

SUFFOLK COUNTY COUNCIL ARCHAEOLOGICAL SERVICE

No. 10, HAWKSMILL STREET, NEEDHAM MARKET REPORT ON THE TWO SPIGOT MORTAR EMPLACEMENTS

SCCAS Report No. 2006/011

1. Introduction

The Suffolk County Council Archaeological Service has been commissioned by the building contractors, RG Carters, on behalf of their clients, to inspect the two spigot mortar emplacements present within the development area at No. 10, Hawksmill Street, Needham Market, Suffolk (planning application 424/04), and to comment on their condition and rarity/importance. The site is centred on NGR TM 0885 5538, see figure 1 below for a plan of the site's location.



Figure 1: Location Plan

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2. Spigot Mortars – Background

An anti-tank or anti-personnel defence also known as the *Blacker Bombard* introduced in the summer/autumn of 1941. It had a range of c.360 metres and was placed at bridges, cross roads or river crossings. In its basic form an emplacement comprised a concrete drum c.1.2m high and 0.9m in diameter known as the 'thimble'. The thimble had a domed top into which a stainless steel pin was set for mounting the removable weapon. The thimble was formed through the filling with concrete of a pre-formed concrete tube within which steelwork for supporting the pin has been placed.

Plate I: A Spigot Mortar Emplacement seen during WWII
(from '20th Century Defences in Britain')

These emplacements were often set in a circular pit to provide shelter for the crew (see Plate I). The top of the thimble would be a little above ground level and the pit itself would be just large enough for personnel to circulate around the thimble. Other slightly more elaborate versions included concrete ammunition lockers placed around the thimble with narrow concrete walls between to provide shelter. These can be placed above or below ground level.

3. Descriptions of the Two Emplacements within the Development Area

Two emplacements have been discovered with the development site at Needham Market. For this report the two emplacements have been identified as 'Mortar 1' and 'Mortar 2'. They are located c.87m apart at NGRs TM 08845 55376 and TM 08860 55291 respectively. See figure 2 for a plan of the development area.

