Archaeological investigation of site $U_{14/3302}$, Omokoroa



REPORT TO
THE NEW ZEALAND HISTORIC PLACES TRUST
AND
WESTERN BAY OF PLENTY COUNCIL

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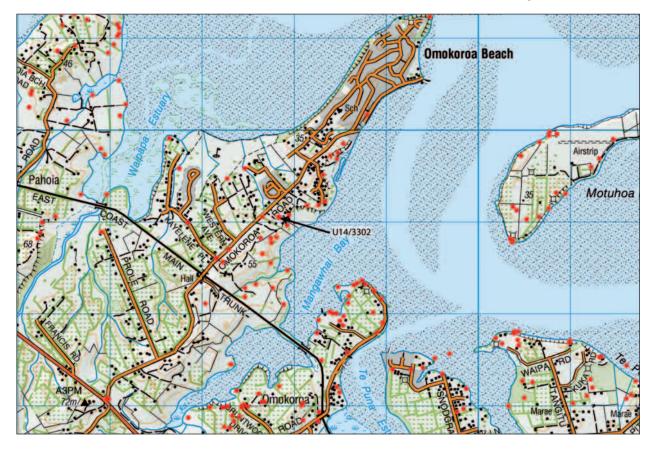
Archaeological investigation of site U14/3302, Omokoroa

Jaden Harris and Louise Furey

Archaeological investigation of site U14/3302 was carried out prior to roading earthworks for the Margaret Place extension through 221 and 225 Omokoroa Road (Figure 1). During the initial archaeological assessment of the route (Furey 2010) a shell midden and possible storage pit were observed in section beside the access to 221 Omokoroa Road. Storage pits, postholes and disturbed shell midden had previously been recorded near to this location when the stormwater pipe was installed (Moore 2009).

The extent of possible archaeological features across the 20 m wide road easement was not known but an authority to modify (2010/434, 16 September 2010) was obtained from the New Zealand Historic Places Trust with a condition requiring monitoring of topsoil stripping, and recording of any cultural material uncovered. Monitoring of topsoil stripping within the road easement took place on 13 October 2010. Prior to earthworks starting an orange grove had been removed at 221 Omokoroa Road. It was found that the roots had infiltrated the topsoil and subsoil to such an extent that a clean surface could not be obtained. While there were no apparent large features or clearly contrasting feature fill evident, and it was not possible to see whether there were any smaller features such as postholes present. In addition the roots would have disturbed the edges of any features present so the area was not investigated further. Within the easement at 225 Omokoroa Road infilled kumara storage pits and postholes were apparent, and there was an area of

1. Location of U14/3302 showing other recorded archaeological sites in the area.



disturbed shell midden adjacent to where the previous stormwater pipe had been put through (Moore 2009).

Previous archaeological work in Omokoroa

Archaeological work in Omokoroa has mainly been in response to residential subdivisions and associated developments such as roading. A number of sites including pa, pits and terraces were excavated at the Lynley Park subdivision (Furey 2004, 2005a,b) and other sites have been investigated to the north and northwest but are all unreported. Just to the south of U14/3302 several sites excavated in the course of housing subdivisions revealed a dense archaeological landscape (Furey and Hudson 2008). To date archaeological work has been confined to the Omokoroa peninsula between the end of the peninsula and the railway line as land blocks are developed, but it is likely that the peninsula has many more sites than are currently recorded. At present there are 36 recorded archaeological sites between the railway line and Omokoroa Beach and just six between the railway line and State Highway 2. Even at the Omokoroa Beach end of the peninsula the true number of sites is most likely underrepresented as much of this area was developed prior to the Historic Places Act in 1975 and widespread recording of archaeological sites.

Archaeological investigation

Archaeological investigation and recording of the features of U14/3302 took place from 13–16 October 2010.

