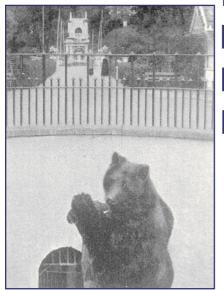
## Stage 1 Trial Trenching

# North East Embankment

Former Henley Cable Works Northfleet Kent



Archaeological Evaluation Report



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Illustrated by Leo Heatley and Magdalena Wachnik

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## Stage 1 Trial Trenching, North East Embankment, Former Henley Cable Works, Northfleet, Kent

## Archaeological Evaluation Report

## Written Ian Cook

## Illustrated by Leo Heatley & Magdalena Wachnik

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### Summary

Between the 1st - 12th of October 2012 Oxford Archaeology (OA) undertook a trial trench evaluation of land at the former Henley Cable Works, Northfleet, Kent. The work was commissioned by the Housing and Communities Agency (HCA) to discharge condition 34 of Planning Application 2011/0320. A specification was set by Kent County Council and was designed to inform further mitigation measures for future land raising and development at the site.

The development site is situated upon on the former location of the Victorian Rosherville Gardens, constructed in the 1840s on a disused chalk pit. The gardens enjoyed a period of prosperity in the mid to late 19th century, eventually falling into decline and permanently closed in the mid 1930s. The gardens were levelled and replaced with the W T Henley Cable Works, which have recently been demolished.

The Stage 1 trial trenching exercise comprised three trenches excavated to establish whether any structures relating to Rosherville Gardens survive on site despite levelling in the mid 20th century and recent remediation associated with the demolition of the Cable Works. A buried soil, ornamental wall and the possible remains of a shell path were observed towards the north of the site in Trench 1 and may represent an old ground surface possibly associated with flowerbeds or later allotments. The remains of a circular structure and associated walls were uncovered towards the centre of the site in Trench 2 and appear to be the remains of the Bear Pit – a well known feature within Rosherville Gardens. Trench 3, to the south of the site, revealed no archaeological deposits.

This report expands the interim report previously approved by Kent County Council (KCC).



## 1 Introduction

## 1.1 Location and scope of work

- 1.1.1 Between the 1st 12th of October 2012 Oxford Archaeology (OA) undertook a trial trench evaluation of land at the former Henley Cable Works, Northfleet, Kent. This was commissioned by the Housing and Communities Agency (HCA), in consultation with Kent County Council (KCC) and Gravesham Borough Council in response to condition 34 of Planning Application 2011/0320. A specification was set by Kent County Council (KCC 2012). The results of the evaluation will inform further mitigation measures for future land raising and development at the site.
- 1.1.2 The site is located within the Northfleet area of Gravesend, just to the south of the River Thames, centred on National Grid Reference TQ 636 743. It is a large former industrial site bounded on the east by Burch Road, to the south by Fountain Walk and Crete Hall Road to the west (Fig. 1).
- 1.1.3 The site is situated on the former remains of the Victorian Rosherville Gardens, constructed in the 1840s on a disused chalk pit which was subsequently levelled to make way for the Henley Cable Works in the late 1930s. The buildings associated with the Cable Works have recently been demolished and the site remediated with hard structures removed to a depth of approximately 2.5m below ground level, and hydrocarbon contaminated soils removed to the water table.
- 1.1.4 The Stage 1 evaluation was intended to determine whether any structures associated with Rosherville Gardens survived, in particular the Bear Pit. KCC's specification set out the methodology for the excavation of three trial trenches targeted upon structures identified in the First and Second editions Ordnance Survey maps (Fig. 2). Trench 1 targeted possible garden or greenhouse structures to the north-west of the site. Trench 2 focused upon the potential location of the Bear Pit. This trench was adjusted slightly to target coordinates provided by Mr Conrad Broadley of Northfleet Harbour Restoration Trust. Mr Broadley had made a note of the location of what appeared to be a possible circular brick structure that he had observed on the site during demolition. Trench 3 was intended to target any remains associated with the Pavilion.
- 1.1.5 OA produced an interim report in October 2012 in advance of the full report in order to facilitate tendering of the Stage 2 works (OA 2012).

