ARCHAEOLOGICAL EVALUATION OF THE SITE OF A PROPOSED MEMORIAL AT THE MOUND, ROYAL CITADEL, PLYMOUTH

Prepared on behalf of Gilmore Hankey Kirke Ltd

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Summary

An archaeological trench evaluation on land at The Mound, Royal Citadel, Plymouth (NGR SX 4804 5397), was carried out during February 2010. The work comprised the hand-excavation of 4 trenches totalling 20m in length, with each trench 1m wide. These were excavated in order to establish the archaeological potential of the area of the north ravelin (a detached defensive triangular outwork) that would be affected by a proposed memorial.

Excavation revealed remains of the massive ravelin scarp wall, and guard house, at the northern end of the site, while work in the centre and south of the development area exposed made ground deposits relating to the construction of the ravelin mound in the late 17th century. No earlier features or deposits were found.

1. INTRODUCTION

This report has been prepared for Gilmore Hankey Kirke Ltd on behalf of the Ministry of Defence and sets out the results of an archaeological trench evaluation undertaken in February 2010 on the site of a proposed memorial to those who have served in 29 Commando Regiment Royal Artillery and have lost their lives in recent conflicts. The site of the proposed memorial is known as 'The Mound' and is located forward of the main gate of the Royal Citadel, Hoe Street, Plymouth, (NGR SX 4804 5397, Fig. 1).

The Royal Citadel is a Scheduled Ancient Monument (SAM No. 26245) and its ramparts and bastions, including the main gate and sallyports, are in the guardianship of English Heritage (EH). Since its construction in the 17th century the Citadel has remained in military ownership and is currently occupied by 29 Commando Regiment Royal Artillery. The site also lies within the Registered Historic Park and Garden of The Hoe and is registered at Grade II.

The trench evaluation was undertaken as a condition of Scheduled Monument Clearance, granted by the Department of Culture, Media and Sport (DCMS), as advised by English Heritage.

2. ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

The Royal Citadel is one of the most complete surviving examples of bastioned artillery defence in England and is the most intact of the important later 17th-century group built to defend the principal British naval ports. The Citadel was commissioned by Charles II and built between 1665-70 to a design by Sir Bernard de Gomme, a Dutch military engineer. It replaced and in part incorporated an existing Elizabethan fortification constructed during the 1590s. The site of this lies in the south-east corner of the later Citadel, immediately to the east and south-east of the Chapel and Great Storehouse. The late 17th-century Citadel took the form of an irregular star-shaped fortification with seven bastions connected by curtain walls encircled by a defensive ditch, with a detached triangular outwork or *ravelin*, to the north, in front of the main entrance.

The north ravelin survives as a triangular, low, flat-topped mound in front of the north gate. Situated within the ditch, the outwork would originally have had a wall along the two outward-facing sides with embrasures for the cannons. A gateway was situated on the north-east side of the ravelin, with a drawbridge crossing the ditch to the glacis. The gateway had a limestone arch which, in 1888, was removed and re-erected over the entrance to the west sallyport on the main defensive circuit. A further drawbridge crossed from the southern side of the ravelin to the main gateway of the Citadel. A guard house, variously described as a 'By guard' or 'Barrack Office' was situated at the apex of the ravelin. The ditches were infilled in the 1880's and the ravelin incorporated into the area of walks and formal lawns forming The Hoe public gardens during the late 19th century.

3. AIMS

The principal aim of the evaluation was to establish the presence or absence, character, extent, depth and date of archaeological features and deposits within the

footprints of the proposed development. The results of the evaluation (this document) will inform the planning process and may be used to formulate a programme of further archaeological work either prior to and/or during groundworks.

4. METHODOLOGY

A brief for the trench evaluation was provided on behalf of English Heritage by Plymouth City Council's Historic Environment Team (PCC HET). All work was carried out in accordance with the requirements of the brief, with trenches sited as per a trench plan prepared by EA and submitted to and approved by PCC HET (Fig. 2).

The evaluation comprised the hand-excavation of 4 trenches totalling 20m in length and 1m wide. Topsoil and underlying deposits were removed to expose the top of archaeological deposits which were then cleaned by hand, investigated and recorded.

In accordance with standard EA procedure, stratigraphic information was recorded on evaluation trench record sheets and single context record sheets. Drawings of plans and sections were compiled at scales of 1:10, 1:20 or 1:50 as appropriate, and a photographic record was made in black-and-white print and colour (digital) format. Registers were maintained for photographs, drawings and context sheets.

