Land off Morton Way, Axminster, Devon

A Limited Archaeological Excavation and Recording Programme

context one
ARCHAEOLOGICAL SERVICES LTD

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Land off Morton Way, Axminster, Devon

A Limited Archaeological Excavation and Recording Programme

For

Betterment Properties (Weymouth) Ltd.

By

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National Grid Reference: centred on SY 29852 97949

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February 2010

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Front cover image: Concrete base of WW2 anti-tank road block. © Context One Archaeological Services 2010

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Non-Technical Summary

Context One Archaeological Services Ltd (COAS) carried out an archaeological programme of works comprising a limited excavation on land off Morton Way, Axminster, Devon (centred on NGR SY 29852 97949) (hereafter referred to as the Site) (Figure 1) over 8 days between the 14th and the 25th of January 2010. The investigation was commissioned and funded by Betterment Properties (Weymouth) Ltd.

The request for the investigation was made by Mr Stephen Reed (Archaeological Officer, Devon County Council Historic Environment Service) in response to a consultation request from East Devon District Council East Team Planning & Countryside Services following the successful determination of a planning application for the erection of 11 two bedroom dwellings (Planning Application No: 09/1459/MFUL) on the Site.

The archaeological work uncovered the concrete foundations of Second World War anti-tank road block associated with the Taunton Stop Line. The road block would have formed part of the Axminster Anti-Tank Island; this 'island' was designed to create a tank proof stronghold that would enable the town to be defended from all sides and allow flanking fire to be directed on the enemy should the Stop Line have been breached. The road block was probably constructed by the 551st Army Troops Company Royal Engineers in 1940 or 1941.

The foundations of the road block extended across a minor east to west aligned track and would originally have had thirty-six sockets covered by moveable concrete covers. The sockets were designed to receive steel barricades that could be erected to block access to the town should the need arise. The concrete covers prevented the holes from silting up and to allow the track to remain in use when the barricades were not in place.

The configuration of the sockets suggests that the barricade originally comprised both 'vertical rail' and 'hairpin' type road blocks. These were probably arranged with an outer row of four vertical rails at either end of the structure, a row of four hairpins behind them and a further fourteen vertical rails in the central area.

Second World War moveable steel and concrete anti-tank road blocks was once common, however, as most of these were situated in roads, the vast majority have been destroyed as a result of subsequent road upgrading and re-surfacing works. Where they do survive it is often due to their location on minor roads or tracks that have never been subject to modern road works and such instances provide a welcome opportunity to investigate a dwindling archaeological resource.

1. Introduction

1.1 Context One Archaeological Services Ltd (COAS) carried out an archaeological programme of works comprising a limited excavation on land off Morton Way, Axminster, Devon (centred on NGR SY 29852 97949) (hereafter referred to as the Site) (**Figure 1**) over 8 days between the 14th and the 25th of January 2010. The investigation was commissioned and funded by Betterment Properties (Weymouth) Ltd.

1.2 The request for the investigation was made by Mr Stephen Reed (Archaeological Officer, Devon County Council Historic Environment Service) in response to a consultation request from East Devon District Council East Team Planning & Countryside Services following the successful determination of a planning application for the erection of 11 two bedroom dwellings (**Planning Application No: 09/1459/MFUL**) on the Site. Mr Reed issued a *Brief* for the archaeological works on 26th August 2009 and this included the reason for the request. It states:

> *"The Historic Environment Service has recently been made aware of the survival of a number of WWII defensive features associated with the Taunton Stop Line Way within the lane that borders the northern edge of the proposed development. This defensive line is of national importance and these features may be adversely affected by the proposed development by the construction of the access to the new dwellings."*

1.3 At the request of Mr Reed, COAS issued a Written Scheme of Investigation (Milby 2009) which provided a strategy for the archaeological works. This was submitted to and approved by Mr Reed prior to the commencement of the archaeological recording programme.

1.4 The excavation was monitored by Mr Reed, with a site visit on the 15th of January 2010.

1.5 The request for the archaeological work follows advice given by Central Government as set out in *Planning Policy Guidance Note 1* (PPG1), *General Policy and Principles, 1997*, and *Planning Policy Guidance: Note 16* (PPG16), issued by the DoE in 1990. The recommendation also conforms to County Structure and Local Plans.