Methodology

The topsoil was removed to the interface with the natural subsoil using a hydraulic excavator under archaeological supervision. The area where pits and other features



2. General view to the northwest after the topsoil has been removed. The pits are visible as dark rectangles against the lighter coloured subsoil.

were visible was relatively small (15 x 22 m) and this area was cleaned down using spades and hoes to obtain a clean surface and further define the features. At this stage it was apparent that there were a dozen or more large rectangular kumara storage pits and other associated features (Figure 2). Postholes, oven scoops and other features which were cut into the pit fill were excavated and recorded first. Trenches were then dug across the ends of the identified pits to define the walls and floor depths and to establish the relationship between intercutting pits. The majority of the fill was then excavated out of the larger pits using a hydraulic excavator with a trenching bucket, a time saving technique to remove a large quantity of clean fill with no stratigraphy. The small amount of fill remaining near the walls and floor was removed by hand to expose any postholes and sumps in the floor of the pits. The fill and dimensions of each feature was recorded and all features were mapped using a Leica total station. The plan is shown in Figure 3.

Results

Sixty-four features were recorded after the topsoil had been removed. These included 18 rectangular storage pits, one shallow bin pit, one possible rua, six firescoops and 22 postholes. The remaining 16 features were postholes or sumps found in the bases of the kumara pits once they had been emptied out. The full catalogue of features is included in Appendix A. Sixteen obsidian flakes were recovered from the fill of nine pits and from the topsoil. Three samples of charcoal were obtained for identification of tree species. One shell-filled scoop not in the main excavation area but within the disturbed root zone on 221 Omokoroa Road was sampled but the shell was too broken up and burnt to be of any use for radiocarbon dating. No shell midden or faunal material was present in other features.

Pits

Of the 18 rectangular storage pits, 12 were completely excavated out or nearly so. The remainder were either half-sectioned or had a trench excavated down one side and across one end. The pits are on two main alignments and the degree of intercutting suggests that the pits relate to different phases or, less likely, that the occupation was of a sufficiently lengthy duration such that the previously infilled pits were dug into again. The alignments are roughly on north east–south west and north west–south east axes and are perpendicular to each other.

The fill of the pits was very consistent across the site with most being filled with relatively clean mottled brown soil. The only difference was in the top 50 – 100 mm where the fill was often noticeably charcoal-stained and consequently much darker. Small fragments of charcoal and oven stone were found throughout the fill of most of the pits. Where pits intercut, the similarity of the fill was such that it was rarely possible to work out which pit had cut which until the base of the feature was reached. The one case where this was clear was Pit 8 which was cut by Pits 19 and 20. Pit 8 was orientated on an angle to Pits 19 and 20 and only two opposite corners of the pit were preserved. Where it intersected with Pit 20 the fill of Pit 8 was a lighter brown and had clearly been cut by Pit 20. Other pits which intercut include Pits 30 and 41. The pits are on the same alignment and the walls only just intersect, but they clearly could not have been in use at the same time. Similarly, the gap between pits 19 and 20 was so narrow that they too could not have been in use at the same time.

The pits vary greatly in size and regularity of form, and there does not seem to have been any single template followed for pit construction. Some pits have multiple internal features, while others have none. The similar alignments indicate

