



YORK ARCHAEOLOGICAL TRUST REPORT

SITE ADDRESS	Care Home, Nuffield Hospital, Haxby Road, York		
CLIENT NAME	Primary Care Investments		
YAT PROJECT #	5481	YAT REPORT #	2011/23
MUSEUM ACCESSION #	n/a	GRID REFERENCE	SE 6079 5344
PLANNING REFERENCE #	10/01677/FULM	AAI OPS NOTICE #	n/a

INTRODUCTION

Between 7th February and 16th March 2011 York Archaeological Trust maintained a periodic watching brief on ground-works associated with the building of a new care home in the grounds of the Nuffield Hospital, Haxby Road, York (Figures 1 and 2). The archaeological monitoring was commissioned by Primary Care Investments and followed a City of York Council Archaeological Scheme of Investigation (2005).

BACKGROUND

The site lies some 1.5km to the north of the core of the historic city in an area devoted largely to residential dwelling but lying adjacent to the large confectionary complex of Rowntree's/Nestle. Lying outside the Area of Archaeological Importance this part of York lies on the periphery of an area which has produced significant Roman, medieval and post-medieval deposits. This area lies beyond the mapped limits of 17th and 18th century city maps. The First Edition Ordnance survey map of 1853 depicts the area of development as open ground and this remained the case until the 1909 edition which shows three small buildings within the area. Within the same map the large Rowntrees building is shown on the opposite side of Haxby Road whilst Butcher Terrace is depicted immediately to the south of the site. By the time of the 1938 edition of the Ordnance Survey map new development to the north of the footprint of the new building is evident though elsewhere the situation remained substantially unchanged. More recent Ordnance maps spanning the 1950s to 1990s still show the area of the footprint to be substantially open ground though with some internal divisions. These divisions are believed to relate to vehicle parking areas. Land use immediately prior to the present construction programme of the care home was as car parking.

The drift geology of the immediate environs of the site is of Glaciolacustrine deposits. Despite the eastern part of the development site lying only just over 100m to the west of the River Foss geological maps do not indicate any alluvial deposits within the area immediately to the east of the junction of Haley's terrace and Huntington Road. The solid geology of the area is formed of Bunter and Keuper sandstones (Geological Survey 1973). The site is on fairly level ground, typically a little over 13m OAD, though there is a very slight fall in a west – east direction. A little to the east of the site Huntington Road lies at a height of fractionally over 10m AOD.

METHODOLOGY

The Archaeological Scheme of Investigation required a watching brief to be kept on all ground-works for the development with the objective of establishing the date and character of any archaeological deposits disturbed by the development (Figure 3).

The initial parts of the ground-works involved the removal of tarmac car park surfaces and their underlying make-up of limestone chippings. Thereafter, the bulk of the watching brief observations related to the machine cutting of a complex of foundation trenches. For health and safety reasons it proved inadvisable to enter the majority of the foundation trenches, many of which were deep and with areas of instability to their sides.

The written, drawn and photographic recording was carried out in accordance with YAT fieldwork standards (YAT 2005).

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Figure 1 Site location map (see also Figure 2)

