	6	1	08/03/2016	EDJ	Bone, Animal	
TP4	104	5	1	08/03/2016	EDJ	Flotation	Pre-1000 aeolian deposit.
TP4	1104	2	2	08/09/2016	EDJ	Flotation	

Table B8. Initial finds list

EXCAVATION	CONTEXT	FIND	RETRIEVAL	DATE	DESCRIPTION	Material Characteristics	Condition	Treatment	Storage Recommendations
TP1	103	2	Screen	07/08/2016	curved piece of metal	Partial circle of iron. Very even and smooth rectangular cross section. corner to corner length: 4.99cm width: 0.39cm thickness: 0.27cm Interior diameter of the ring would have been about 7.8cm.	Heavy surface rust but minimal pitting or expansive rust. The dimensions and smoothness of the original surface are still apparent. After treatment the iron has a dark brown and slightly glossy appearance.	Dirt and rust were removed with a scalpel. The object was degreased in acetone and treated with at least 2 applications of 5% tannic acid solution. After drying the surface was coated with 5% B48N in acetone.	Storage in as dry of an environment as possible is recommended.
TP1	104	10		07/27/2016		Fragment of thin copper strap with a copper rivet and a partial hole for a second rivet. The rivet hole was awl punched rather than drilled. The rivet was set by hammer without a swaging block. There is a thin space between the strap and the rivet head suggesting that it may have been attacked to something like a sheet of cloth or very thin leather strap. One end of the strap is cut in a convex curve, the other appears to be torn in a diagonal line through the second rivet hole. 2.52cm x 1.91cm x 0.092cm thick sheet metal 0.650cm long rivet	damp, corroded, and very dirty from excavation. After treatment the copper is dark brown with areas of dark green and reddish brown corrosion and a slightly glossy appearance.	Reduced corrosion with a scalpel under magnification, and then by electrochemical process wrapped in aluminum foil in a strong solution of sodium carbonate for about 5 hours. Rinsed repeatedly with distilled water. Degreased in acetone and allowed to dry thoroughly. Coated with 5% B48N in acetone.	Storage in as dry of an environment as possible is recommended.
TP1	105	1	Screen	07/26/2016	S-shaped decorative piece	Copper alloy metal. Hook made of a bent metal bar of roughly square cross section. Slightly tapered toward the ring end. Probably chisel cut at the hook end. 4.36cm x 1.63cm x 0.56cm	Damp and very dirty from excavation. Thick pale green corrosion layer under the dirt. After treatment the copper has is light brown with areas of dark and pale green corrosion and a slightly glossy appearance.	Reduced corrosion with a scalpel under magnification, and then by electrochemical process wrapped in aluminum foil in a strong solution of sodium carbonate for about 5 hours. Rinsed repeatedly with distilled water. Degreased in acetone and allowed to dry thoroughly. Coated with 5% B48N in acetone.	Storage in as dry of an environment as possible is recommended.

EXCAVATION	CONTEXT	FIND	RETRIEVAL	DATE	DESCRIPTION	Material Characteristics	Condition	Treatment	Storage Recommendations
TP1	105	2	Screen	07/26/2016	Woven wool. Pre-1300.	Woven cloth with a 2/2 twill weave. Max dimensions aprox. 7.5cm x 14.2cm. The majority of the yarns appear to be Z twist however a few appear to be S twist. The cloth is too worn, stretched, and mated to make a definite thread count but it averages approximately 9 to 11 yarns/cm in what appears to be the warp. The yarns assumed to be the weft yarns are fatter than those assumed to be the warp. Matting observed on the surface appears more likely to be the result of burial conditions rather than intentional felting. No evidence of seams or stitching.	The cloth was very dirty, matted, and wet from excavation. After treatment it is dry but still somewhat dirty. The surface is still mostly matted.	Brushed away most of the dirt with a dry brush then sprayed with clean tap water to remove more of the adhered dirt. Allowed to dry in open air.	Around 50% humidity recommended
TP1	105	3	Screen	07/27/2016	Triangular fragment of stoneware	Triangular fragment of salt glazed stoneware.	Damp and slightly dirty from excavation.	Swabbed with de-ionized water.	
TP1	105	4	Screen	07/27/2016	metal fragment		Damp, dirty, and with quite a bit of bright green surface corrosion. After treatment the copper is light brown with areas of dark green corrosion and a slightly glossy appearance.	Reduced corrosion with a scalpel under magnification, and then by electrochemical process wrapped in aluminum foil in a strong solution of sodium carbonate for about 5 hours. Rinsed repeatedly with distilled water. Degreased in acetone and allowed to dry thoroughly. Coated with 5% B48N in acetone.	Storage in as dry of an environment as possible is recommended.