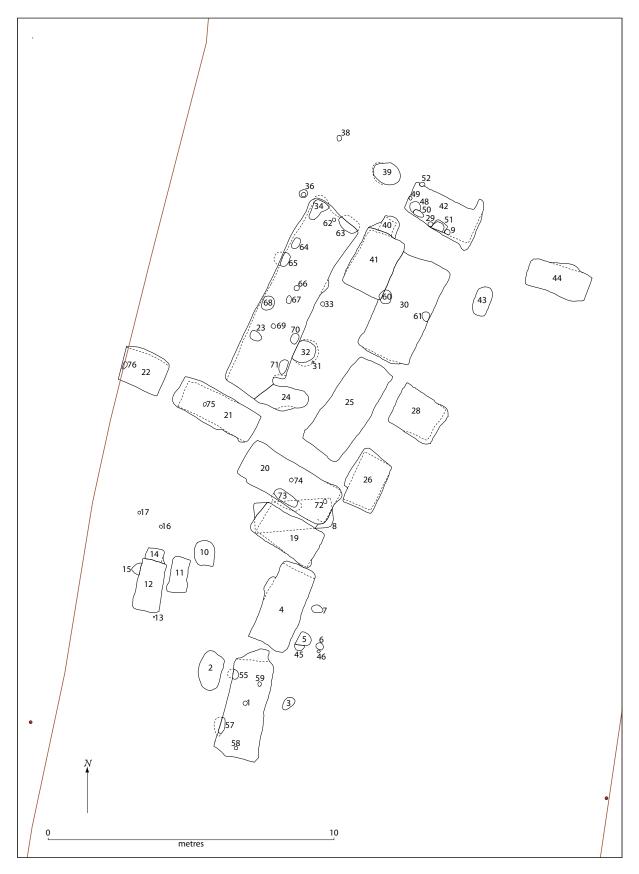


Figure 3. Plan of features, U14/3302.

contemporaneity of use and implementation of a pre-determined layout, but the pits themselves seem to have been constructed to individual designs and needs.

Pit 35 was the largest storage pit and measured 7 x 1.9 m x 460 mm deep (Figure 4). While the sides of the pit were relatively vertical, the pit was not square, and had an obvious curve in the side walls. The floor level was also irregular and sloped upwards at the southern end. It is possible that the pit in its original form was about 6 m long, and that the angle in the east wall adjacent to feature 71 may in fact be a remnant of the back wall. If it was extended, the additional space was probably associated with Feature 24, which appeared to be a rua, off the southeast corner of the pit. Feature 24 showed as an irregular patch of dark-stained soil on the surface of the subsoil and was excavated horizontally for 1200 mm from the corner of the pit. The roof of the rua had collapsed and so the side walls were not well defined. There was, however, a straight edge 600 mm wide cut from the floor level of the pit in the corner and would have formed part of the entranceway to the rua. The fill was very clean, partly as a result of the roof collapsing, and contained no charcoal or other inclusions.

Within Pit 35 there are seven sumps in the floor, arranged along the walls, and four postholes running down the centre of the pit. The sumps are not regularly spaced and appear to have been dug as required. The three largest sumps all slightly undercut the wall of the pit. The spacing of the postholes is similarly irregular, although they are roughly aligned down the centre of the pit and of a similar size. Feature 62 is against the north end of the pit and measured 130 x 130 mm x 370 mm deep. The other three are roughly in the middle of the pit with Feature 66 measuring 180 x 180 mm x 340 mm deep; Feature 67 measured 280 x 180 mm x 410 mm deep; and Feature 69 measured 160 x 150 mm x 280 mm deep. The size of the posts could not have been very large, but the postholes do indicate that the pit was roofed over with a low A-frame type roof structure.

On the east side of Pit 35 the pit had cut through an earlier large round scoop, Feature 32, which measured 780 x 650 mm x 220 mm deep and was filled with very

Pit	Max length (mm)	Max width (mm)	Max depth (mm)	Internal features
1	3250	1400	520	Two sumps, three postholes
4	2900	1400	440	No
8	c.2700	c.1000	300	?. Destroyed by later pits
12	1750	950	450	No
14	>420	600	350	No
19	2500	1350	400	No
20	3300	1400	500	Sump, two postholes
21	2900	1160	480	One posthole
22	>1700	1400	480	One posthole
25	3600	1500	c.800	No
26	1900	1200	400	No
28	1700	1500	460	No
30	3600	1900	460	Two sumps
35	7000	1900	460	Seven sumps, four postholes
41	2200	1400	640	Rua off end
42	2600	1260	400	Buttress, scoop, sump, three postholes
44	>2200	1000	560	No

Table 1. Kumara storage pit dimensions.



4. Pit 35 looking northeast (scales 1 m); inset: plan of Pit 35 showing internal and related features.

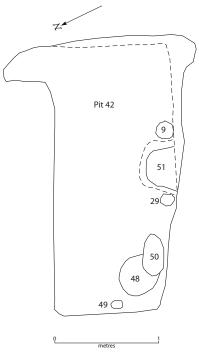
dark charcoal stained soil. A bulk sample of fill was retained to float off any charcoal present but a suitable sample could not be obtained.

