

Along the western side, between the existing drain pipe trench and the western edge of the intervention, a brick surface was discovered at a depth of approximately 0.27m (F12 C1019) (Plate 1). This feature (F12) was sealed by C1016. It consisted of fourteen rows of handmade red stock bricks (c.9" x 5" x 2¾"), aligned NW-SE, with no mortar bonding or rendering on or between any of the bricks. They had been laid directly onto a flat bed of clay (C1017). The eastern edge of F12 had a generally ragged, irregular appearance, which indicated that it had been at least partially robbed. F12 was not present to the eastern side of the existing drain trench. A single dressed block of sandstone, set along the eastern edge of the floor surface, probably re-used, may be all that remains of the original kerb.



C1016 abutted and covered both F14 and F15, two walls defined in plan, although not necessarily visible in section (Fig.4). The walls were of massed wall construction, and shared some constructional detail.

During the watching brief (Int.4, see below) some facing stones of F15 had been discovered at the bottom of Trench E. The wall core of F15 was composed of rubble, primarily sandstone with occasional fragments of limestone, and bonded with a soft yellow, sandy mortar. The mortar was in poor condition, badly decayed or absent from many of the joints. The wall was faced with large blocks of sandstone, with an average size of 0.26 x 0.15 x 0.17m. No tooling was visible on exposed surfaces. Some fragments of bone, possibly human, were incorporated into the makeup of the wall core.

A modern post setting (F13) (Plate 2) had been inserted into the eastern side of F15 to a depth of approximately 0.35m. The pit had been filled with stone rubble and concrete, presumably including material collected from the wall itself. A well-formed imprint of a post socket (6" x 4") at the top of F13 indicated that the feature had supported a squared timber fence post, possibly part of original wooden compound fence erected in the corner of the Outer Ward.



Plate 2 Intervention 5, F13

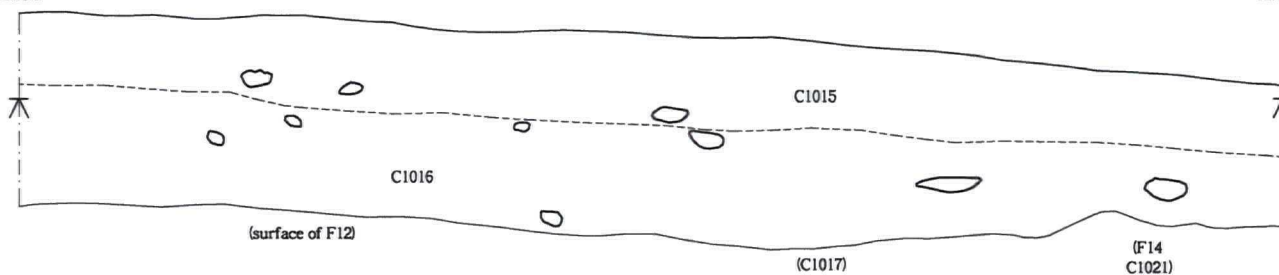
F14 abutted F15 (Plate 3) and was also of massed wall construction. F14 was faced with large blocks