EXCAVATION	CONTEXT	FIND	RETRIEVAL	DATE	DESCRIPTION	Material Characteristics	Condition	Treatment	Storage Recommendations
TP1	105	5	Screen	07/27/2016	Metal fragment		Damp, dirty, and with quite a bit of bright green surface corrosion. After treatment the copper is light brown with areas of dark green corrosion and a slightly glossy appearance.		Storage in as dry of an environment as possible is recommended.
TP1	105	6	Screen	07/27/2016	Thin metal fragment	Fragment of thin copper sheet. Slightly curved, about 1.2cm x 0.5cm	Damp, dirty, and with quite a bit of bright green surface corrosion. After treatment the copper is light brown with areas of dark green corrosion and a slightly glossy appearance.	Reduced corrosion with a scalpel under magnification, and then by electrochemical process wrapped in aluminum foil in a strong solution of sodium carbonate for about 5 hours. Rinsed repeatedly with distilled water. Degreased in acetone and allowed to dry thoroughly. Coated with 5% B48N in acetone.	Storage in as dry of an environment as possible is recommended.
TP1	105	7	Screen	07/27/2016	Clay pipe fragment	Bone. Fragments of long bones of a small animal. No evidence of human working.	Damp and dirty from excavation.	The bone was cleaned by brush with a 1:1 solution of isopropanol and de-ionized water. Glued a detached fragment back in place with B72 acrylic adhesive in acetone.	Storage at about 50% RH or as close as practical is recommended.
TP1	105	8	Screen	07/27/2016	Lead window came fragment	Fragment of lead window came. Shallow H cross section, slightly twisted, pinched, and bent in a roughly right angle.	Damp, dirty, and slight surface corrosion. After treatment the lead is metallic gray with residual areas of light yellowish white surface corrosion and a slightly glossy appearance.	Reduced corrosion with a scalpel under magnification, and then by chemical chelation process immersed in 5% solution of disodium Ethylenediaminetetraacetic acid (EDTA). Rinsed with distilled water. Degreased in acetone and allowed to dry thoroughly. Coated with 5% B48N in acetone.	Storage in as dry of an environment as possible is recommended.

EXCAVATION	CONTEXT	FIND	RETRIEVAL	DATE	DESCRIPTION	Material Characteristics	Condition	Treatment	Storage Recommendations
TP1	105	9	Screen	07/27/2016	Clay pipe fragment	Bone. Fragments of long bones of a small animal. No evidence of human working.	Damp and dirty from excavation.	The bone was cleaned by brush with a 1:1 solution of isopropanol and de-ionized water. Glued a detached fragment back in place with B72 acrylic adhesive in acetone.	Storage at about 50% RH or as close as practical is recommended.
TP1	105	12	Screen	07/27/2016	Lead window came fragment	Segment of lead window came with 2 branches. Shallow H shaped cross section. 2 solder joints. Slightly twisted and bent. There is a small bead of iron set into one of the branches. The angles of the branches suggest that this may have come from a diamond pane window. Roughly 3.2cm x 2.4cm overall.	Damp, dirty, and slight surface corrosion. After treatment the lead is metallic gray with residual areas of light yellowish white surface corrosion and a slightly glossy appearance.	Reduced corrosion with a scalpel under magnification, and then by chemical chelation process immersed in 5% solution of disodium Ethylenediaminetetraacetic acid (EDTA). Rinsed with distilled water. Degreased in acetone and allowed to dry thoroughly. Coated with 5% B48N in acetone. The bead of iron came loose during cleaning and was reattached using B48N acrylic adhesive.	Storage in as dry of an environment as possible is recommended.
TP1	108	14		07/28/2016		Triangular sherd of a curved stoneware vessel, possibly wood fired.	dry and slightly dirty from excavation.	Swabbed with deionized water to remove dirt.	

