

Date: May 2005

Client: Kinegar Sand and Gravel Ltd

Project Code: KSG99

Archaeological Watching Brief at Kinegar Sand and Gravel Pit, Cockburnspath, Scottish Borders

Phase 11

Richard Conolly

PROJECT SUMMARY SHEET (KSG 99)

Client	Kinegar Sand and Gravel Ltd
National Grid Reference	NT 773 701
Project Manager	Stephen Carter
Project Supervisor	Richard Conolly
Text	Richard Conolly
Illustrations	Tom Small
Schedule	
Fieldwork	22-24 February 2005
Report	May 2005

Summary

Headland Archaeology undertook an archaeological watching brief during topsoil stripping at Kinegar Sand and Gravel Quarry, Cockburnspath, Scottish Borders. Five pits and one posthole were identified and recorded in the course of the watching-brief. Neolithic pottery and worked stone were recovered from two pits.

1. INTRODUCTION

Headland Archaeology Ltd was commissioned to carry out an archaeological watching brief during topsoil stripping for an extension to Kinegar Sand and Gravel Pit, Cockburnspath, Scottish Borders, in order to satisfy a condition of planning consent. This report details the results of the eleventh phase of the watching brief, following on from strips monitored in 2000 (Conolly 2000) and 2001-2 (Conolly 2001 a & b and 2002a) under an earlier consent and 2002-3 under the present consent (Conolly 2002b & c, 2003a & b, 2004 and Jones 2004).

The work was carried out between 22 and 24 February 2005 in variable weather conditions.

2. SITE LOCATION AND DESCRIPTION (FIGURE 1)

Kinegar Sand and Gravel Pit is located to the south of Cockburnspath, Scottish Borders (NT 773 701). This phase involved the stripping of a rectangular parcel of land running at right angles to the road and covering some 4775 m². The ground was relatively flat and was under grass at the time of the watching brief. The underlying geology is sandy gravel and sand, overlying boulder clay.

3. ARCHAEOLOGICAL BACKGROUND

The quarry is situated in an area where several prehistoric cist burials have been discovered, including two within the quarry itself. In addition to this, a number of cropmark sites are known, one of which lies at the southern end of the current application area.

To date, the watching brief has identified several clusters of pits, some of which have yielded pottery dating to the Neolithic and Bronze Age. While most of these features were located some distance to the north of the current site, five pits were identified in the course of Phase 9. From one of these pits a quantity of early Neolithic pottery, a pitchstone blade and chert flakes were recovered.

4. AIMS AND METHODS

The watching brief was intended to ensure that any archaeologically significant deposits that would be destroyed by quarrying operations might be appropriately recorded.

The topsoil strip was carried out using a 360° mechanical excavator fitted with a toothless ditching bucket, operating under continuous archaeological supervision.

Any potential features identified during the strip were hand cleaned, investigated and recorded appropriately.

5. RESULTS (FIGURES 1 & 2)

A group of five shallow pits and one isolated post-hole were identified.

The group (Figure 2) formed a rough line approximately 7 m long, but did not appear structural. The fills of all the features appeared naturally deposited. A sherd from an early Neolithic round-bottomed bowl (Appendix 3) and three pieces of struck flint were recovered from the fill of one (Pit 261) while an undiagnostic sherd was recovered from the fill of another (Pit 263).

The post-hole was sub-circular and 0.4 m across. Several angular stones <0.1 m across may have served as packing stones, though no post-pipe was evident. Four sherds and a number of fragments from a Neolithic Impressed Ware bowl (Appendix 3) were recovered from the feature. No related features were identified.

Small quantities of fragmentary charcoal were recovered from the environmental samples taken (Appendix 2).

6. CONCLUSIONS

The results of this phase of the watching brief are once again consistent with low-level Neolithic occupation of this area. No structures were identified in the course of the watching brief. Given the shallowness of the topsoil on the site, it is possible that shallow features have been lost to plough truncation. Alternatively the recorded features relate to earth-fast structures that left no trace in the subsoil.

The pottery recovered is similar to that from previous phases. Round-bottomed bowls, which dominate the assemblage from Kinegar, date to the third/fourth millennia BC, while Impressed Ware, of which small quantities have been recovered, is currently thought to date to the mid to late fourth millennium BC.