Pit 42 was fully excavated by hand as a trench dug down one side revealed that it had some unusual features. It measured 2.6 m long but was not square, being 1.26 m wide at the east end and 1.07 m wide at the west end (Figure 5). At the east end wide slots extended off from each corner, although their function is not clear. The base of the slots was at the same level as the floor of the pit. Halfway along the south wall of the pit was a buttress with a posthole or small sump on either side. In the south west corner of the pit was another shallow posthole or sump $400 \times 200 \text{ mm} \times 50 \text{ mm}$ deep and a shallow saucer-shaped scoop $340 \times 320 \text{ mm} \times 35 \text{ mm}$ deep cut into the floor of the pit. The scoop had probably only been used once and contained a large amount of charcoal identified as puriri and tawheowheo. The only posthole was small, $130 \times 110 \text{mm} \times 260 \text{ mm}$ deep, in the centre against the west wall.

Pit 41 had the majority of the fill cleaned out but no features were present in the base. Feature 40 measured 630 x 500 mm x 270 mm deep and appears to have been constructed as a step into Pit 41. Pit 30 was only half excavated and a trench was dug down one side to find the back wall. Roughly at the halfway point where excavation stopped a sump was observed against each wall. The sumps were not excavated. Pit 44 was separated somewhat from the rest of the pits and was almost fully excavated, although the east end was cut by the stormwater trench. No features were evident in the base of the pit.

Pits 25, 26, and 28 presented a somewhat confused picture on the surface, with the dark-stained fill suggesting some intercutting, but upon excavation there proved to be separation between each pit. Pit 25 was the deepest at approximately 800 mm, and was not excavated. Part of the floor of Pit 28 and some of the west





5. Pit 42 looking south east (scales 1 m, 0.5 m); inset: plan of Pit 42 showing internal and related features.

wall were removed by the hydraulic excavator and again the feature was not fully excavated. A trench dug across the south end and down the east wall of Pit 26 indicated it had a slightly irregular form and sides. The wall in the south west corner where the pit was closest to Pit 20 had collapsed.

Pits 21 and 22 were on the same alignment with only a short space separating the two. Pit 21 was fully excavated and cleaned out and had slightly irregular walls with just one small posthole in the base. Pit 22 continued into the baulk of the excavated area, but had at least one large posthole in the base which measured 200 mm wide x 400 mm deep. Pits 19 and 20 were on a similar alignment to 21 and 22 and while Pit 20 had a large sump along the south wall and two postholes down the centre, Pit 19 had no internal features. The sump (Feature 73) which measured 930 x 330 mm x 230 mm deep, undercut the wall of the pit and had dark brown fill with fragments of charcoal. One large flake of obsidian was also recovered from the fill. The postholes were of a similar size with Feature 72 measuring 140 x 130 mm x 220 mm deep and Feature 74 measured 150 x 140 mm x 320 mm deep.

Pit 1 was the southernmost pit and was situated on the boundary of the disturbed area where the orange grove had been located. The form of the pit was slightly irregular, especially at the north end which may have been the result of slumping while the pit was open, or just how it was originally dug. Tree root action at this end of the site is also likely to have affected preservation of features. Two sumps were present along the west wall of the pit and both slightly undercut the wall. Feature 57 was the larger of the two and measured $580 \times 220 \text{ mm}$ at the top but was undercut to the extent that the base measured $800 \times 350 \text{ mm}$, with a maximum depth of 390 mm. Three postholes were present in the base of the pit. Feature 56 was in the centre of the pit and measured $150 \times 160 \text{ mm} \times 370 \text{ mm}$ deep, and Feature 58 was centred along the south wall and measured $110 \times 110 \text{ mm} \times 180 \text{ mm}$ deep. Feature 59, however, which was of a similar size, $140 \times 110 \text{ mm} \times 100 \text{ mm}$ deep, was located off to the side at the north end of the pit. Just to the north, Pit 4 was also fully excavated and measured $2900 \times 1400 \text{ mm} \times 440 \text{ mm}$ deep. Unlike Pit 1 there were no internal features in the base.

In the south west corner of the site was a group of three smaller pits. Pit 11 was a shallow rectangular pit $900 \times 570 \text{ mm} \times 120 \text{ mm}$ deep. Pit 12 was $1750 \times 950 \text{ mm} \times 450 \text{ mm}$ deep and had relatively regular sides, although the floor was not level. Pit 12 had cut through another rectangular bin pit, Feature 14, which was 600 mm wide $\times 350 \text{ mm}$ deep.