EXCAVATION	CONTEXT	FIND	RETRIEVAL	DATE	DESCRIPTION	Material Characteristics	Condition	Treatment	Storage Recommendations
TP2	102	1		07/29/2016	Wooden peg fragment	Fragment of a round wooden peg with a flared head. Split lengthwise. 5.67cm x 2.68cm(head) x 2.03cm(shaft) x 1.51cm	Wet and muddy from excavation. There are some grass roots penetrating the object, mostly following the grain of the wood. The wood is very soft and light weight indicating extensive degradation. After treatment wood is still soft and light weight and light in color but with a slight gloss due to the acrylic consolidant. Limited cracking and cupping of the surface occurred during drying but was stabilized by consolidation.	Object was cleaned by swabbing with a 1:1 solution of deionized water and isopropanol. Grass roots were removed with tweezers. A few roots could not be pulled out and were cut off or broke off at the surface of the wood. Object was dried by solvent immersion process using isopropanol followed by acetone followed by air drying. The surface was consolidated with 5% B48N in acetone applied by brush. A detached fragment near the thin end of the peg was reattached with B72 acrylic adhesive.	Storage at about 50% RH or as close as practical is recommended.
TP2	102	2		07/29/2016	Wooden peg fragment	Possibly a fragment of a round wooden peg. Broken at both ends. 4.85cm x 1.77cm x 1.45cm	Wet and muddy from excavation. There are some grass roots penetrating the object, mostly following the grain of the wood. The wood is very soft and light weight indicating extensive degradation. After treatment wood is still soft and light weight and light in color but with a slight gloss due to the acrylic consolidant. Limited cracking and cupping of the surface occurred during drying but was stabilized by consolidation.	Object was cleaned by swabbing with a 1:1 solution of deionized water and isopropanol. Grass roots were removed with tweezers. A few roots could not be pulled out and were cut off or broke off at the surface of the wood. Object was dried by solvent immersion process using isopropanol followed by acetone followed by air drying. The surface was consolidated with 5% B48N in acetone applied by brush.	Storage at about 50% RH or as close as practical is recommended.
TP2	102	3		07/29/2016	Blue glass bead	Round glass bead. average exterior diameter 1.16cm average interior diameter 0.52cm average thickness0.46cm	Damp and dirty from excavation. After treatment it is clean except for some residue of dirt in surface pores. Surface has a somewhat matte appearance. Transmitted light shows a deep blue color suggesting cobalt glass.	Object was cleaned by swabbing with a 1:1 solution of deionized water and isopropanol.	storage between 30% and 60% RH recommended.

EXCAVATION	CONTEXT	FIND	RETRIEVAL	DATE	DESCRIPTION	Material Characteristics	Condition	Treatment	Storage Recommendations
TP2	102	4		07/29/2016	Cheek piece from a bone comb	Thin sliver of bone mostly composed of periosteum with a smaller segment of bone pulp material inside. 2 small round holes drilled through the middle of the piece. One of the holes is filled with a rivet or peg apparently made of bone or wood. There are at least 6 very small marked incised into one edge. The size, rivets, and incised marks suggest that this was part of a comb. Overall 4.53cm long	Damp and muddy from excavation. After treatment the bone surface is clean but stained a light tan. The periosteum has curled and split somewhat as it dried.	The surfaces were swabbed with a 1:1 solution of de-ionized water and isopropanol to remove dirt. The surfaces were allowed to partially dry but an attempt was made to dry it slowly and only partially by use of a partially open humidity chamber. Unfortunately it dried too much and the edges curled considerably.	Storage at about 50% RH or as close as practical is recommended.
TP3	102	1	Screen	07/30/2016	Wooden disk fragment	fragment of a carved wooden disc with a round hole in the center. One face was roughly flat while the other was gently domed. The disc has split in half. One edge appears to have been cut off with a sharp knife or chisel. Most surfaces are too worn to find any obvious remaining tool marks. 5.53cm x 3.04cm x 0.70cm Less than half of the central hole remains and the edges are worn however the diameter of the remaining partial hole is about 0.9cm	Wet and muddy from excavation. There are numerous grass roots penetrating the object, mostly following the grain of the wood. The wood is very soft and light weight indicating extensive degradation. After treatment wood is still soft and light weight and light in color but with a slight gloss due to the acrylic consolidant. Limited cracking and cupping of the surface occurred during drying but was stabilized by consolidation.	Object was cleaned by swabbing with a 1:1 solution of deionized water and isopropanol. Grass roots were removed with tweezers. A few roots could not be pulled out and were cut off or broke off at the surface of the wood. Object was dried by solvent immersion process using isopropanol followed by acetone followed by air drying. The surface was consolidated with 5% B48N in acetone applied by brush. 2 detached fragments next to the central hole were reattached with B72 acrylic adhesive.	Storage at around 50% RH, or as close as practical is recommended