The lithics recovered are from a variety of sources, probably indicating that local pebbles were being used to provide material for the production of tools.

The full archive will be deposited with the National Monuments Record of Scotland.

BIBLIOGRAPHY

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APPENDIX 1: FIELD REGISTERS

Context Register

Context Number	Description	Dimensions
1-253	Used in previous phases	-
254	Fill of Pit 255. Mid greyish brown silty coarse sand with sparse sub-rounded gravel <5 cm and rare charcoal flecks.	-
255	Cut of pit. Sub ovoid with shall to moderately steep slightly concave sides breaking gently to concave base.	0.76 x 0.7 x 0.15 m
256	Fill of Pit 257. Mid greyish brown silty coarse sand with sparse sub-rounded gravel <5 cm, rare sub-angular gravel 5-8 cm and rare charcoal flecks.	-
257	Cut of pit. Sub-ovoid with moderate concave sides breaking gently to concave base.	0.6 x 0.55 x 0.13 m
258	Fill of Pit 259. Dark greyish brown silty sand with moderate gravel <5 cm and rare charcoal flecks.	-
259	Cut of pit. Sub-ovoid pit with moderate concave sides breaking gently to slightly concave base.	0.7 x 0.44 x 0.14 m
260	Fill of Pit 261. Dark greyish brown silty sand with moderate gravel <5 cm and rare charcoal flecks. Pot sherd recovered from surface.	-
261	Cut of pit. Sub-ovoid – double bowled with moderate concave sides breaking gently to slightly concave base.	0.7m x 0.44 x 0.12 m
262	Fill of Pit 263. Mid greyish brown silty sand with sparse gravel <5 cm.	-
263	Cut of pit. Sub-circular with near vertical straight sides and near flat base.	0.4 x 0.32 x 0.16 m
264	Fill of Pit 265. Dark greyish brown silty sand with common gravel and stones <10 cm and rare charcoal flecks.	-
265	Cut of pit. Sub-circular with steep, near vertical sides and uneven concave base.	0.4 x 0.34 x 0.22 m

Photo Register

Both cameras failed.

Drawing Register

Drawing Number	Description
1-117	Used in previous phases
118A	North facing section Pit 255.
1188B	North-east facing section Pit 257.
118C	North-west facing section Pit 259.
118D	North-east facing section Pit 261.
118E	North-east facing section Post-hole/Pit 263.
118F	East facing section Post-hole 265.
118G	Post-ex plan Post-hole 265
118H	Post-ex plan features 255 – 263 inclusive

Finds Register

Context Number	Description
260	Prehistoric pottery sherd. 60 x 50 x 9 mm
260	Flint. 15 x 7 x 2 mm. Light grey waste flake
260	Flint - ?pitchstone. 6 x 6 x 0.5 mm. Glossy black flake with well defined platform and bulb of percussion. Possible hinge fracture
260	Chert. 23 x 15 x 3 mm. Light grey flake. Obverse: pronounced bulb of percussion, platform missing. Reverse: flake scars. Generally battered.
262	Chert. 5 x 5 x 3 mm. Mid grey chip.

APPENDIX 2. ASSESSMENT OF SAMPLES

SAMPLING STRATEGY

Bulk soil samples were taken from the fills of features for the recovery of small finds and palaeoenvironmental remains.

METHODOLOGY

Each sample was subjected to a system of flotation in a Siraf style flotation tank. The floating debris (flot) was collected in a 250 μ m sieve and, once dry, scanned using a binocular microscope. Any material remaining in the flotation tank (flot) was wet-sieved through a 1 mm mesh and air-dried. This was then sorted and any material of archaeological significance removed.

The results are summarised in Tables 1 and 2.

Discussion

The archaeological material recovered from the samples taken during this phase of the watching brief is consistent with that recovered during earlier phases, both in terms of composition and quantity. All samples yielded small quantities of fragmentary charcoal, with burnt bone present in two samples and nutshell in one. The artefacts recovered comprise pottery and worked stone.

Small quantities of fragmentary charcoal were recovered from all samples, but in only one case (Context 264, fill of Post-hole 265) were these potentially suitable for AMS dating.

Small fragments of mammal bone were recovered from two samples, Contexts 258 and 264. The condition of these pieces precludes further analysis.

