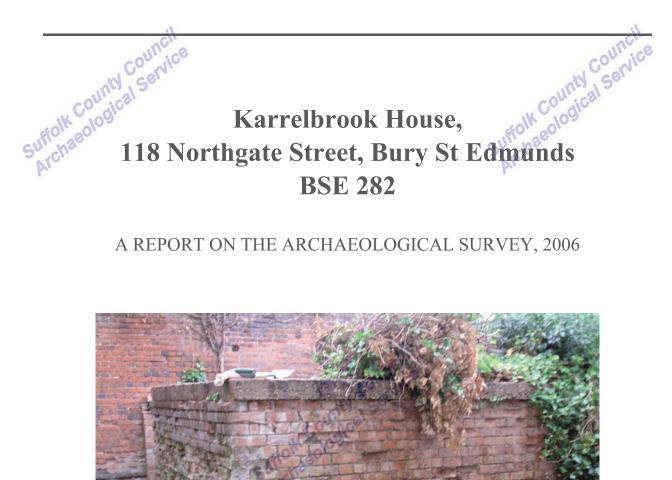
ARCHAEOLOGICAL SURVEY REPORT



David Gill Field Team Suffolk C.C. Archaeological Service

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SCCAS Report No. 2006/095



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Contents

List of Figures SMR information Service Introduction Methodology Results Discussion

Suffolk County Council Suffolk County Council Archaeological Service

Appendix 1: Brief and Specification

List of Figures

- 1. Survey location
- 2. The shelter, south elevation
- 3. Ground Plan
- 4. Elevations
- Council 5. Emergency exit
 6. Inside of the roof at entrance showing limit of iron impressions
- Suffolk Archaeolog 7. Government recommended siting for double, and quadruple shelters

Summary

A brick and concrete air-aid shelter in the rear garden of No 118 Northgate Street, Bury St Edmunds was surveyed prior to its demolition. The shelter was an example of a *double domestic* surface shelter, the blue print for which was issued by the government in May 1939.

SMR information

| Planning application no. | SE/05/02344 |
|--------------------------|--------------------------------|
| Date of fieldwork: | August 2006 |
| Grid Reference: | TL 8559 6443 |
| Funding body: | Richard Ames Developments Ltd. |
| Oasis reference. | suffolkc1-17761 |
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Introduction

A survey to record a WWII air-raid shelter was undertaken ahead of the proposed development of *Karrelbrook House*, 118 Northgate Street, Bury St Edmunds and the recording of any groundworks. The work was a condition on the consent of planning application SE/05/02344 to convert the existing building into apartments, which included the demolition of the shelter. A brief and specification for the recording was prepared by Dr Jess Tipper (Appendix 1) and was undertaken by members of Suffolk County Council's Archaeological Services on 14th August 2006. The work was commissioned and funded by Richard Ames Developments Ltd.

The development lies within the core of the medieval urban area that is defined as an area of archaeological importance. The shelter is situated in the garden to the rear of the house (TL 8559 6443), and the local planning authority had been advised that the structure is significant and should be recorded before it is demolished.



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Figure 1. Survey location

Methodology

A photographic record was made of each elevation the using a digital camera and a medium format camera with monochrome film. Targets were fixed to the walls and a measured sketch of each elevation was drawn recording the positions of the targets to allow for the photographs to be scaled. A metric photographic scale was also used in each photograph.

A scale plan was drawn detailing the positions of the openings and partitions, this was annotated with notes on construction, descriptions of materials and brick sizes. A block plan was also made to record the shelter's position within the garden. The photographs were catalogued and archived in the main stores of the Suffolk County Council Archaeological Service at Bury St Edmunds and with the County Sites and Monuments Record under the parish code BSE 282, and a copy of the report with the OASIS online database, ref suffolkc1-17761.

Results

The shelter is constructed against what was an existing boundary wall, 2.60m from the rear of the house (Fig. 1).

The shelter is wholly above ground, it is constructed of brick, built off a concrete slab floor and has a cast concrete roof (Fig. 2). The ground level in the garden has been raised and banked up against the south side of the shelter, burying the floor slab and the bottom four courses of brick and part blocking the emergency exits. At the north end the slab is above ground forming a step up into the shelter.