5. RESULTS

Relevant detailed plans and sections are included as Fig. 3 and detailed context descriptions for each trench are set out in Appendix 1.

5.1 The trenches

Trench 1 (Fig. 3, Plate 1-2)

This trench measured 4m x 1m, was orientated N-S and was excavated to a maximum depth of 0.5m.

Made ground (102), comprising reddish brown silty clay was exposed at a depth of 450mm. This was sealed by a demolition deposit (101) measuring 350mm thick and containing a large amount of limestone rubble. This was in turn overlain by topsoil (100). Detailed context descriptions for this trench are set out in Table 1, Appendix 1.

Trench 2 (Fig. 3, Plate 3) This trench measured 6m x 1m, was orientated N-S and was excavated to a maximum depth of 50mm.

Made ground (202) comprising grey silty clay was exposed at a depth of 450mm below ground level. This was overlain throughout the trench by brownish yellow loamy clay (201), which was in turn overlain by topsoil (200). The layer sequence is set out in Table 2, Appendix 1.

Trench 3 (Fig. 3, Plate 4) This trench measured 6m x 1m, was orientated E-W and was excavated to a maximum depth of 500mm. Made ground (302) comprising grey silty clay was exposed at a depth of 450mm below ground level. This was overlain throughout the trench by brownish yellow loamy clay (301), which was in turn overlain by topsoil (300). Detailed context descriptions for this trench are set out in Table 3, Appendix 1.

Trench 4 (Fig. 3, Plate 5-8)

This trench measured 5m x 1m, was orientated N-S and was excavated to a maximum depth of 580mm.

Two archaeological features were present: an approximately NE-SW aligned linear structure located within the centre of the trench (405) and a further NE-SW aligned linear structure (406) located at the southern end of the trench. Detailed context descriptions for this trench are set out in Table 4, Appendix 1.

Structure 405 was a NE-SW aligned linear feature exposed at a depth of 500mm and measuring in excess of 3m wide. It was constructed of small limestone rubble bonded with light yellow/white lime mortar. It is interpreted as the heavily robbed rubble core of the north ravelin scarp wall. The face of the wall was not recovered as it lay beyond the excavated area.

Structure 406 was a NE-SW aligned linear feature exposed at a depth of 140mm and measuring at least 1m wide. It was constructed of large limestone rubble bonded with white lime mortar and may represent the remains of the guard house.

6. DISCUSSION

The results indicate that the mound of the 17th-century north ravelin survives to within 500mm of present ground level and consists of compacted clay. Exposed within trenches 1-3, the upper horizon of the clay was consistently flat, any overlying surface having been removed. No evidence has been found to suggest internal features or structures within the southern half of the ravelin, the clay being overlain by a heavily mixed demolition deposit in trench 1 (101), containing large amounts of limestone rubble. This deposit is likely to be derived from the stripping of the interior and dismantling of structural elements of the ravelin during the late 19th century. By contrast, in trenches 2 and 3 a homogenous loamy clay deposit (201/301) overlay the earlier made ground (202/302). This deposit is on balance likely to be 20th century in date and relate to the circular shrubbery in the centre of the mound.

Towards the northern apex, trench 4 uncovered remains of the massive ravelin scarp wall and a smaller structure immediately to the south. The larger blocks (406) identified at the southern end of the trench may well be associated with the guard house, shown on a plan of 1677 (Fig. 5) and a map of 1856 (Fig 4), while the smaller limestone rubble (405) across the remainder of the trench represents the solid core of the ravelin scarp wall. The possible remains of the guardhouse survive to within 140mm of current ground level, sealed only by topsoil, while the wall core lies at a slightly greater depth (500mm) sealed beneath a succession of demolition and levelling deposits (401-404), most likely associated with the dismantling and landscaping of the ravelin during the late 19th century.

7. CONCLUSION

The trench evaluation constitutes a thorough examination of the site with the trenches positioned to provide a comprehensive sample of the proposed development area. Structural elements relating to the north ravelin scarp wall and (probably) the guard house have been confirmed within the area of Trench 4 to within 140mm of ground level, while the removal of 19th-century material within trenches 1-3 has exposed the clay core of the mound at a depth of approximately 400-500mm.

The construction of the memorial will entail excavation to an indicated depth of 450mm. This may expose the upper horizon of the clay mound but will not significantly impact upon it. Excavations for the pavement across the mound are to be shallower at 165mm (maximum). At this depth, there may be some minor impact upon the guard house foundations towards the north end of the site.