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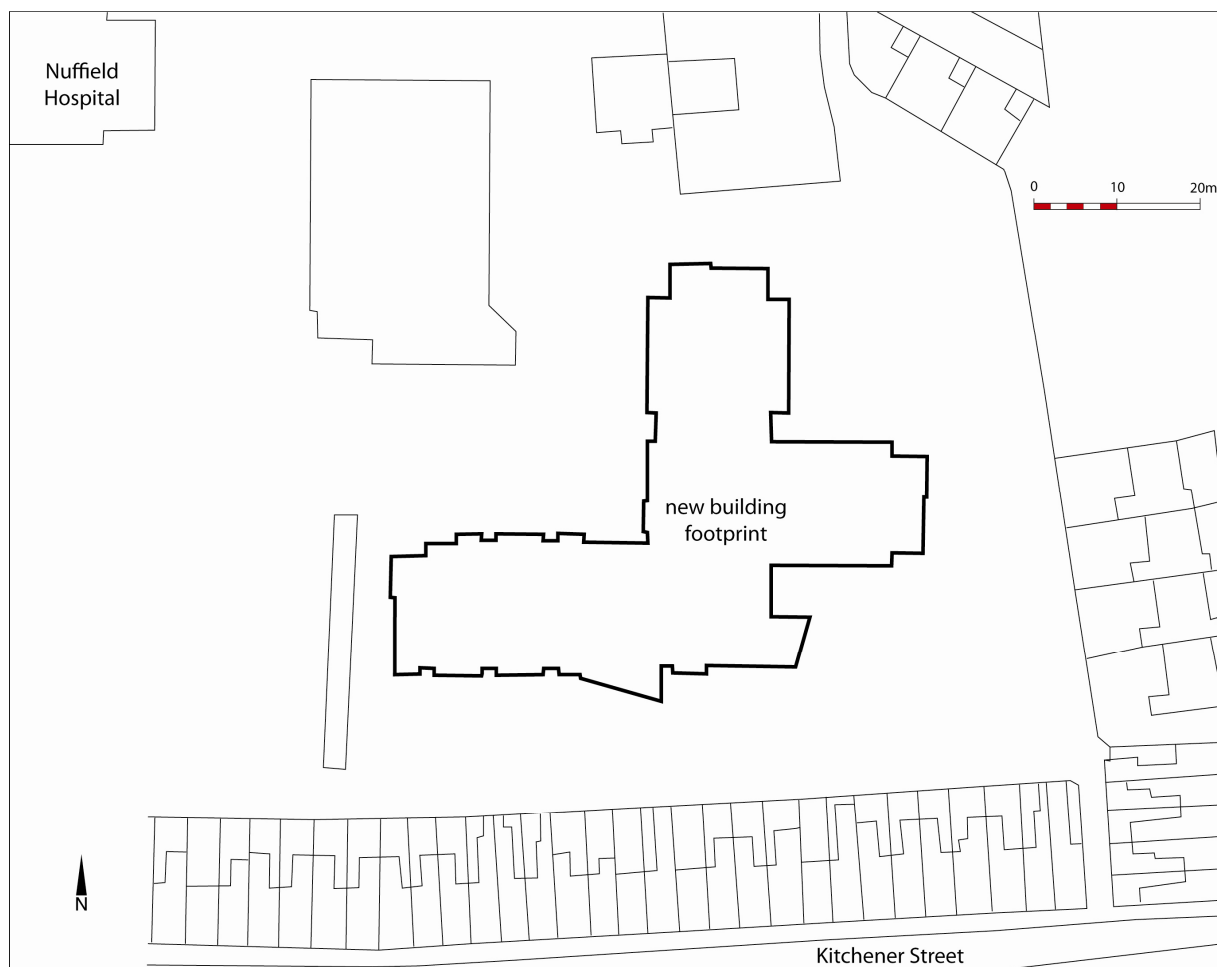


Figure 2 Plan showing footprint of new building in relation to surrounding property