Other Features

Aside from the kumara storage pits there were a small number of postholes, but nothing that would indicate the presence of structures of any kind. A small group of features including two scoops was located in the south east corner of the site beside Pits 1 and 4 in an area otherwise devoid of features. None of the scoops could be termed cooking features, in that they did not have oven stones or a clear lens of charcoal or ash, or have a shell fill. Feature 5 measured 430 x 320 mm and contained brown mottled fill with some charcoal, but no oven stones. The scoop intercut with Feature 45, which was a small scoop 320 x 300 mm deep, but the fill of the two features was the same. Around the scoops were four postholes filled with similar brown mottled fill and small pieces of charcoal. There was no midden or other food debris to indicate that the area had been used for cooking.

A few other isolated scoops and postholes were found. Feature 43 was a large oval scoop, $1040 \times 560 \text{ mm} \times 160 \text{ mm}$ deep that contained light brown mottled fill with the occasional piece of charcoal and oven stone. The feature was only half-sectioned and near the base of the scoop was a thin lens (c. 10 mm thick) of white sand or coarse volcanic ash. One flake of obsidian was the only other addition to the fill. Feature 39 was another well defined scoop, $980 \times 700 \text{ mm} \times 350 \text{ mm}$ deep, and while the fill was darker on top it was a light mottled brown beneath with the odd fragment of charcoal and oven stone throughout. There were no postholes or other associated features around either of these two firescoops.

Outside of the area of the pits were a few further scattered features. To the south east of the main excavation area, near the edge of road corridor, a shell-filled scoop was excavated. The scoop was within the disturbed root zone where the orange grove had been. Other features may have originally been present in this area but the shell filled scoop was the only preserved feature. To the north of the main excavation area a very shallow possible scoop was excavated. Again features in this area had been badly affected by tree root action. It should also be remembered that further evidence of occupation may still exist in the undisturbed ground on either side of the road.

Material Culture

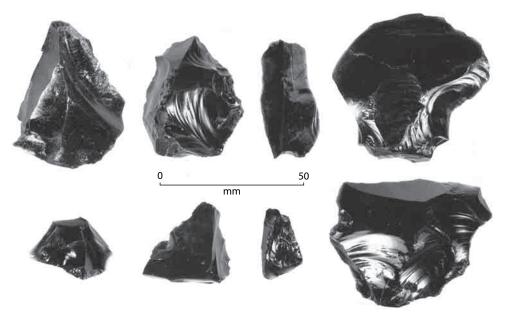
Sixteen flakes of obsidian were recovered. The only other stone, found in the fill of Pit 41, was a flat water worn cobble, $100 \times 70 \times 40$ mm, which had no evidence of modification. The streams in this area do not have a stony base so the source was further afield, possibly from the Katikati area where andesite was obtained for oven stones and a cache from nearby U14/712 was sourced to this area (Moore 2008).

For analysis the obsidian flakes were washed, measured, weighed, any evidence of use or modification noted and the colour or other characteristics recorded (see Table 2). All of the flakes were green in colour and had no obvious inclusions, consistent with the source being Mayor Island (Figures 6–9).

All but two of the obsidian flakes exhibited some form of usewear or modification (Table 2). All were recovered from the fill of features, apart from flake 9 which was found while cleaning down the area around the pits, and flake 17 which was found in the disturbed area to the south of the pits during topsoil stripping.

Id	Context	Max length (mm)	Max width (mm)	Weight (g)	Usewear/Modification
1	F73	51	41	34	20 mm unifacial, bruising on opposite edge to create finger rest
3	F35	36	30	4	22 mm unifacial
4	F35	24	30	3	26 mm unifacial
5	F35	24	17	2	15 mm unifacial
6	F42	10	10	<1	waste flake, no usewear
7	F30	42	20	5	38 mm unifacial
8	F30	28	19	2	16 mm unifacial, 20 mm unifacial on
					opposite edge
9	-	31	15	4	20 mm bifacial
10	F22	53	55	27	25 mm bifacial, end modified to create
					finger rest
11	F42	43	36	27	35 mm unifacial
12	F1	49	27	12	12 mm unifacial
13	F35	25	17	1	no obvious usewear
14	F43	25	14	1	15 mm unifacial
15	F2	27	15	1	19 mm unifacial, end modified
16	F1	28	29	9	20 mm bifacial
17	-	46	57	32	48 mm bifacial

Table 2. Obsidian flake analysis.