1.6 This report summarises the topographical, geological, archaeological setting of the site, and presents the results of the archaeological programme of works.

2. Definition and Objectives of an Excavation

2.1 An Archaeological Excavation is defined by the Institute of Field Archaeologists (IFA) as:

> *"…a programme of controlled, intrusive fieldwork with defined research objectives which examines, records and interprets archaeological deposits, features and structures and, as appropriate, retrieves artefacts, ecofacts and other remains within a specified area or site on land, inter-tidal zone or underwater. The records made and objects gathered during fieldwork are studied and the results of that study published in detail appropriate to the project design." (IFA rev.1999)*

2.2 The purpose of an Excavation is also defined by the IFA as:

> *"…to examine the archaeological resource within a given area or site within a framework of defined research objectives, to seek a better understanding of and compile a lasting record of that resource, to analyse and interpret the results, and disseminate them." (IFA rev.1999)*

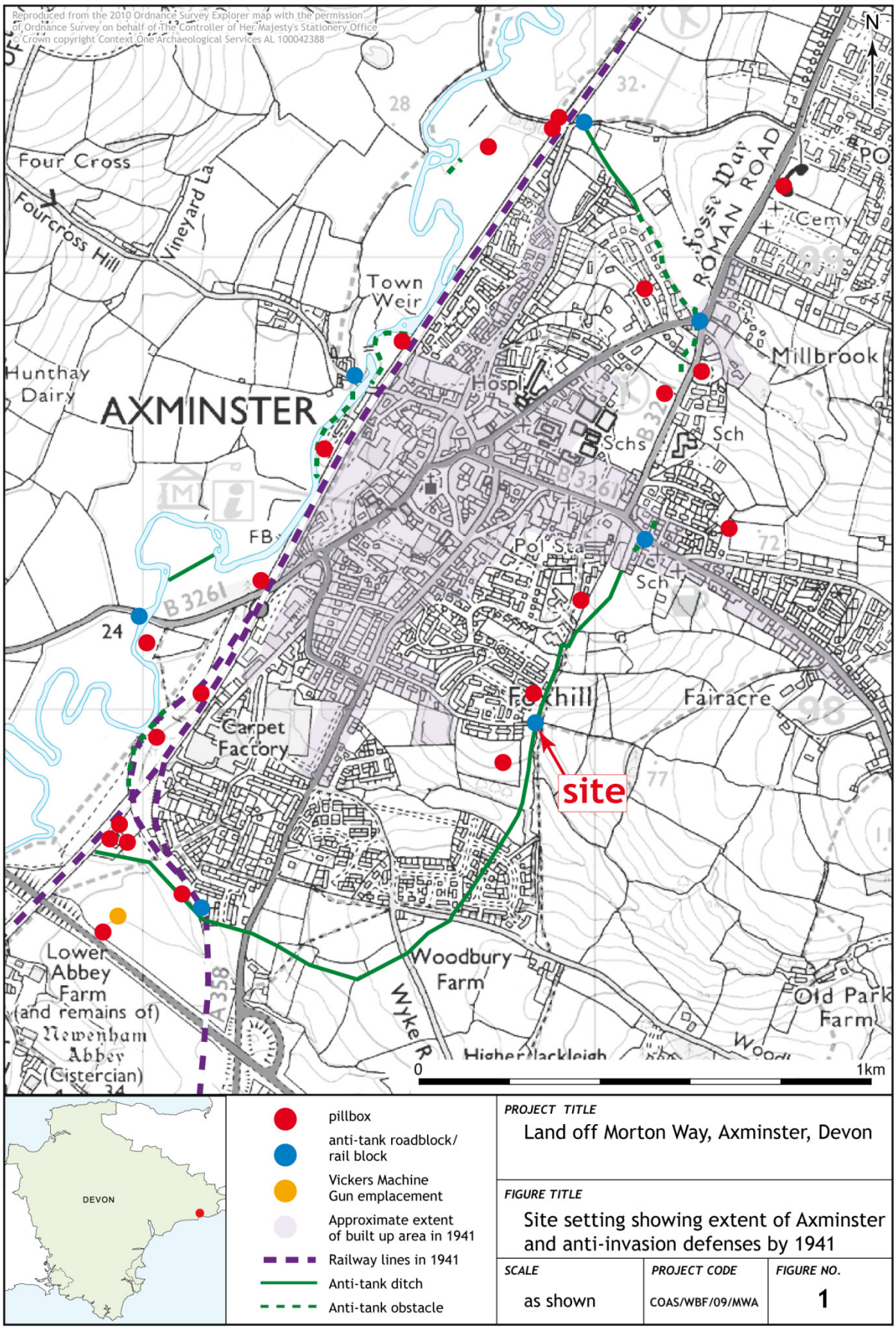
2.3 The results of an Excavation are used to:

- produce a record of the location, nature and date of any archaeological remains encountered on the site;
- add to the knowledge about the previous history of activity on the current site and its surroundings; and

- provide information to influence planning decisions in the area.

3. Site Location, Topography and Geology

3.1 The Site (centred on NGR SY 29852 97949) is located on the edge of a housing estate in the Foxhill area in Axminster, Devon. The area within the development site subject to archaeological investigation was situated in a trackway on the ridge of an east to west aligned spur of land that lies approximately 57m above Ordnance Datum and overlooks a tributary of the river Axe (**Figure 1**). A modern housing estate is located immediately to the north of the Site and there are open fields to the south. According to the British Geological Survey (2010), the underlying geology consists of Jurassic Blue Lias Formation limestones and mudstones. The soils in this area are characterised by freely draining slightly acid loamy soils (Multi Agency Geographic Information for the Countryside 2010).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N
Four Cross
Fourcross Hill
Vineyard La
Town Weir
Hunthay Dairy
AXMINSTER
Fosse Way ROMAN ROAD
Millbrook
Hospl
Schs
Sch
FB
B 3261
24
Pol Sta
Fairacre
Carpet Factory
site
Lower Abbey Farm (and remains of) Newenham Abbey (Cistercian)
A 358
Woodbury Farm
Old Park Farm
Wyke R
0
1km
DEVON
pillbox
anti-tank roadblock/ rail block
Vickers Machine Gun emplacement
Approximate extent of built up area in 1941
Railway lines in 1941
Anti-tank ditch
Anti-tank obstacle
PROJECT TITLE
Land off Morton Way, Axminster, Devon
FIGURE TITLE
Site setting showing extent of Axminster and anti-invasion defenses by 1941
SCALE
as shown
PROJECT CODE
COAS/WBF/09/MWA
FIGURE NO.
1

4. Archaeological Background

4.1 Given that the project was specifically focused on a Second World War defensive feature, the archaeological background presented in this report is limited to a description of anti-invasion defences constructed in the area in the early 1940s as part of the Taunton Stop Line. The archaeological background to the Site comprises information drawn from the Devon County Council Historic Environment Record (HER), The Defence of Britain Database (Council for British Archaeology (CBA) 2006) and The Defence Areas Project (Foot 2009). A summary of this information is presented below and illustrated **Figure 1**.

4.2 The anti-invasion defences around Axminster formed part of the Taunton Stop Line, which ran from Seaton on the Devon coast to Highbridge on the Bristol Channel (Foot 2009). The Stop Line followed the natural barriers of the River Axe and the River Parrett, as well as artificial linear features such as railway lines and canals (*ibid*). The purpose of the Taunton Stop Line was to protect the central part of southern England from a German advance from the west, should they have landed on the Cornish, Devon or Somerset coasts (*ibid*).

4.3 The Stop Line comprised a wide variety of defensive features including numerous pill boxes; anti-tank obstacles; barricades and ditches; barbed wire entanglements; artillery gun emplacements; machine gun emplacements; fortified buildings; moveable anti-tank road and rail blockades; and mined roads and bridges (CBA 2006).

4.4 The defences at Axminster formed an 'anti-tank island' around the town. The intention of these 'islands' was, as the name implies, to create a tank proof stronghold that would enable the town to be defended from all sides and allow flanking fire to be directed on the enemy should the Stop Line have been breached.