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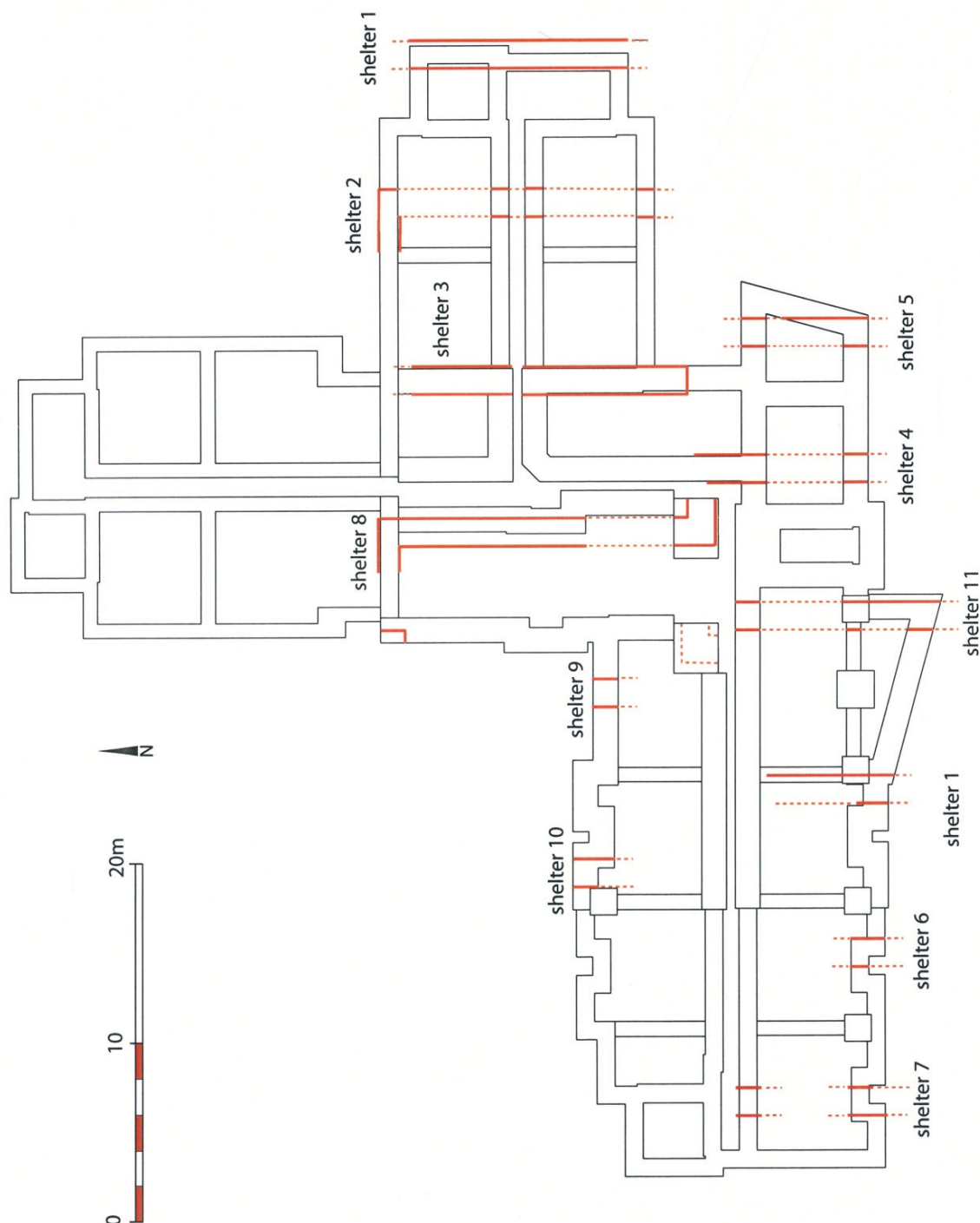


Figure 3 Plan of foundation trenches showing layout of air raid shelters

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RESULTS

The initial part of the ground-works was comprised of the stripping of tarmac surfaces together with underlying makeup of limestone chippings. These modern materials relate to recent car parking areas and collectively had a depth generally a little over 0.35m deep. Immediately beneath these materials a thin smeared horizon of dirty, dark greyish brown silty clay, seldom more than a few millimetres thick was observed. In a small handful of places thin spreads of fine clinker-type material were seen to be interleaved between the car park materials and the thin, dirty, horizon. No archaeological features, save for those of 20th century date, were observed at this reduced level. It was apparent that this thin smeared horizon was sat directly over natural yellowish brown clays and it would seem probable that its origin was in surface disturbance during truncation of overburden at the site, presumably at the time of car park construction. The handful of thin spreads of clinker-like material are likely to relate to piecemeal levelling-up of any hollows within the truncated area immediately prior to the laying of car park related materials. Cartographic and archaeological evidence indicate all this upper part of the depositional sequence relates to the post World War II era.

The foundation trenches were mechanically cut through the horizon of the surface strip. The width of the foundation trenches was intended to be between 0.80m – 1.4m wide and between 0.50m – 2m deep, this being dependent upon their location, and load bearing, within the building. However, due to encountered sub-surface obstructions it was necessary, in some places, for the foundation trenches to be cut just under 2m wide and for certain trenches to be cut to a deeper level than originally intended. Ground-works excavation for the two lift pits were also carried out at this stage.