## 1.2 Geology and topography

- 1.2.1 The site is located within the River Thames valley, just to the south of the river. It lies on Chalk with Thanet Beds to the east and south at approximately 5.50 m above Ordnance Datum (aOD).
- 1.2.2 The site has been subject to considerable quarrying activity and more recently has been used as an industrial works with substantial industrial units and works. The site has recently been levelled and compacted in preparation for land raising.

## 1.3 Archaeological and historical background

1.3.1 No known previous archaeological investigations have taken place within the site. A Baseline Built Heritage Assessment of the site was undertaken by CgMs, which included discussion on the Historic Background of the site (CgMs 2006). This information has been summarised below and supplemented with details taken from the Gravesend Historical Society's publication on Rosherville Gardens (Smith 2006).



- 1.3.2 Cartographic sources demonstrate that the site was located within a large chalk pit in the 18th century (CgMs 2006). In 1837 the chalk pit was leased from Mr Jeremiah Rosher for 99 years by the Kent Zoological and Botanical Gardens Company, founded by Mr George Jones (Smith 2006, 5). George Jones oversaw the redevelopment of the site and in August 1837 Rosherville Gardens opened to the public even though only a few paths had been laid out (Smith 2006, 7). Between 1839 and 1840 the rest of the gardens were laid out and planted. The designer was Henry Rose who also built St Mark's Church, Rosherville. By the end of 1840 the Italian Gardens were laid out, the maze planted, ponds and tunnel through the chalk spur excavated, animal dens (including the Bear Pit) and an archery ground built. The entrance lodge and Gothic Hall (re-named Baronial Hall in 1842) was also constructed (Smith 2006, 7-8).
- 1.3.3 The layout and extent of the Gardens is shown on the First Edition Ordnance Survey of 1865. Notable features such as the Maze, Theatre and Banqueting hall, Pavilion, Archery ground and Bear Pit are located on the map. The site remained relatively unchanged, with a few minor alterations to buildings throughout the Second and Third Edition Ordnance Survey maps of 1897 and 1909 (CgMs 2006).
- 1.3.4 By 1878 the popularity of the Gardens had begun to decline. Other seaside resorts were now a more affordable destination. This, combined with a steam boat tragedy on the Thames the year before where over 600 passengers drowned, some travelling from Rosherville Gardens back to London, meant the Gardens were no longer the popular destination they had once been (Smith 2006, 29). In 1901 the Gardens were bankrupt and put up for sale by auction, but failed to attract a bidder. The fixtures and fittings were sold off for whatever they could achieve. The Gardens were stripped of its contents, including animals (Smith 2006, 38).
- 1.3.5 The Gardens reopened briefly between in 1903 and 1907 under new management, and again between 1909 and 1912. One final attempt to revive the Gardens took place in 1913. New additions included a circus and miniature railway but even with these new attractions the gardens were open for less than a year. In 1914 the Magnet Film Company took over the Gardens turning them into their studios, but the outbreak of the First World War saw the end of the new enterprise. The Gardens remained closed throughout the War and were put up for sale in 1924 with five acres sold to W T Henley's Cable Works (Smith 2006, 43-44).
- 1.3.6 The north-east corner of the un-sold portion of the gardens were converted into allotments and were still in existence at the time of the production of the 1939 Revised Ordnance Survey map. In November 1938, however, the Board of W T Henley decided to purchase the rest of Rosherville Gardens and cleared the site in 1939. The clearance included levelling the site and cutting back the cliffs to enlarge the site for the construction of the Cable Works (Smith 2006, 44-45). By the time of the production of the 1954 Ordnance Survey map, the former Rosherville Gardens had been wholly replaced by industrial works.
- 1.3.7 Industrial works and associated buildings remained on the site their demolition in 2010.