4.5 The survey for the Taunton Stop Line was carried out by 516th Corps Field Survey Company Royal Engineers (Foot 2009). Work on the southern area, which included Axminster, began in July 1940 and was undertaken by the 551st Army Troops Company Royal Engineers (*ibid*). The Stop Line was initially manned by units of the Field Army and was the responsibility of 48th Division of VIII Corps. Supervision and reinforcement of all garrisons stationed in the anti-tank islands was undertaken by the 8th Battalion Somerset Light Infantry (*ibid*). Logistical support for the Field Army was provided by the Axminster Company of the Seaton Battalion, Devon Home Guard. However, when the Field Army was later withdrawn the Home Guard were given responsibility for maintaining and manning the defences (*ibid*).

4.6 The primary defences of the Axminster Anti-Tank Island were based on the river Axe and the main railway embankment that ran down the centre of the Axe valley. These pre-existing features were fortified by adding anti-tank obstacles, twenty-one pill boxes and a Vickers machine gun emplacement around the perimeter of the town. In order to prevent an attack from the east anti-tank ditches was dug across fields to the north, south and east of the town. Some sections of the eastern defensive line were also protected by lines of anti-tank obstacles. The railway lines also had concrete rail blocks constructed to allow steel barricades to be inserted across the tracks to prevent tanks from driving along them. Anti-tank roadblocks of various descriptions are recorded on five of the nine roads or tracks that lead into the town. However, it is likely that all such routes were fortified in some way.

4.7 A variety of different roadblocks were used around the perimeter of Axminster, these comprised moveable anti-tank horizontal rails on the western approaches to the town and moveable anti-tank vertical rail barricades (see **Plates 1 and 2**) on the northernmost approach to the town. In addition, the western river crossings and roads to the north-east of the town were to be mined in the event of an attack.

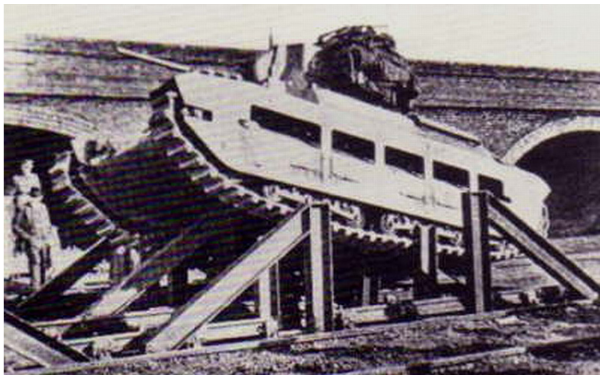


Plate 1: Wartime trial of hairpin roadblock (Pillboxes.co.uk 2010)

Plate 2: Hairpin roadblock at Enfield Ridgeway , London (Pillboxes.co.uk 2010)

4.8 Although a large number of Axminster's wartime defences survive as extant structures to the west of the town. A similarly large number, particularly to the east of the town, have been destroyed as a result of modern development, road widening and agriculture.

5. Methodology

5.1 The programme of archaeological work was carried out in accordance with the *Standards and Guidance for an Archaeological Excavation* published by the Institute of Field Archaeologists (IfA) in 1995 (revised 1999). COAS adhered to the *Code of Conduct* issued by the IfA in 1985 (revised 2000), and *Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology* (1990, revised September 2000), at all times during the course of the investigation. Current Health and Safety legislation and guidelines were followed on site.

5.2 The modern hardcore surface of the trackway was manually removed and the full extents of the archaeological feature exposed in plan. A sondage measuring 1.00m by 0.50m across was also excavated adjacent to the structure in order to establish its depth. The structure was recorded on dimensionally stable media at scales of 1:50 (plan) and 1:10 (section). A photographic record of the work was prepared and involved the sole use of digital images. The photographic record included shots of the excavated area and working shots to illustrate the nature of the archaeological operation mounted. Consideration was also given to the possibility of publication.

6. Results

6.1 The weather was overcast with occasional sunny intervals and regular heavy rain, resulting in some flooding of the trench.