AIR RAID SHELTERS

(Figure 3, Plates 1–5))

During the cutting of the foundation trenches no archaeological finds or features pre-dating the 20th century were encountered. A considerable number of archaeological features, all of World War II era were uncovered. These were encountered fully across the network of foundation trenches excepting the northern-most wing of the new building. All these features were related to air raid shelters, the long axes of which were aligned north – south. This arrangement of shelters is depicted in Figure 3. The shelters were seen to follow a standard pattern of a long narrow chamber with an access point at one end, this being aligned at 90 degrees to the main body of the shelter. Only parts of these shelters were seen, namely those parts that occurred within the lines of the foundation trenches. Consequently, certain shelters were seen in a number of narrow cuttings, others only within one foundation cutting. As far as could be ascertained there were 11 shelters within the footprint of the building. The basal parts of the shelters occurred at a depth generally of around 1.45m below the surface stripped level, which approximates with around 1.8m below the former car-park surface level.

The basal part of the shelters were formed of pre-cast sectional slabs, typically fractionally over 100mm thick and around 1.52m in width (these dimensions appear likely to equate with imperial measurements of 4 inches thick and 5 feet wide, respectively). The sides of the shelters were formed of overlapping sections of pre-cast, steel reinforced concrete. Most commonly these were 0.27m wide by 0.11m thick and had a simple lap joint to either side. The length of these side panels could not be accurately ascertained owing to their top ends being smashed in at the time of demolition, however, this was clearly in excess of 1.55m. These side walls were fitted snugly against

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the sides of the basal slab floors rather than being seated on their upper surface. The roof was made of similar panels, of the same width and thickness, though these had an arched profile to them and spanned from side wall to side wall. None of the roof panels, nor indeed the tops of the side panels, survived intact as these had been broken in at the time of demolition. Entrances/exits to the shelters was via concrete staircases at one end of the shelter and were aligned at 90 degrees to the long axis. Each of these steps was a pre-cast single unit and was embedded within the side walls of the entrance. The side walls of the entrances were, in all observed cases, built of brick with some steel reinforcing bars within. The theory behind such angling of entrances was that such would reduce the effects of blast within the shelter.

It is known that in some air-raid shelters of 'trench shelter' type that emergency exist hatches were provided at the ends opposite to the entrances (Figure 4). It is not known if such were a fixture of the Haxby Road shelters. Chemical toilets were also sometimes provided in these shelters, screened simply by a curtain, but again the presence of such arrangements here is unknown. Lighting in trench shelters could be by candle or by electric lighting. No cabling was observed within the backfilled shelters, though any such cabling could have been salvaged prior to demolition.

It is assumed that demolition of the air raid shelters took place soon after the war ended. Demolition was achieved by the crushing and breaking up of the roof, presumably with machines. Within the shelter tunnels there were also large quantities of re-deposited natural clays, often inter-mixed with darker, siltier, topsoil-like materials. No 'finds' or other materials were recovered from the shelters save for a number of pieces of partially decayed wood. It would seem likely that the shelters were kept reasonably clear and clean, this certainly appears to have been the case at the time of demolition.

All the shelters appeared to have their long axes aligned north – south, with the short entrances to them being aligned east – west. It is assumed that this regularity of alignment is owed to a need to accommodate as many shelters as possible within a restricted area. The shelters were constructed initially by the digging of long vertically sided trenches to a level just below that of the underside of the basal slabs and fractionally wider than the side to side width of the slab walls. Small amounts of fill, principally brick rubble and soil occupied the gap between the outer sides of the side panels and the edge of the trench cut. This thin gap was seldom wider than 0.15m. Given the assumed heights of the side panels and contemporary ground level, it is likely that the upper parts of the side panels were roughly at ground level. Assuming such, then the arched roof would have risen slightly above the then existing ground level. Upcast from excavating the shelter trenches seems certain to have been laid up over the top of the shelter roofs producing the effect of a series of linear mounds. There are a handful of photographs of air-raid shelters at Rowntree's, though the location of the particular shelters depicted is not known. However, at least one of these photographs (Plate 7) depicts a trench shelter of broadly similar pattern to those observed during the watching brief. This photograph shows people seated on benches to either side of the shelter. No evidence for seating accommodation was encountered during the monitoring works and it is probable that such bench arrangements were utilised here. The same photograph also shows electric lighting.