Context 264 yielded a single piece of hazelnut-shell. Quantities of nutshell have been recovered from previous samples, but in insufficient quantities to demonstrate the harvesting of nuts for food as opposed to incidental burning with firewood.

Recommendations

The charcoal recovered in association with Neolithic Impressed Ware may be suitable for AMS dating. If so, this should be identified to species level before submission for testing.

Table 1: Composition of flots

Context number	Sample number	Context description	Total flot vol (ml)	Charcoal		Comments
				Qty	AMS	
254	53	Fill of Pit 255	20	++		
258	54	Fill of Pit 259	<10	+		
260	55	Fill of Pit 261	<10	+		
262	56	Fill of Pit 263	<10	+		
264	57	Fill of Post-hole	<10	++	*	

Key: + = rare, ++ = occasional, +++ = common and ++++ = abundant.

Table 2: Composition of retents

Context Number	Sample Number	Context type	Charcoal	Burnt bone	Worked stone	Pottery	Nutshell	Comments
254	53	Fill of Pit 255	++					
258	54	Fill of Pit 259	++	+	+			
260	55	Fill of Pit 261						Archaeologically sterile
262	56	Fill of Pit 263	++		+	+		
264	57	Fill of Post-hole 265	+++	+		+++	+	

Key: + = rare, ++ = occasional, +++ = common and ++++ = abundant.
* = means sufficient charcoal for AMS dating.

APPENDIX 3: POTTERY ASSESSMENT

Ann MacSween

Context 260

The pottery from this context comprises a body sherd which is probably from an early Neolithic round-bottomed bowl, Sheridan's 'traditional Carinated Bowl pottery' (see MacSween in Conolly 2001b).

Context 262

Interior fragment, undiagnostic.

Context 264

Two rim sherds, two body sherds and a number of fragments were recovered from context 264. All are from the same vessel, a Neolithic Impressed Ware bowl. The wide exterior bevel of the rim and the exterior surface are decorated with double rows of (?) bird bone impressions. Current dating for Impressed Wares, in the south and east of Scotland at least, indicate that Impressed Wares date back to the mid to late fourth millennium BC.