6.2 Excavation uncovered the concrete foundations of an anti-tank road block structure constructed in the surface of an east to west aligned track. The structure was exposed in full and extended from an existing hedge bank to the north across the whole width of the track and measured 8.70m x 4.60m (**Plate 3**). The central section was defined by a rectangular mass of concrete measuring 4.60m x 2.80m which had three 'fingers' of concrete, each measuring 1.80m x 0.80m extending to the east and west of the main structure. A further six small squares of concrete, each measuring 0.70m x 0.70m were also recorded to the east and west of the concrete 'fingers'. This structure had thirty two square holes cast into it which were capped with moveable concrete covers. The covers had iron rods set into them to allow them to be lifted out. A modern service trench had removed a further two east to west aligned 'fingers' of concrete on the southern side of the structure (See **Figure 3**).

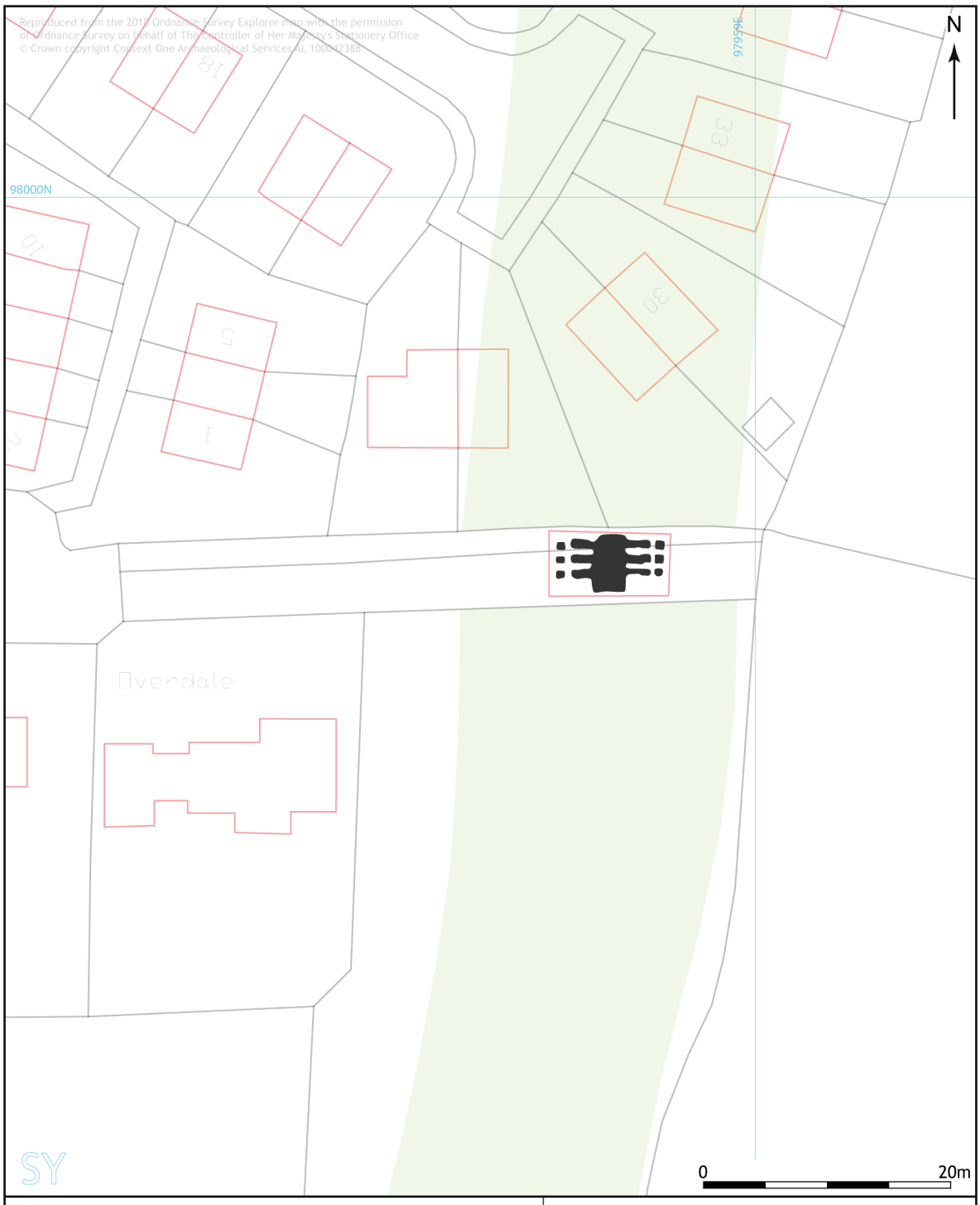
Plate 3: Concrete ant-tank road block foundations viewed from the east