Section A

A1

504948.57,489229.76
82.16m

504948.60,489233.14
82.16m

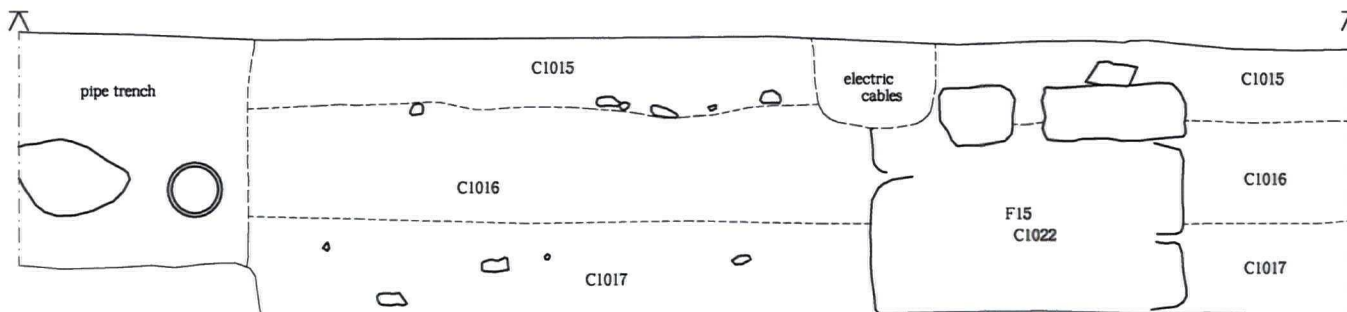


Section B

B1

504948.60,489233.14
82.30m

504952.13,489233.20
82.30m



Intervention 5 east and south facing sections

Scale 1:20



Figure 4

of sandstone, many of irregular shape. The wall core comprised building rubble, loosely bonded with a yellow sandy mortar, also in a very decayed condition. The void between F14 and F15 was filled with mortar. Further fragments of bone, also possibly human, were exposed in the wall core, but were left *in situ* and covered.

C1017 abutted F14 and F15 at a lower depth than C1016, but did not spread over the fabric of the walls. C1017 was similar to C1016 but contained

a larger proportion of broken building material, lumps of clinker, occasional thin spreads of crushed lime mortar and fragments of animal bone.



Plate 3 Intervention 5, F14 and F15

Table 1 Summary of contexts from Intervention 5

C no.	Identity	F no.	Munsell	Description
1015	layer	-	10YR3/1	consistent dark brown sandy clay soil, soft texture with high humic content, 0.18-0.24m thick, incorporated a moderate amount of building debris (brick, tile, slate mortar, glass, china, pottery) mostly of small size (<6mm)
1016	layer	-	10YR3/2	variable, firm dark greyish brown sandy silt with some gravel and moderate amounts of pebble sized stones, contained some pockets of lighter brown clayey sandy silt (7.5YR4/3), and occasional flecks of charcoal, incorporated moderate amounts of building material and general domestic refuse (glass bottles, table china, tins etc.), max. 0.30m thick
1017	layer	-	10YR3/2	firm, very dark greyish brown sandy silt with some gravel and pebble sized stone but with abundant lumps of clayey sandy silt, incorporated moderate to abundant amounts of broken building debris and domestic refuse (particularly bottle necks and bases), including clinker at the lower levels, min. 0.30m thick. Occasional, thin spreads of crushed lime mortar scattered throughout but becoming more abundant at lower levels. One human femoral head recovered.
1018	dump	-	-	localised spread of loose, soft pale brown mortar with small blocks of broken and crushed sandstone, max. 0.20m thick
1019	makeup	12	-	floor surface constructed of hand made red stock brick, size centred around 9" x 5" x 2¾", not bonded and laid in rows on a clay bed (the surface of C1017)
1020	fill	13	-	misc. small building rubble held in a concrete matrix
1021	makeup	14	-	built of massed wall construction and faced with large blocks of sandstone, many of irregular shape, loosely bonded with a yellow sandy mortar, included part of human jaw bone in makeup
1022	makeup	15	-	built of massed wall construction and faced with large blocks of sandstone, bonded with a very sandy and soft yellow mortar, makeup included part of human cranium

Table 2 Summary of features from Intervention 5

F no.	Identity	C no.	Dimensions (m)	Profile
12	floor	1019	L 1.88 x W (min) 0.80	n/a
13	post pit	1020	dia. 0.64 x D 0.35	n/a
14	wall	1021	L (min) 1.66 x W 0.81	n/a
15	wall	1022	L (min) 4.00 x W 0.79	n/a

3.0 WATCHING BRIEF

3.1 MONITORING PROCEDURE

A test trench (D), measuring 0.90m by 0.55m and aligned roughly NE/SW, was dug to locate an existing drain running between manholes 1 and 2 (Fig.5 MH1 and MH2 respectively). This was positioned as close as possible to the flagged area to the east of the Master Gunner's House, and was excavated by the building contractors by spade, under close archaeological supervision, to a depth of 1.04m below present ground level.

Trench E formed an extension of Trench D, on a curved route northwards (Fig.5), circumventing a wall to the north and east of the flagged area. It was excavated using a small back-acting mechanical excavator with a 0.40m toothed bucket under close archaeological supervision. It was dug to a variable depth, according to the required drainage slope. The excavation was interrupted at approximately 5.5m north of the Master Gunner's House yard wall, when features were encountered which would interfere with the proposed drainage scheme.

In response to findings within Trench E, a further trench (F) was opened to the west of Trench E (Fig.5), in order to determine whether there was a route in the immediate vicinity which would avoid the features already uncovered. This was dug by hand to an average depth of approximately 0.20m, but after encountering features apparently consistent with those in Trench E, works were again suspended.