OTHER ARCHAEOLOGICAL REMAINS

(Plate 6)

No archaeological finds or features, other than those of World War II were encountered during the watching brief. 20th century materials were seen to lie directly over 'natural materials'. It is clear that

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there has been truncation at the site though it cannot be stated whether or not such truncation has removed any archaeological remains.

CONCLUSIONS

The presence of the network of air-raid shelters at this site was not anticipated. This appears often to be the case with such features of this date and is seemingly owed to their rapid construction, short lifespan and rapid destruction. Surviving locally held records for such structures tend often to be minimal. It was a wartime requirement for companies of a certain size to make sheltered provision for its workers in the eventuality of air raids. Given that the development plot was formerly owned by the Rowntree's company it is reasonable to suppose that the shelters were built by the company, on its own land, for its workers. There is photographic evidence indicating that Rowntree's did this, though this source does not state where their shelters were located (Wilson 2008, 123). There is also evidence indicating that in addition to manufacturing chocolate Rowntree's was more directly geared up to the war effort (Wilson 2008, 120-3). In particular, it is known that within the factory there were eight units, each of roughly eighty people – nearly all women, dedicated to the manufacture of armaments fuzes, four shifts working throughout the day and four throughout the night. A total of 7,809,579 fuzes were manufactured at the plant. It is a possibility that further information on these shelters may exist in Rowntree archives.



*Plate 1 Walls and base of Shelter 1, looking NW.
Foundation trench in top centre has cut through part of shelter wall*

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Plate 2 Walls and base of Shelter 2 cut through by two foundation trenches, looking S.



*Plate 3 Northern brick entrance walls to Shelter 2.
Note slots for concrete steps in wall, looking N.*

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Plate 4 Walls and base of Shelter 6. Note rubble fill in narrow gap between trench cut and wall, also curved roof panels within backfill, looking N.



Plate 5 Typical air raid shelter materials as machined out during cutting of foundation trenches, looking NNW.

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Plate 6 Foundation trenches in northern part of site showing modern materials directly over natural deposits, looking N.



Plate 7 Historic photograph entitled: Rowntree staff in an air raid shelter, York, 1939

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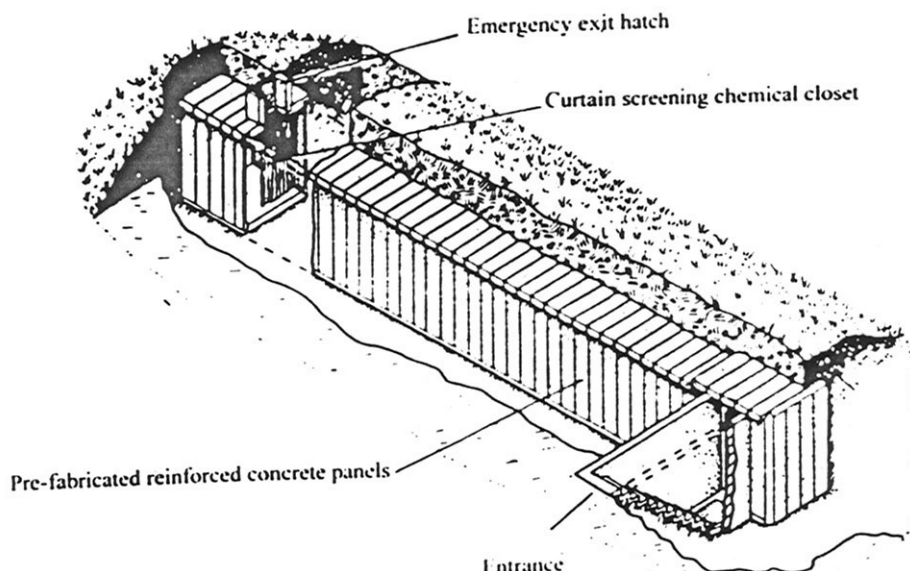


Figure 4 Covered trench shelter of broadly similar type to those revealed at the site

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