6. Obsidian flakes; top row left to right, 1, 11, 7, 10; bottom row left to right, 4, 16, 14, 17.

Charcoal Analysis

Charcoal from two features was identified to plant species by Rod Wallace of Auckland University (Table 3). Feature 53 was the shell filled scoop which also contained a large amount of charcoal. The presence of hebe and tutu in the sample indicates that the landscape around the site was dominated by disturbed vegetation, consistent with the land having been burnt off and cleared by Maori for gardening. From the large number of storage pits recorded during archaeological

Feature	Туре	Species	NISP
53	scoop	Hebe	25
		Tutu	1
12	pit	Tawheowheo	2
		Puriri	3
48	scoop	Tawheowheo	2
	-	Puriri	3

Table 3. Charcoal sample species identification.

excavations in Omokoroa we can deduce that the growing of crops such as kumara played a significant role in the Maori economy in this area.

The other two species, tawheowheo and puriri, from Pit 12 and Feature 48, are broadleaf trees and most likely represent wood used for pit timbers. Feature 48 is interesting as it is a shallow oven scoop dug into the base of Pit 42. It is possible that disused roofing timbers or offcuts from post preparation were used as fuel for the small fire in the base of the pit.

Given the modified state of the vegetation, consistent with clearing the land for gardening and subsequent regeneration of small shrub species, it is unlikely that the puriri and tawheowheo timbers were derived from surviving trees in the immediate area of the site. Construction timbers would have been valuable and reused due to their relative scarcity and if they had to be transported from further away. There was little indication from the posthole fill in the floor of the pits that timbers had rotted in situ – a postmould or darker organic stain might be expected if that was the case. Instead the posts were removed, and the empty holes filled with the same material used to fill the pits.

Discussion

While the archaeological evidence at site U14/3302 does not exhibit the same intensity of prehistoric occupation as other nearby sites, there is a similarity in that storage of food crops was the predominant activity. The excavated part of U14/3302 consisted primarily of a group of kumara storage pits with few other associated features such as postholes or oven scoops. This does not mean however that people were not living near the pits and it is quite likely that further occupation evidence may exist or have once been present to the east or west of the road easement.

Suitable samples for radiocarbon dating could not be obtained from the pits. The firescoop containing shell was physically separated from the pits with no other features in the intervening space. Not only would a dated sample from a single firescoop not give any further information about the cluster of storage pits, but the firescoop was also without context. In the circumstances it was considered inappropriate to obtain a radiocarbon date.

The two different orientations among the storage pits suggests two phases of occupation, although whether these were continuous or if there was a break in occupation is not known. Within the two main phases it is also clear that pits which intercut each other or are only separated by a short space cannot have been in use at the same time. The number of seasons a storage pit was used is not known but in this area is commonly assumed to be in the order of one to two seasons. It may be longer in other areas where the heavy clay soils required a greater labour input in digging pits, so that there are fewer pits and evidence of reuse with multiple postholes in the floor of pits. In the western Bay of Plenty where the tephra based subsoil was easy to dig, storage pits appear to have been replaced more fre-

quently. If this is the case then at least several seasons of gardening activity are represented by each phase.