Figure 2. The shelter, south elevation

It is rectangular in plan and measures externally $3.75m \times 4m \times 2.14m$ high, it is divided into two equally sized (1.37m x 3.2m x 2m internally) and symmetrical cells by a central dividing wall (Fig. 3). Each cell has an entrance at the north end and an opposing low emergency exit at the south. A doorway close to the south wall connects the two halves of the shelter. All of the entrances are 0.65m wide and there is no indication that there were doors in these openings. The entrances to the shelter are protected by an anti-blast wall which forms a narrow (0.65m wide) passage and this was built butting against the existing boundary wall. The walls are two bricks thick and are laid in English bond; the bricks are a standard 9"x $4\frac{1}{2}$ " x $2^{5}/8$ " and stamped *EASTWOODS 4PRESSED*.

The emergency exits in the south wall are close to the floor and 0.68m high x 0.71m wide (Figs. 4 and 5). There is a cill, one course of bricks from the floor and the head of the opening is supported on a flat-sectioned iron lintel. The sides of the opening have no splay. The east opening is blocked and the west partly blocked, the bricks of the infilling are not bonded and

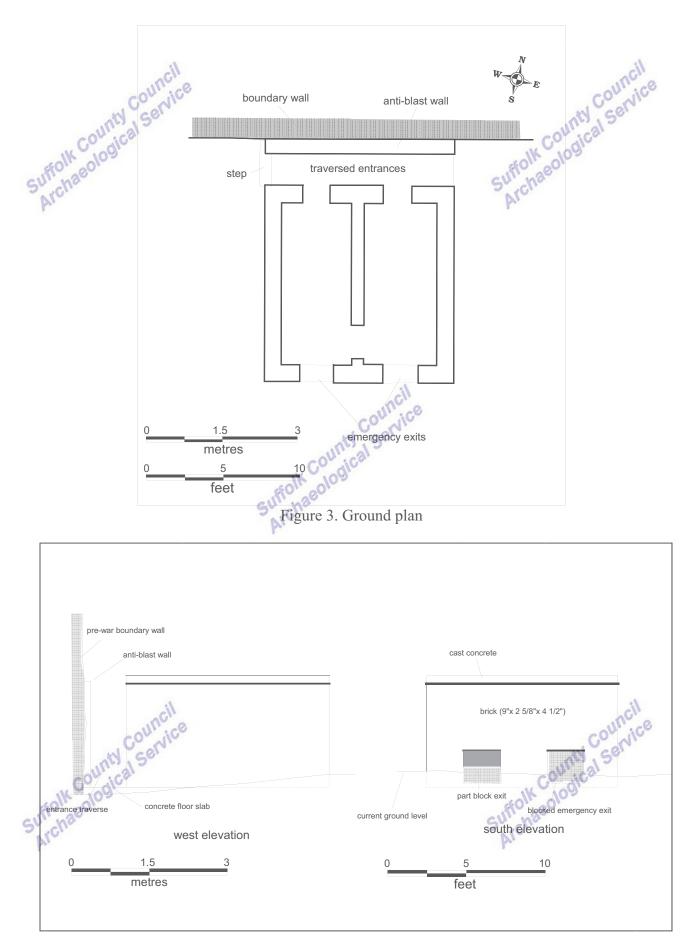


Figure 4. Elevations

although similar to the bricks that make up the wall, are stamped *LBC PHOURPRES 12*. The height of the part blocking in the west opening coincides with the raised external ground level. A white band has been painted around the inside of each of the openings, so they could be found in low light, and this follows the vertical edge of the openings but is the second course of bricks above it (Fig 5). The emergency exits would have covered by mild steel plates; these would have been attached to the inner and outer faces of the shelter and secured by wing nuts fastened from the inside. The gap between the plates was filled with unbonded bricks that could be pushed out when the plates were removed and as these bricks still appear to be place it seems that the shelter had a quiet war.