Plate 4: Concrete cover lifted showing socket into which a ridgid steel girder could be inserted

Plate 5: Sondage excavated adjacent to the structure

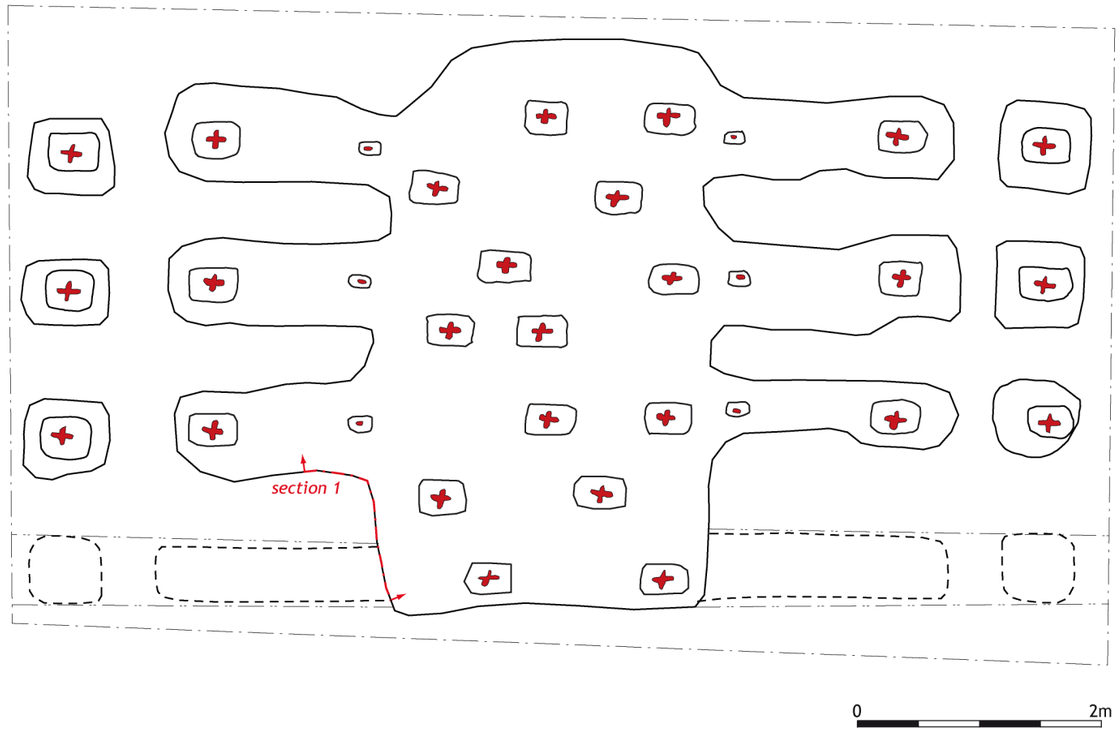
6.3 Where it was possible to lift the concrete covers, they were shown to have a rectangular hole in the centre measuring 0.18m by 0.30m across. Many of the holes were filled with silt and were of unknown depth (**Plate 4**).

6.4 Excavation of a sondage adjacent to the road block revealed that the main structure was in excess of 1.00m thick, whilst the concrete 'fingers' were only 0.40m thick (**Plate 5; Figure 2**).