SITE ARCHIVE

The site records have been compiled into a fully integrated site archive currently being held by Exeter Archaeology (Project 7144) pending deposition at Plymouth City Museum (AR.2010.4). Details of the investigations, including a copy of this report, have been submitted to the on-line archaeological database OASIS (exeterar1-72696).

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APPENDIX 1: CONTEXT DESCRIPTIONS BY TRENCH

Table 1: Tr	rench 1		
Context	Depth (b.g.s.)	Description	Interpretation
No.			
100	0-100mm	Dark brown (3/2 7.5YR) loamy clay	Topsoil
101	100mm-450mm	Light grey (7/1 2.5Y) silty clay with limestone	Demolition deposit
		frags (25-30%), mortar flecks (5%), charcoal	
		flecks (1%)	
102	450mm+	Reddish brown (4/6 2.5YR) silty clay with	Internal 17th-century made
		limestone frags (5-10%), charcoal flecks (1%)	ground

Table 2: Trench 2

Context	Depth (b.g.s.)	Description	Interpretation
No.			
200	0-100mm	Dark brown (3/2 7.5YR) loamy clay	Topsoil
201	100-450mm	Brownish yellow (6/6 10YR) loamy clay with	Landscaping deposit
		slate frags (1%), charcoal flecks (1%),	
		limestone frags (2-3%)	
202	450mm+	Grey $(5/1 5Y)$ silty clay with limestone frags	Internal 17 th century made
		(2-3%), mortar flecks (2-3%), charcoal flecks	ground
		(1%)	

Table 3: Trench 3

Context	Depth (b.g.s.)	Description	Interpretation
No.			
300	0-100mm	Dark brown (3/2 7.5YR) loamy clay	Topsoil
301	100 - 450mm	Brownish yellow (6/6 10YR) loamy clay with	Landscaping deposit
		slate frags (1%), charcoal flecks (1%),	
		limestone frags (2-3%)	
302	450m+	Grey $(5/1 5Y)$ silty clay with limestone frags	Internal 17 th century made
		(2-3%), mortar flecks (2-3%), charcoal flecks	ground
		(1%)	

Table 4: Trench 4

Context	Depth (b.g.s.)	Description	Interpretation
No.			
400	0-140mm	Dark brown (3/2 7.5YR) loamy clay	Topsoil
401	140-200mm	Very dark grey (3/1 5Y) loamy clay with	Demolition deposit
		limestone frags (10-15%), charcoal flecks (1%)	
402	100-300mm	Black (2.5/1 5Y) loamy clay with limestone	Demolition deposit
		frags (5-10%), charcoal flecks (1%), mortar	
		flecks (2-3%)	
403	300-400mm	Mortar lense	Demolition deposit
404	200-580mm	Reddish brown (5/4 2.5YR) silty clay with	Demolition deposit
		limestone frags (25-30%), charcoal flecks	
		(1%), slate frags $(1%)$, mortar flecks $(1%)$	
405	500mm+	NE-SW masonry foundations	North ravelin rubble core
406	140mm+	NE-SW masonry foundations	North ravelin inner facing



Fig. 1 Location of site. Scale 1:5,000.



Fig. 2 Trench location plan.



Fig. 3 Plans and sections: trenches 1, 2, 3 and 4.



Fig. 4 Trench positions in relation to detail from the Ordnance Survey map of 1856 (blue).



Fig. 5 Detail of the 1677 plan of the Royal Citadel showing the north ravelin.



Pl. 1 General view of site. Looking north.



Pl. 3 General view of sample section Trench 2 showing top of made ground (202). Looking south. 1m scale.



Pl.2 General view of sample section Trench 1 showing demolition deposit (101) and top of made ground (102). Looking south. 1m scale.



Pl.4 General view of sample section Trench 3 showing top of made ground (302). Looking south. 1m scale.



Pl. 5 General view of 'Barrack Office' wall (trench 4) with rubble core of ravelin scarp wall in foreground. Looking south. 1m scale.



Pl.7 Detailed view of rubble core of ravelin scarp wall and 'Barrack Office' wall. Looking east. 1m scale.



Pl. 6 General view of 'Barrack Office' wall. Looking south-east. 0.25m scale.



Pl. 8 Detailed view of rubble core of ravelin scarp wall and 'Barrack Office' wall. Looking west. 1m scale.