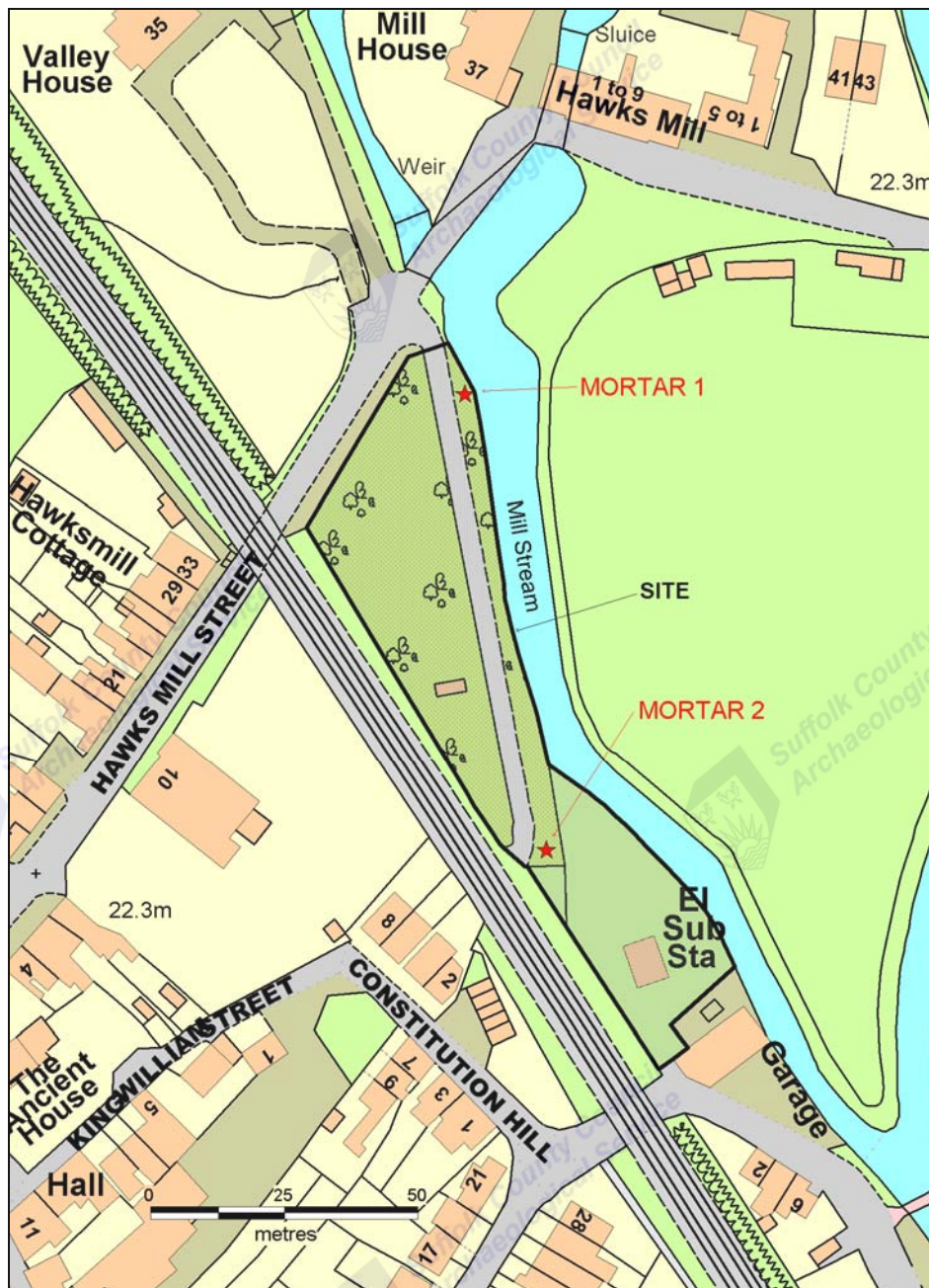


Figure 2: The Development Area

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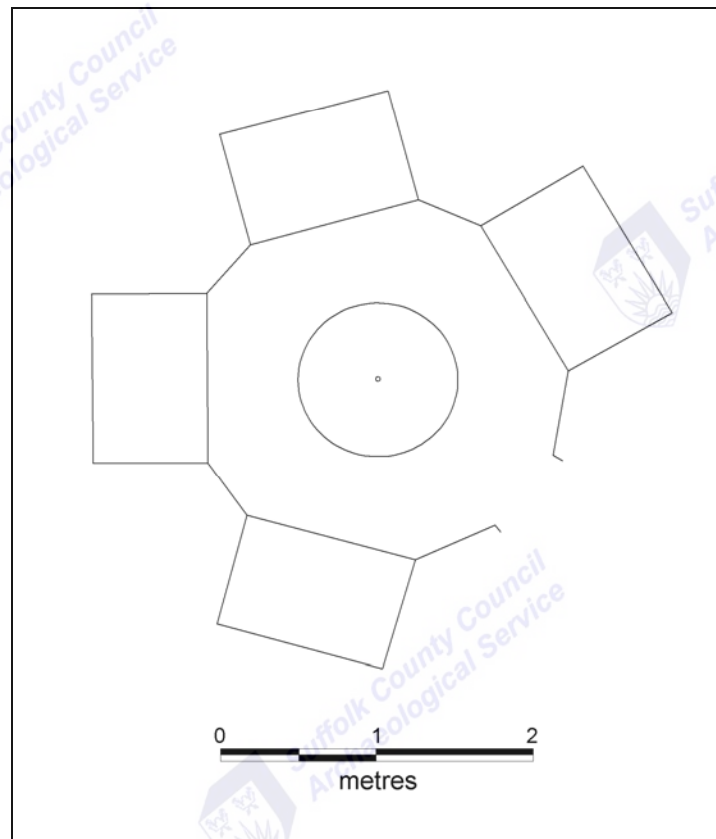


Figure 3: Mortar 1
(drawing constructed from a measured sketch)

Mortar 1: (NGR TM 08845 55376) This emplacement comprises the central thimble surrounded by a group of four ammunition lockers. It lies adjacent a watercourse marked on the map as 'Mill Stream'. The emplacement is covered in moss and partially overgrown by bushes and small trees and contains a large amount of debris making internal measurements and photography problematic.

The height of the lockers measured externally is 0.93m and the height of the thimble is at least 0.8m (to the top of the debris). The emplacement is partially sunk into the slope on the stream's edge with only c.0.4m of the locker exposed on its southwest side whilst on its eastern side the emplacement is exposed to its full height. It was noted that on this eastern side erosion, presumably due to water action at times of peak flow, has started to undermine the emplacement.