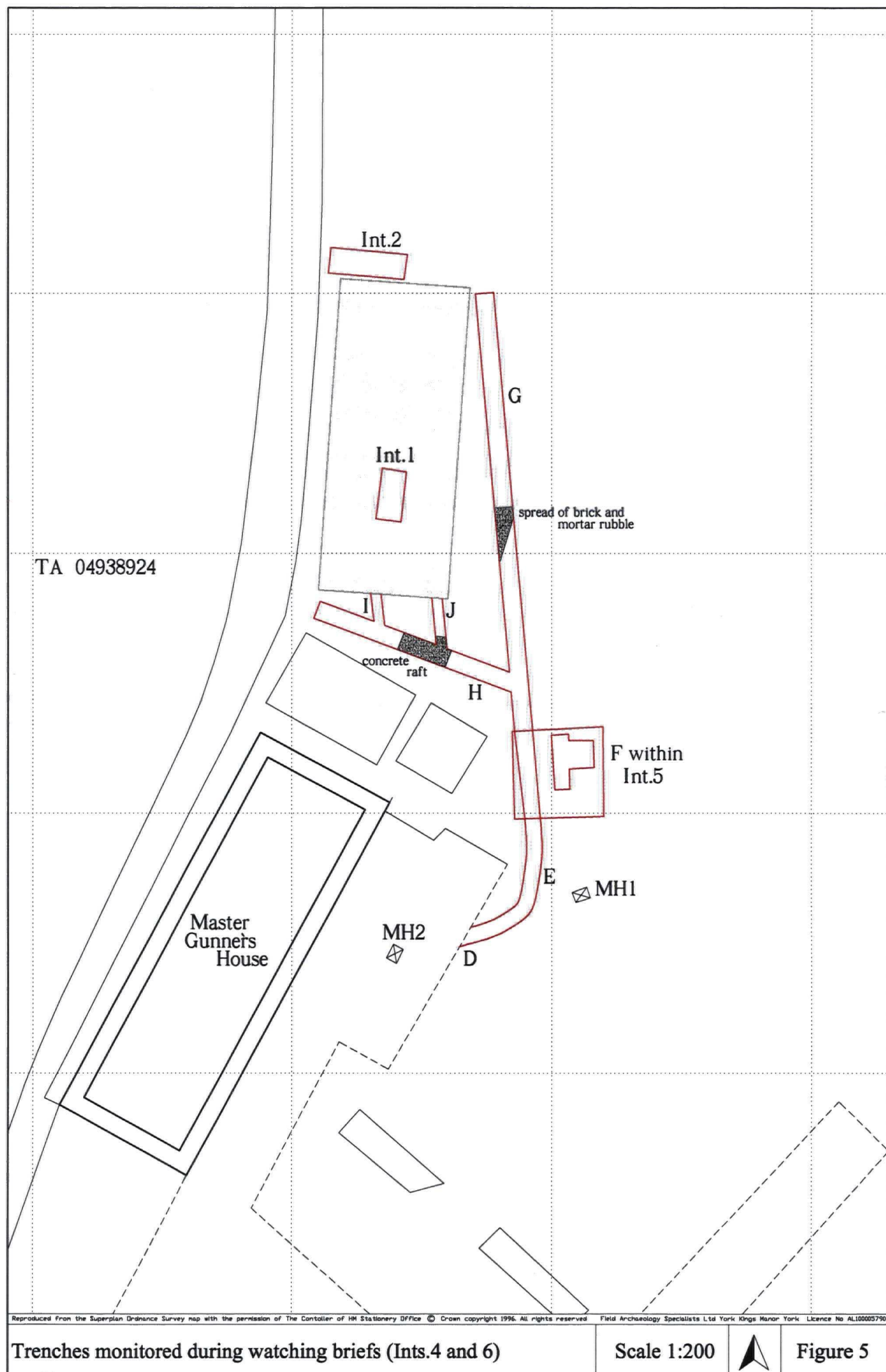
Following the completion of an archaeological evaluation (Int.5), and in accordance with



Plate 4 F15 before stone removal



Plate 5 F14 before stone removal



instructions from English Heritage, two stones from the F15 were carefully removed (Plate 4), as well as a few loose stones from F14 (Plate 5), in order to achieve an adequate drainage slope. A photographic record was made of these intrusions, and observations regarding the construction of each wall were confirmed.