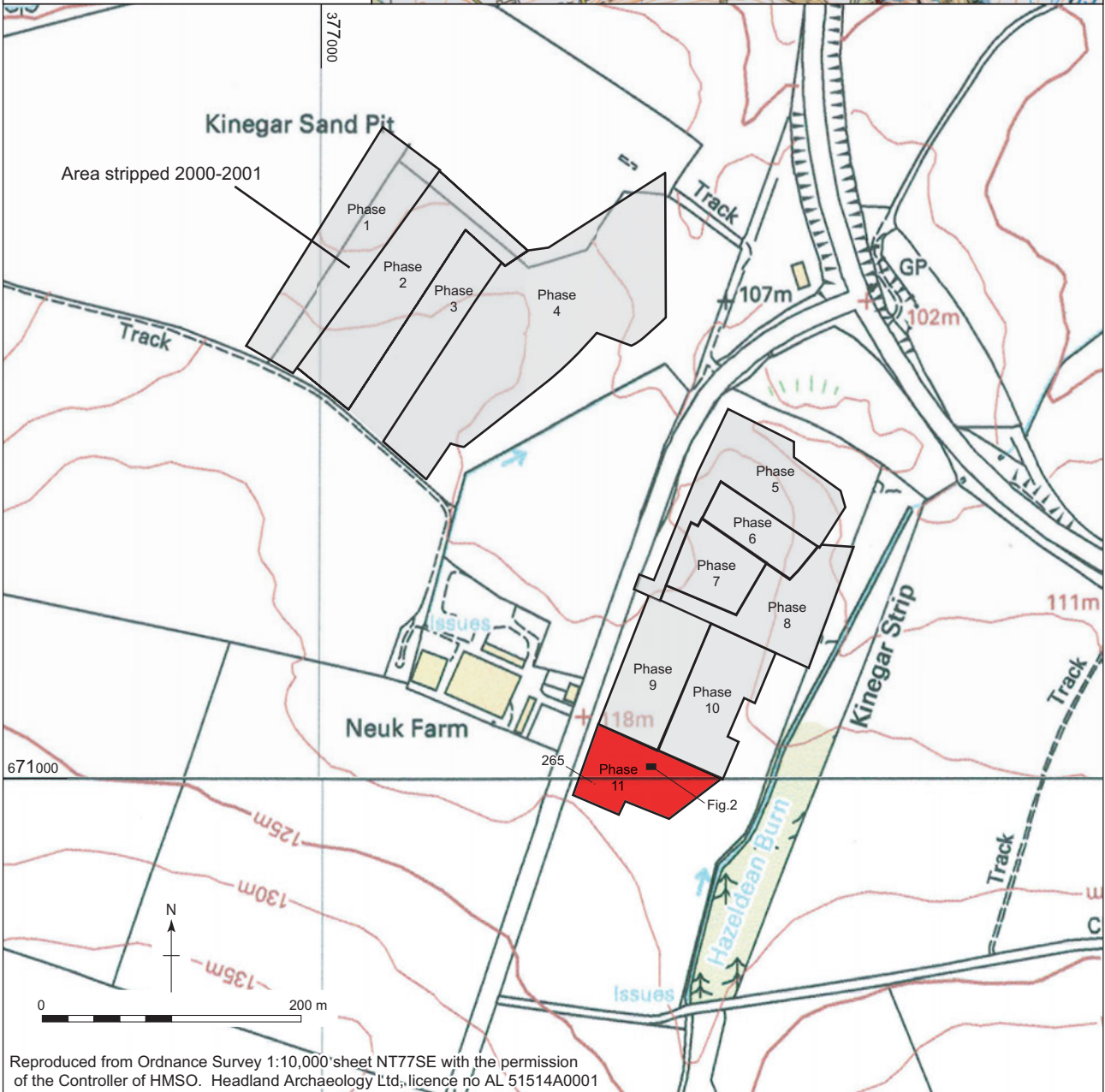
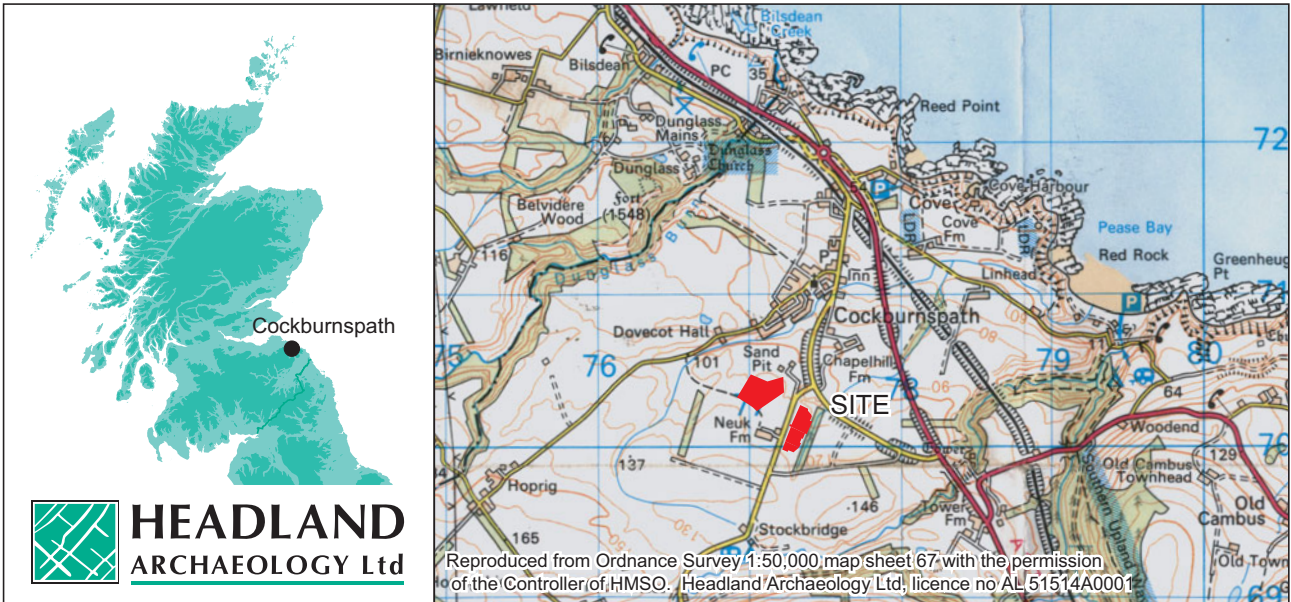


Figure 1: Kinegar Sand and Gravel - site and feature location.