Plate 2: Mortar 1 (20/02/06) general view looking northeast

The emplacement is basically complete but there are cracks in the concrete, particularly on the western side. These cracks tend to have occurred along the corners and edges of the ammunition boxes and in a couple of places actual fragments have become detached but this is probably as a result of having been knocked rather than general degradation.

The central thimble is basically sound with the pin *in situ*. A c.70mm outer skin of concrete/mortar around the thimble (part of the original tube used to form the thimble) has become detached over approximately a third of its circumference and is lying within the emplacement but this has little overall effect on the stability of the thimble. There is no sign of corrosion or expansion of any internal metal components within the thimble.

Mortar 2: (NGR TM 08860 55291) This emplacement comprises the central thimble that was formerly surrounded by a group of four ammunition lockers of which only the bases remain. The thimble, which stands 1.07m high, is in good condition with the pin *in situ*. The original concrete tube used to form the thimble is intact and although there is a crack running the full height of the thimble it is not loose. There is no sign of corrosion or expansion of any internal metal components within the thimble.



Plate 2: Mortar 2 (13/07/05) view looking southeast

Only the bases of the ammunition lockers remain. A floor surface of concrete, which appears to be intact and unbroken, is present around the thimble.

An adjacent cutting to the east has partially undermined the base of the eastern ammunition locker but otherwise the remains of this emplacement could be said to be in good condition.

4. Rarity/Importance of the Spigot Mortar Emplacements

It is recorded that 28000 spigot mortars were issued for use during the Second World War of which nearly 6000 were destined for Eastern Command for use on beaches, nodal points and airfields but unfortunately there has been no comprehensive survey into the exact number that still survive. The Defence of Britain Project, the largest survey of twentieth century military sites to date, recorded only 17 such sites in Suffolk, not including the Needham Market pair, which is a fraction of those that are thought to have been constructed. This fraction is even smaller when it is considered that multiple emplacements were probably constructed for each spigot mortar issued to enable the weapon to be rapidly deployed to differing locations.

In relation to their importance it can be said that both emplacements are in their original locations and that the setting has altered relatively little from when they were in service. The site adjacent 'Mortar 2' was formerly a level crossing although this has now been removed it can still be clearly seen that the emplacements have been positioned to defend the railway crossing and the nearby road bridges over the Mill Stream and the River Gipping. They would have been placed adjacent the roadway that approached the crossing and although this has also gone the approach to the new development partially recreates it.

Needham Market is a designated nodal point in the 1940 List of Nodal Points in Eastern Command Home Forces Headquarters Papers (WO 199). A nodal point being defined as a location where a number of defence lines come together and a site where a stand against an invading army would be made. In this case one presumes that the railway line would have acted as one of these lines of defence being a northwest-southeast obstacle on the route from the East Coast to London. This location could be seen as a weak point in the defence line due to the bridge and the level crossing which would allow an invading mechanised force to cross the line. It is likely that further defensive works would exist in the area although none are recorded on the County Sites and Monuments Record or in the Defence of Britain database.

The site of the two emplacements is private land although 'Mortar 1' is close to and visible from Hawksmill Street. It is also visible from a small picnic area open to the public on the opposite side of the Mill Stream from where it can be clearly seen to be defending the bridges.

Another aspect of such structures is their local significance as monuments to the local men of the Home Guard who were prepared to defend their homes against invasion and as such they have a high educational value for local children and the community which cannot be underestimated.

The site has since been recorded on the Suffolk County Sites and Monuments Record, reference NDM 019, and on the OASIS online archaeological database, reference suffolkc1-16408.

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22nd February 2006

References

- Dobinson, C.S. 1996 *Twentieth Century Fortifications in England, Vol II: Anti-invasion defences of WWII*, CBA
- Lowry, B. (ed.) 1996 *20th Century Defences in Britain – An Introductory Guide*, CBA

Additional Plates

Selection of digital pictures taken during site visit on the 20th February 2006.



Mortar 1 – thimble obscure by vegetation and debris



Mortar 1 – damage to ammunition box



Mortar 1 – broken corner off entrance wall



Mortar 1 – base undermined on eastern side



Mortar 2 – general view



Mortar 2 – cracked thimble formation tube