Monitoring continued on the northern extensions of the drain runs. Between Int.5 and a manhole cover at the NE corner of the toilet block. Trench G, 0.70m wide and 0.50m deep, was mechanically excavated (Fig.5). Trench H, of similar dimensions, was cut from another manhole at the SW corner of the new toilet block, linking with G immediately north of Int.5. Two smaller trenches (I and J), 0.40m wide and 0.50m deep, were dug running south from the south side of the new toilets, linking with Trench H.

All of the trenches were positioned according to the development plans for the proposed drainage route, relative to the Master Gunner's House. Written notes were made, and photographs taken, of deposits, features and structures as they appeared; significant structures were sketched in plan and positioned in relation to the Master Gunner's House and the evaluation trench.

3.2 MONITORING RESULTS

Intervention 4 (R L Rowell) (Fig.5)

Trench D

The fill of this trench consisted of a dark brown sandy soil with inclusions of large blocks of rough or partly dressed yellow sandstone, and occasional inclusions of eighteenth century bottle glass (including one shoulder fragment and base), blue and white pottery, and disarticulated animal bone.

The only feature within Trench D, at 0.27m below present ground level, was a stub of wall protruding 0.18m from the northern side of the trench. The exposed and undressed south face measured 0.49m in length NE/SW. The wall was visible to the full depth of the trench (0.78m). The wall comprised large dressed limestone and yellowish-green sandstone blocks, with mortar adhering to the uppermost exposed surface, indicating the removal of further courses. The wall had been cut through on the south during the provision of services from the Master Gunner's House. This wall is consistent with that visible above ground on the north, acting as a retaining wall to the flagged yard. It is assumed that the wall continues further to the south of this test trench. The wall is presumably of eighteenth century date.

Trench E

The trench was expected to transect Trench B, dug in March 2001, at approximately 5.0m from existing manhole 1, and thus would re-expose a loosely bonded yellow sandstone linear feature (F11), observed during an earlier watching brief (FAS_scc03). Initially, excavation encountered only a dark brown sandy soil with small stone inclusions, and only occasional brick or stone rubble within 0.20m of the present surface. An iron water pipe was observed where the trench turned northwards, as well

as two plastic drainpipes servicing the old toilet block.

At approximately 2.7m north of the yard wall, a stone feature was uncovered (later identified as F15, Int.5), at a depth of 0.60m below present ground level, and immediately below a layer of gravel laid for the drainage pipe installed in March 2001. This consisted of several pieces of limestone, only one of which was reasonably exposed. This block measured 0.52 x 0.21 x 0.19m, and was dressed on its upper and southeast faces. Although the width of the trench prevented close inspection, it appeared that the southeastern surface was worn. The size of the trench prevented any attempt at determining the full width of the feature, but it was apparent that the structure continued further northeast.

Within a metre of this feature, (5.9m from manhole 1) F11 was re-encountered, also below the newly-installed drainage pipe. As described in FAS_scc03, this feature consisted of a mix of disintegrating yellow sandstone and limestone blocks, loosely bonded with a sandy lime mortar, and of variable height, aligned NW/SE (equivalent to F14, Int.5).

Trench F

The respective alignments of the two features indicated that there was a possibility that they would intercept and terminate within 1.2m east of Trench E. However, the initial removal of topsoil revealed the top of a wall, 0.80m wide and on a similar alignment to F11, constructed of irregular blocks of limestone. While no yellow sandstone, characteristic of F11 in Trench E, was visible at this stage, the consistency in alignment and structure width led to the conclusion that this was a continuation of F11. (During the evaluation, F11 was identified as part of the wall core of F15, and had been used as backfill for pit F13).

Extensive services has already been installed in and around the area, making more certain identification of the alignment or continuation of F11 difficult. Soil within and around these intrusions included four 18th century bottle bases and a pottery fragments of various dates, suggesting backfilling.

The termination of groundworks was followed by the excavation of Intervention 5, described above.

Intervention 6 (Fig.5)

Trench G

It was noted that this trench had previously been de-turfed but not excavated, the turf being subsequently replaced. A sequence of layers was identified which was consistent with strata from the remaining trenches (H-J), consisting of a topsoil 0.10m thick; a spread of friable silty sand, 0.07m thick and with abundant roots; and a spread of more compact clayey sandy silt. This dark greyish brown layer (7.5YR4/3) was similar in character to C1016 (Int.5), which also contained moderate amounts of building material and flecks of charcoal, although 18th century bottle glass was less well represented.