EXCAVATION	CONTEXT	FIND	RETRIEVAL	DATE	DESCRIPTION	Material Characteristics	Condition	Treatment	Storage Recommendations
TP3	102	2	Screen	07/30/2016	Textile	Fragment of woven wool cloth. 2:2 twill weave. The finer straighter yarns were estimated to be the warp. The warp yarns are Z twist. The weft yarns mostly appear to be S twist. Aprox. 13 yarns/cm in the warp direction. Aprox. 5.8cm in the weft direction. Aprox. 5.9cm in the warp direction.	Damp and very dirty from excavation. Several grass roots through the textile. After treatment the piece still has some residual dirt tightly adhered to the fibers but all details of the fabric are entirely visible. Fibers are somewhat brittle but not critically fragile. The edges are loose but do not appear to be falling apart spontaneously. Minimal handling recommended.	The piece was placed on a screen and cleaned with a dry brush to remove loosely adhered dirt. Grass roots were removed with tweezers. It was further cleaned with tap water squirted with moderate pressure from a syringe to remove remaining dirt. Allowed to air dry slowly in an open plastic bag. Previous cleaning tests had indicated that wool cloth from this excavation seems to hold up under gentle water washing and air drying. Addition of a humectant is probably not necessary.	Storage at about 50% RH or as close as practical is recommended. Annual examination for mold or insect infestatio is recommended. Minimal handling is recommended to avoid further fraying o loss of yarns from the edges of the fabric
TP3	102	3	Screen	07/30/2016	Textile	Fragment of woven wool cloth. 2:2 twill weave. The finer straighter yarns were estimated to be the warp. The warp yarns are Z twist. The weft yarns mostly appear to be S twist. Aprox. 14 yarns/cm in the warp direction. Aprox. 4.6cm in the weft direction. Aprox. 4.0cm in the warp direction.	Damp and very dirty from excavation. Several grass roots through the textile. After treatment the piece still has some residual dirt tightly adhered to the fibers but all details of the fabric are entirely visible. Fibers are somewhat brittle but not critically fragile. The edges are loose but do not appear to be falling apart spontaneously. Minimal handling recommended.	The piece was placed on a screen and cleaned with a dry brush to remove loosely adhered dirt. Grass roots were removed with tweezers. It was further cleaned with tap water squirted with moderate pressure from a syringe to remove remaining dirt. Allowed to air dry slowly in an open plastic bag. Previous cleaning tests had indicated that wool cloth from this excavation seems to hold up under gentle water washing and air drying. Addition of a humectant is probably not necessary.	Storage at about 50% RH or as close as practical is recommended. Annual examination for mold or insect infestatio is recommended. Minimal handling is recommended to avoid further fraying o loss of yarns from the edges of the fabric

EXCAVATION	CONTEXT	FIND	RETRIEVAL	DATE	DESCRIPTION	Material Characteristics	Condition	Treatment	Storage Recommendations
TP3	102	4	Screen	07/30/2016	Unidentified piece of a whale vertebra with drilled holes	Part of an unidentified object made from the end plate of a whale vertebra. Object has 3 drilled holes and an inset cut into one face. The object was probably circular originally. The 3 holes are each around 2.5cm diameter and are not arranged in a straight line. overall dimensions 13.35cm x 7.47cm x 2.11cm	damp and dirty from excavation. The object has been broken into several pieces, only 2 of which have survived.	The bone was cleaned by brush with a 1:1 solution of de-ionized water and isopropanol then allowed to dry slowly in an open plastic bag. The 2 segments were joined with B72 acrylic adhesive.	Storage at about 50% RH or as close as practical is recommended.
TP3	105	13		07/27/2016	Wooden rim fragment	fragment of a shaped wooden object. Appears to be part of a rim of a wooden vessel. Most surfaces are too worn to find any obvious remaining tool marks. The object was measured before treatment. 3.616cm x 3.172cm x 2.230cm See attached drawing for further detail measurements. The proper orientation of the fragment is difficult to determine but based on the very shallow interior curvature it appears that it may have been part of a very wide vessel.	Wet and muddy from excavation. There are numerous grass roots penetrating the object, mostly following the grain of the wood. The wood is very soft and light weight indicating extensive degradation. After treatment wood is still soft and light weight and dark in color but with a slight gloss due to the acrylic consolidant. Limited cracking and cupping of the surface occurred during drying but was stabilized by consolidation.	Object was cleaned by swabbing with a 1:1 solution of deionized water and isopropanol. Grass roots were removed with tweezers. A few roots could not be pulled out and were cut off or broke off at the surface of the wood. Object was dried by solvent immersion process using isopropanol followed by acetone followed by air drying. The surface was consolidated with 5% B48N in acetone applied by brush.	Storage at about 50% RH or as close as practical is recommended.
TP4	102	1		08/02/2016		Roughly trapezoidal chip of tin glazed stoneware of a shallow curved vessel.	Damp and dirty from excavation. Most of the glaze has chipped away.	Swabbed with de-ionized water.	