Figure 5. Emergency exit



Figure 6. Inside of the roof at entrance showing limit of corrugated iron impressions

The roof is a 14cm thick concrete slab, constructed in a single cast. On the underside of the roof the impression of corrugated iron can be seen, these stop short of the entrance over which the concrete is smooth (Fig. 6). The corrugated sheets were laid with their long edge parallel with the long walls of the shelter rather than across it. The corrugated iron would have been too insubstantial to support the weight of wet concrete, particularly laid in the direction that it has been, unless it was supported by a temporary structure below (or the shelter was filled with sand). However as there is no iron sheeting in situ and none trapped between the joint of the top of the wall, this suggests that the roof was cast on the ground and lifted into place once set, allowing for the recovery of the sheets for re-use.

Discussion

The shelter on Northgate Street is a variation of the *domestic surface shelter* introduced by the government from May 1939 as an alternative to the part buried Anderson shelter.

From September 1938 the government introduced a succession of legislation and measures to protect the population on the home front following the Munich crisis. Sir John Anderson was appointed as the minister responsible for civil defence and in December 1938 announced that the Anderson shelter would be issued free to the less well off households (those with an income of less than £250 per annum). By May 1939 it was realised that the Anderson was not suited to all domestic applications (they were very prone to flooding) and required a lot of steel in their construction, and the brick and concrete shelter was introduced as an alternative. This shelter was only issued, free, where the preferred alternatives, the *Anderson* or *basement strengthening* could not be used (Dobinson 2000).

Shelters were sold privately to more prosperous households once the free provision had been met and it seem likely that the Northgate Street shelter was one of these. The shelter is the largest that the design allowed and bigger than the standard family unit which measured 6ft 6in x 4ft 6in (1.98m x 1.37m) and was designed to accommodate six people (Dobinson 2000). The Northgate St shelter although the same in plan and specification to the government issued shelters it appears to be a modification of the double shelter which would normally have been a "semi" shared by neighbouring households and constructed across the property boundary (Fig. 7). No.118 is a large property and presumably contained a large household or was already commercial offices at the outbreak of war and would therefore require greater shelter capacity than six persons.

Other variations to the standard plan observed in the shelter were; the inclusion of the blast wall and traverse across the entrances, this was usually a feature on shelters constructed more than 15ft away from other buildings, closer than this and it was considered that the blast protection was provided by the those buildings: the opening in the partition between the two halves and the position of the emergency exits which are closer to the ground than those on the government blueprint.

These variations to a Government Issue model make the shelter an interesting example and support the theory that this was a privately funded shelter adapted to the particular needs of the then occupants of the house.

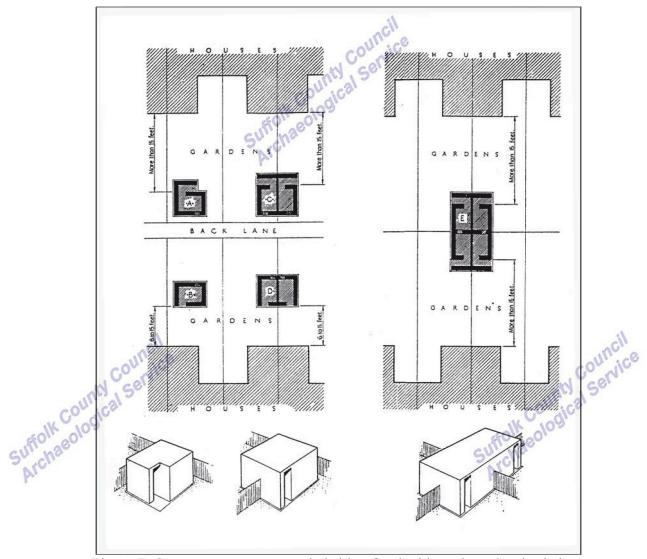
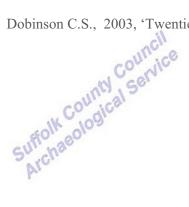


Figure 7. Government recommended siting for double and quadruple shelters

References

Dobinson C.S., 2003, 'Twentieth Century Fortifications in England, Vol.VIII', CBA Report pp52-62



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