References

- Furey, L. 2004. Interim report on excavations on U14/712–3, Omokoroa. Unpublished report to Durham Properties and NZ Historic Places Trust.
- Furey, L. 2005a. Interim report on excavations Stage II, Lynley Park. Unpublished report to Durham Properties and NZ Historic Places Trust.
- Furey, L. 2005b. Interim report on excavations Stage IIb, Lynley Park. Unpublished report to Durham Properties and NZ Historic Places Trust.
- Furey, L 2010. Archaeological Assessment 221 and 225 Omokoroa Road. Unpublished CFG heritage report to Western Bay of Plenty Council and Aurecon Ltd.
- Furey, L and B. Hudson 2008. Archaeological Investigations at U14/3283 and U14/3284, Omokoroa Road, Omokoroa: Interim Report. *Archaeology in New Zealand* 51(4): 264–274.
- Moore, P.R. 2008. Oven stones in the Western Bay of Plenty, Northern New Zealand. *New Zealand Journal of Archaeology* 29: 39–55.
- Moore, P.R. 2009. Omokoroa Structure Plan Stormwater Project: Report on Archaeological Monitoring (2007/2). Report to New Zealand Historic Places Trust and Duffill Watts Ltd.

Appendix A Feature catalogue

Featur	е Туре	Description	Length mm	Width mm	Depth mm	Relationships
1	Pit	Rectangular storage pit. Mottled dark brown/grey fill with charcoal and oven stone fragments.	3250	1400	520	
2	Pit	Irregular shall pit. Mottled dark/brown/grey fill with charcoal and oven stone fragments.	1200	800	200	
3	Posthole	Mottled brown fill, some charcoal.	420	270	140	
4	Pit	Rectangular storage pit. Mottled dark brown/grey fill with charcoal and oven stone fragments.	2900	1400	440	
5	Scoop	Mottled brown fill with charcoal fragments.	430	320	120	intercuts 45
6	Posthole	Mottled brown fill with charcoal fragments.	220	220	140	
7	Posthole	Dark brown mottled fill with charcoal fragments.	380	270	200	
8	Pit	Remnant of pit. Light brown mottled fill.	c.2700	1000	300	cut by 19, 20
9	Posthole	Posthole or sump beside buttress (51) in Pit 42. Brown mottled fill.	220	160	70	42
10	Unknow	n Showed as irregular patch of fill on surface, mapped but not excavated.				
11	Bin Pit	Small rectangular pit with flat base. Clean grey/brown fill.	900	570	120	
12	Pit	Mottled dark brown/grey fill with charcoal and oven stone fragments. Floor sloping and slightly irregular.	1750	950	450	cuts 14, 15
13	Posthole	Not excavated.				
14	Pit	Edges irregular, base tapers. Mid-brown fill with charcoal flecks.	600	>420	350	cut by 12
15	Unknow	n Edges irregular, base tapers. Dark mottled fill.	370	>230	270	cut by 12
16	Posthole	Not excavated.				
17	Posthole	Not excavated.				
19	Pit	Large rectangular pit. Mottled dark brown fill with charcoal and oven stone fragments. Fill darker in top 100 mm.	2500	1350	400	cuts 8
20	Pit	Large rectangular pit, walls slightly irregular. Dark brown mottled fill with charcoal and oven stone.	3300	1400	500	cuts 8
21	Pit	Rectangular pit, walls vertical but with some slumping. Mottled dark grey fill with cleaner yellow/brown near edges.	2900	1160	480	