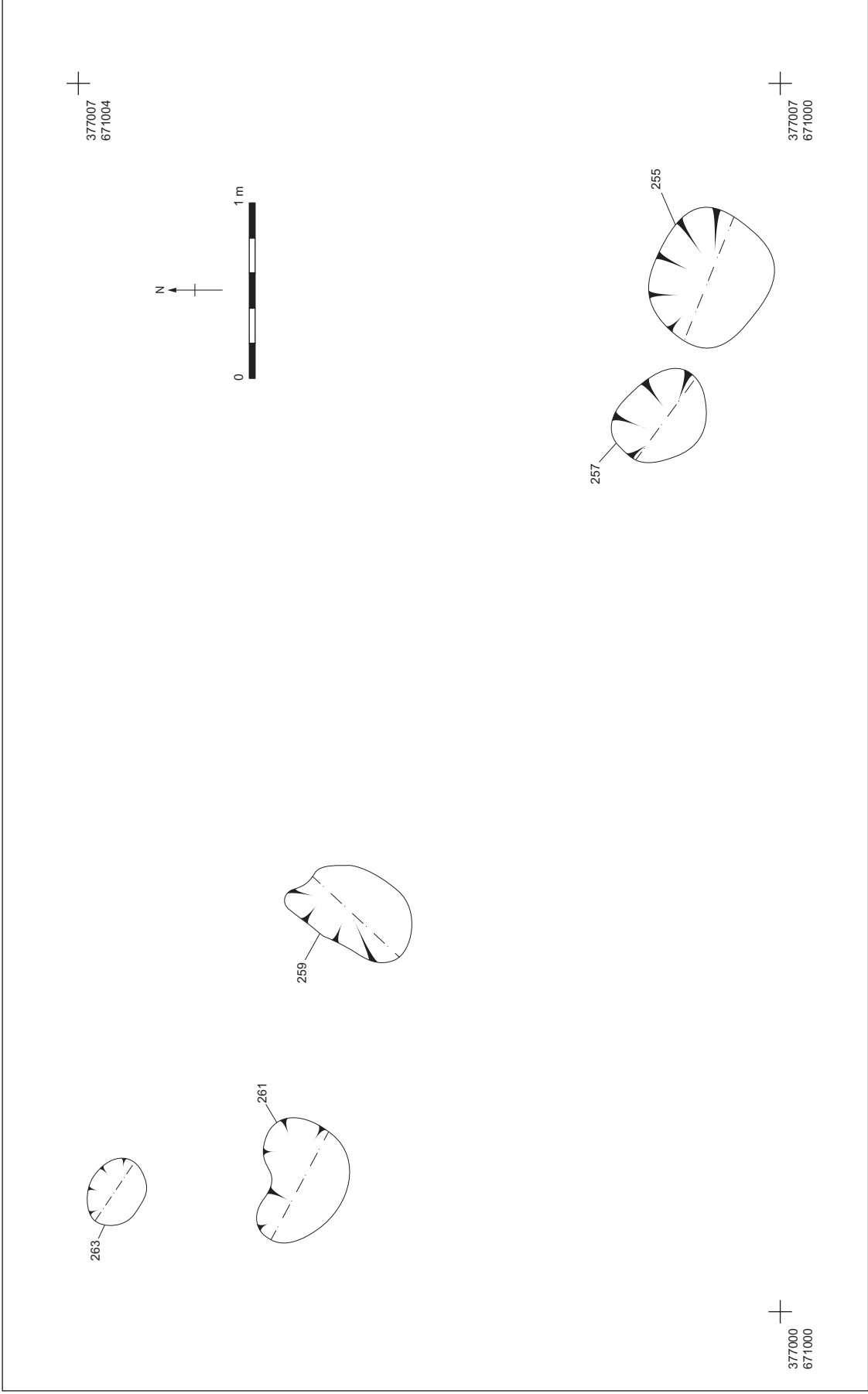


Figure 2: Kinegar Sand and Gravel - Plan of cluster of features.