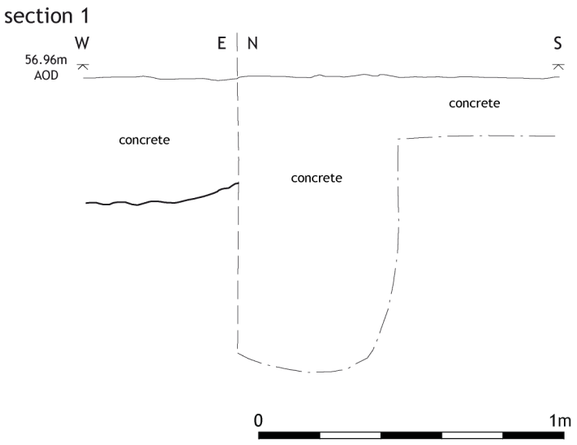


PROJECT TITLE	Land off Morton Way, Axminster, Devon
FIGURE TITLE	Detailed site setting showing location of anti-tank road block
SCALE	as shown
PROJECT CODE	COAS/WBF/09/MWA
FIGURE NO.	2

N



section 1



Limit of excavation
Truncation by modern service trench
Projected features
Iron handles
Section location
XX.Xm AOD Height above Ordnance Datum (AOD)

PROJECT TITLE	Land off Morton Way, Axminster, Devon
FIGURE TITLE	Plan and section of anti-tank road block
SCALE	as shown
PROJECT CODE	COAS/WBF/09/MWA
FIGURE NO.	3

7. The Finds

7.1 No finds were recovered from the limited archaeological excavation.

8. Discussion and Conclusions

8.1 The archaeological work uncovered the concrete foundations of Second World War anti-tank road block associated with the Taunton Stop Line. The road block would have formed part of the Axminster Anti-Tank Island; this 'island' was designed to create a tank proof stronghold that would enable the town to be defended from all sides and allow flanking fire to be directed on the enemy should the Stop Line have been breached. The road block was probably constructed by the 551st Army Troops Company Royal Engineers in 1940 or 1941.

8.2 The foundations of the road block extended across a minor east to west aligned track and would originally have had thirty-six sockets covered by moveable concrete covers. The sockets were designed to receive steel barricades that could be erected to block access to the town should the need arise. The concrete covers prevented the holes from silting up and to allow the track to remain in use when the barricades were not in place.

8.3 The configuration of the sockets suggests that the barricade originally comprised both 'vertical rail' and 'hairpin' type road blocks. A vertical rail road block, also known as a 'hedgehog', consisted of a series of square sockets built into in a road surface into which vertical rigid steel girders (RSG's) could be inserted (see **Plate 6**). A hairpin road block worked in a similar manner; the barrier in this case comprised either a length of rail track bent in a 'V' shape (see **Plate 7**) or two or three lengths of RSG welded into a triangular configuration (see **Plate 8**). These would have been fitted into sockets in the road in the same way as the vertical rail road blocks.

8.4 It is likely that the barricade used in this road block comprised an outer row of four vertical rails at either end of the structure. Behind these there was probably a row of four hairpins located on the 'fingers' of concrete protruding from the central area (see **Figure 2**). This suggestion is supported by the location of the smaller sockets at the ends of the 'fingers' nearest to the centre of the structure; these are likely to have received the sloping ends of hairpin barricades. The central area was probably occupied by a further fourteen vertical rails.

8.5 More concrete was used in central section of the structure than was usual for road blocks of this nature. This is probably due to the fact that the structure was located in a track rather than a metalled road. As the foundations were surrounded by soil rather than concrete or tarmac, the barricade would have been venerable to being pushed over by an advancing tank. The threat of this occurring had in this case been counteracted by constructing massive foundations in the central area.

8.6 Second World War moveable steel and concrete anti-tank road blocks was once common, however, as most of these were situated in roads, the vast majority have been destroyed as a result of subsequent road upgrading and re-surfacing works. Where they do survive it is often due to their location on minor roads or tracks that have never been subject to modern road works and such instances provide a welcome opportunity to investigate a dwindling archaeological resource (see **Plates 9, 10 and 11**).

Plate 6: 'Hedgehog' or vertical rail anti-tank road block in use (Pillboxes.co.uk 2010)

Plate 7: Bent rail hairpins in Bures, Essex (Bures Village Website 2010)

Plate 8: Welded RSG hairpins in Narborough , Norfolk (Pillboxes.co.uk 2010)