Featu	re Type	Description	Length mm	Width mm	Depth mm	Relationships
22	Pit	Rectangular pit, end and side walls irregular, runs into baulk. Dark brown/black fill with charcoal flecks.	>1700	1400	480	
24	Rua	Collapsed rua off the SE corner of pit 35. Clean mottled yellow/brown fill.	c.1200	600		35
25	Pit	Large rectangular pit. Partially excavated to define dimensions. Dark brown mottled fill.	3600	1500	c.800	
26	Pit	Rectangular pit, sides very irregular. Dark brown mottled fill with charcoal and oven stone fragments.	1900	1200	400	
28	Pit	Rectangular pit, sides slightly irregular. Dark grey/brown mottled fill with charcoal and oven stone fragments.	1700	1500	460	
29	Posthole	Posthole or sump on west side of buttress in pit 42. Brown mottled fill.	320	240	150	42
30	Pit	Rectangular pit, sides slightly irregular. Brown mottled fill.	3600	1900	460	intercuts 41
31	Posthole	Not excavated.				
32	Scoop	Circular feature, walls slightly undercut, floor flat. Dark charcoal stained fill.	780	650	220	cut by 35
33	Posthole	Grey/brown mottled fill.	150	150	130	
34	Sump	Sump in NW corner of pit 35. Sump has slight drain leading into it. Clean brown mottled fill.	500	370	150	35
35	Pit	The largest pit on site, walls slightly irregular and shape not square. Brown mottled fill.	7000	1900	460	
36	Posthole	Modern posthole.				
38	Posthole	Mottled brown fill, some charcoal.	180	150	140	
39	Scoop	Large well defined oval oven scoop. Dark grey on top, lighter mottled brown/grey fill below. Charcoal and oven stone throughout.	980	700	350	
40	Pit	Most likely an entrance step to pit 41. Mottled grey/brown fill.	500	630	270	41
41	Pit	Walls and floor regular and straight. Pit 41 and 30 intercut, but not clear which cuts which. Mottled grey/brown and yellow/brown fill.	2200	1400	640	40, 30
42	Pit	Rectangular pit with odd features. Pit not square, 1260 mm wide at E end, 1070 mm wide at W end. Dark grey stained fill on top, mottled brown with charcoal and oven stone below.	2600	1260	400	
43	Scoop	Large oval oven scoop. Light brown mottled fill with odd chunk of charcoal and oven stone. Thin lens of white sand near base.	1040	560	160	

Feature Type		Description	Length mm	Width mm	Depth mm	Relationships
44	Pit	End runs into stormwater pipe trench. Dark grey charcoal stained fill on top, brown/grey mottled fill below. Floor not level.	>2200	1000	560	
45	Scoop	Mottled brown fill, with some charcoal. Regular form.	320	300	100	
46	Posthole	Small stakehole, mottled brown fill with charcoal.	110	100	90	6
48	Scoop	Shallow but regular scoop cut into floor of pit 42. Large chunks of charcoal in fill.	340	320	35	42
49	Posthole	In base of pit 42 at W end. Clean brown mottled fill.	130	110	260	42
50	Sump?	Shallow elongated oval scoop in base of pit 42. Clean brown mottled fill.	400	200	60	42
51	Buttress	Buttress on S side of pit 42. Top of buttress 200 mm down from top of pit.	320	400		42
52	Posthole	Dark brown mottled fill.	130	120	280	cut into fill/side of 42
55	Sump	Sump along W wall of pit 1, cuts under wall. Loose pale yellow/brown fill.	320	220	430	1
56	Posthole	Posthole in centre of pit floor. Loose yellow/brown fill.	150	160	370	1
57	Sump	Sump along W wall of pit at S end, undercuts wall of pit. Loose yellow/brown fill.	580	220	390	1
58	Posthole	Posthole in S end of pit 1.	110	110	180	1
59	Posthole	Loose brown/yellow fill.	140	110	100	1
60	Sump	Brown mottled fill on top, not excavated.	400	300		30
61	Sump	Brown mottled fill on top, not excavated.	300	220		30
62	Posthole	Clean brown mottled fill.	130	130	370	35
63	Sump	Clean brown mottled fill.	700	360	200	35
64	Sump	Clean brown mottled fill.	390	230	80	35
65	Sump	Clean brown mottled fill. Undercuts wall of pit.	500	460	300	35
66	Posthole	Clean brown mottled fill.	180	180	340	35
67	Posthole	Clean brown mottled fill.	280	180	410	35
68	Sump	Clean brown mottled fill.	510	440	200	35
69	Posthole	Clean brown mottled fill.	160	150	280	35
70	Sump	Clean brown mottled fill.	360	290	160	35
71	Sump	Clean brown mottled fill.	460	260	150	35
72	Posthole	Brown mottled fill. In base of pit 20.	140	130	220	20

Feature Type		Description	Length mm	Width mm	Depth mm	Relationships
73	Sump	Large sump on S side of pit 20, undercuts pit wall. Dark brown fill with charcoal flecks.	930	330	270	20
74	Posthole	In base of pit 20, brown mottled fill.	150	140	320	20
75	Posthole	In base of pit 20, clean brown mottled fill.	130	120	240	21
76	Posthole	In base of pit 22, brown mottled fill. Runs into baulk.		290	400	22