Approximately midway along Trench G, a localised spread of loose brick and pale brown sandy mortar rubble indicated a point of intrusion through C1016 (Plate 6). It contained bonded light red brick (9¼" x 3" x 4¼"), some of which was rendered in a hard grey mortar which was scored to take plaster, broken slates and a few substantial steel pins.



Plate 6 View north along Trench G

Trench H

Trench H was cut through a former paved footpath to the old toilet block. At the east end of the trench was a buried concrete raft, approximately 1.95m wide, uncovered at a depth of c.0.30m. Although the significance of this platform was not established during the watching brief, it was probably also associated with the old toilet block.

Trenches I and J

These trenches contained no significant archaeological remains.

4.0 ASSESSMENT

F15 has been interpreted as part of a large enclosure wall which ran approximately N-S along the front of the Master Gunner's House and the north magazine. The northern end returned to the west and was linked with the medieval curtain wall. The wall is well documented on maps of the eighteenth century, the earliest instance being c.1745 (Dr J Clark, pers. comm.), and had been detected as a strong linear anomaly on the geophysical survey of the Outer Ward (FAS_scc02).

F14 abuts F15, and was therefore a later addition (1746-1819) which effectively closed off the yard of the Master Gunner's House on the north. It runs west towards the curtain wall, apparently beneath the old toilet block. The relationship between F15 and F14 and the brick surface (F12) is not well defined, but the surface does seem to respect the line of both walls, and is probably contemporary with the F15. It is likely that the brick surface formed a lower courtyard to the north of the Master Gunner's House, reached by a surviving staircase at the northeast corner of the house. Probing near the base of the staircase, when compared with levels taken along the brick surface, suggests that the rest of the brick surface survives at the same depth below present ground level.

The sequence of layers (C1016 to C1018) represent a recent episode of ground improvement, when dumps of material were used to level-up the ground surface. The incorporation of moderate quantities of wine and port bottles (18th century) and other contemporary and later building material, encountered in both the watching briefs and evaluation, suggest it was reclaimed material from nearby. However, the tentative identification of human bone built into the wall fabric may indicate

that material had been incorporated from elsewhere in the Outer Ward.

5.0 ARCHIVE

All material remains were washed, bagged, marked and maintained to current conservation best practice. All material of 18th and 19th century date has been assessed and discarded. The written and photographic archive will be deposited with Mr Andrew Morrison, English Heritage Regional Archaeological Curator, Helmsley Store, Helmsley, N Yorkshire. A copy of the report will be deposited with the NMR.

APPENDIX A: INDEX TO FIELD FILE

CODE		DESCRIPTION	RECORD	FORMAT
Indices				
YO1		Index of notebooks		
YO2		Index of contexts	1	A4
YO3		Index of features	1	A4
YO4		Index of structures		
YO5		Index of drawings		
YO6	.0	Index of photographs	4	A4
	.1	Index of film processing	1	A4
YO7	.0	Index of finds		
	.1	Index of finds by context		
	.2	Index of finds by grid square		
	.3	Sample register		
	.4	Artefact register		
	.5	Finds storage register		
YO8		Index of geophysical data files		
YO9	.0	Index of survey stations		
	.1	Index of co-ordinate files		
	.2	Index of topographic files		
YO10		Index of interventions		
Y1		Notebooks		
Contexts				
Y2	.0	Context record	5	A4
	.1	Skeleton record		
	.2	Coffin record		
	.3	Masonry record		
	.4	Timber record		
Features				
Y3	.0	Feature record	1	A4
	.1	Auger record		
Structures				
Y4		Structure record		
Site drawings				
Y5	.0	Legend		
	.1	Plans	3	A4
	.2	Maps		
	.3	Sections	1	A4
Photographs				
Y6	.0	Black and white negatives	29	35mm
	.1	Colour negatives	61	35mm
	.3	Colour prints	61	6"x4"
	.4	Black and white prints	29	contacts
	.5	Digital images		disk
Finds				
Y7	.0	Finds Location Record		
	.1	Artefact Record		
Survey				
Y8	.0	Record of geophysical data files		
	.1	Record of .RAW data file		
	.2	Record of .FLD data file		
	.3	Surface Reconnaissance Record		