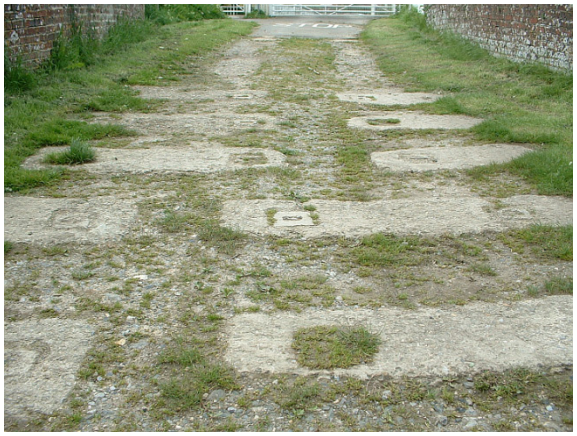


Plate 9: Roadblock sockets in Crofton on Kennet and Avon Cannal; probably for a hedgehog vertical rail road block (Wikipedia 2010)

Plate 10: Roadblock sockets in Macclesfield, Cheshire; probably for a hedgehog vertical rail road block (Pillboxes.co.uk 2010)

Plate 11: Vertical rail anti-tank sockets recorded on the northern edge of Axminster, during a walk over survey undertaken by COAS as part of a recent desk-bsed assessment (Hawtin, forthcoming)

9. Archive

9.1 The site archive is currently held at the offices of Context One Archaeological Services Ltd and consists of 90 digital images in .jpg format, drawn plans and sections on stable drawing film and the written paper record. The archive will be prepared to comply with guidelines set out in *Environmental Standards for the Permanent Storage of Excavated Material from Archaeological Sites* (UKIC 1984, Conservation Guidelines 3)/ *Guidelines for the Preparation of Excavation Archives for Long-term Storage* (UKIC 1990)/ *Standards in the Museums Care of Archaeological Collections* (Museum and Galleries Commission 1992)/ *Management of Archaeological Projects 2* (English Heritage

1991). Arrangements will be made to deposit the archive with the Royal Albert Memorial Museum within 12 months following the submission of this report.

9.2 Following the completion of the report, an OASIS form will be completed and submitted (OASIS ID: contexto1-72456).

9.3 Copies of the Watching Brief report will be deposited with:

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EX2 4QW

10. COAS Acknowledgements

10.1 Context One Archaeological Services Ltd would like to thank Mr John Loosemoore (Betterment Properties (Weymouth) Ltd.) for his kind assistance throughout the course of the investigation, and Mr Stephen Reed (Archaeological Officer, Devon County Council Historic Environment Service), for curatorial advice.

11. Bibliography

British Geological Survey, 2010 http://www.bgs.ac.uk

Bures Village Website, 2010 http://www.bures-online.co.uk

Council for British Archaeology, 2006 *The Defence of Britain Database*. Council for British Archaeology. Archaeology Data Service. http://ads.ahds.ac.uk

Department of the Environment, 1990 *Planning Policy Guidance Note 16: Archaeology and Planning*, London: Her Majesty's Stationery Office

Department of the Environment, 1997 *Planning Policy Guidance Note 1: General Policy and Principles*, London: Her Majesty's Stationery Office

Foot, W., 2009 *Defence Areas: A National Study of Second World War Anti-Invasion Landscapes in England.* Council for British Archaeology and English Heritage. Digital copy on CD viewed at Devon HES

Hawtin, T., Forthcoming *The Stop Line Way Multi-User Path, Seaton to Colyford and Cloakham Lawn to Weycroft, East Devon - An Archaeological Desk-Based Assessment.* Context One Archaeological Services, Unpublished

Hungerford Virtual Museum, 2010 www.hungerfordvirtualmuseum.co.uk

Institute of Field Archaeologists (IfA), 1985 (rev. 2000) *Code of Conduct*, Reading: IfA

Institute of Field Archaeologists (IfA), 1990 (rev. 2000) *Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology*, Reading: IfA

Institute of Field Archaeologists (IfA), 1994 rev. 1999 *Standard and Guidance for an Archaeological Excavation*

Milby, S., 2009 *Written Scheme of Investigation for a programme of Archaeological Recording: Land off Morton Way, Axminster, Devon.* Context One Archaeological Services

Multi Agency Geographic Information for the Countryside (MAGIC), 2010 *http://www.magic.gov.uk*

Pillboxes.co.uk, 2010 *http://www.pillboxes.co.uk*

Wikipedia, 2010 *http://www.wikipedia.co.uk*