## 2 EVALUATION AIMS AND METHODOLOGY

#### 2.1 Aims – General

- 2.1.1 The general aims of this evaluation were to:
  - · determine the presence or absence of any archaeological remains;
  - determine or confirm the approximate date or date range of any remains, by means of



artefactual or other evidence;

- determine or confirm the general nature of any remains present;
- determine the condition and state of preservation of any remains;
- determine or confirm the likely range, quality and quantity of the artefactual evidence present.

## 2.2 Aims - Specific

- 2.2.1 The specific site aims were to:
  - seek to clarify the nature of the deposits and the stratigraphy of the site and to determine whether any remains associated with the Rosherville Gardens are likely to survive on the site:
  - locate a surviving structure dated to the 19th century, most likely the Bear Pit; and
  - to fulfil the requirements of condition 34 of Planning Application 2011/0320;

## 2.3 Methodology

- 2.3.1 The targeted evaluation comprised three trenches each measuring 20m x 2m. In order to get to archaeological levels Trenches 1 and 2 were excavated to a depth of around 2m onto the archaeological horizon. Trench 1 was stepped down to have an upper footprint of 22m x c 4m and a final lower footprint of 20m x 2m. Trench 2 was excavated to a depth of 2.3m where archaeological features appeared. Trench 2 was stepped down and had an upper footprint of 24m x 6.7m with a final footprint of 20m x 2m. Trench 3 was excavated to a depth of 0.85m onto natural chalk and had a footprint of 20m x 4m.
- 2.3.2 The location of the trenches were targeted on large structures indicated on the First and Second edition Ordnance Survey maps. Trench 1 was targeted an area of possible greenhouses or garden beds and Trench 2 was located on the possible site of a Bear Pit. Trench 3 was targeted upon the Pavilion.
- 2.3.3 All trenches were excavated using a 360° mechanical excavator under the direct supervision of an experienced archaeologist.
- 2.3.4 All archaeological features were sampled by hand. All features and deposits were issued with unique context numbers, and context recording was carried out in accordance with established OA practice as detailed in the OAU Field Manual (Wilkinson 1992).
- 2.3.5 All archaeological features were planned at an appropriate scale of 1:20 or 1:50 and where excavated, sections were drawn at a scale of 1:20. All excavated features were photographed using digital photography and black-and-white print.



## 3 RESULTS

## 3.1 Introduction and presentation of results

3.1.1 The results of the evaluation are summarised in Section 3.3, and discussed by trench in sections 3.4 to 3.6 below. Trench plans are illustrated on Figures 3 and 4 and the corresponding sections on Figure 5. A full context inventory is presented in the table in Appendix A.

## 3.2 General soils and ground conditions

- 3.2.1 Type 1 stone and concrete crush was present at the top of all the trenches and varied in depth between 0.30m and 0.40m. This deposit was overlying modern make-up levelling deposits most likely laid down prior to the construction of the Henley Cable Works. A possible buried garden soil of Victorian date was present at the northern and southern ends of Trench 1. The natural geology of chalk was only revealed in Trench 3.
- 3.2.2 Ground conditions were generally damp throughout due to occasional rainfall.

## 3.3 General Distribution of Archaeological Deposits

3.3.1 Trench 1 contained a small garden wall at the northern end with possible Victorian garden soils throughout the trench. Remains of a possible shell path were observed at the southern end of the trench. The remains of a Victorian brick built Bear Pit and associated walls, possibly relating to subterranean cages were seen in Trench 2. No archaeological features or deposits were found in Trench 3.

#### 3.4 Trench 1

- 3.4.1 Trench 1 was a NW SE aligned trench and was located in the northern part of the site. The trench had an upper footprint of 22m x c 4m and was stepped to have a final footprint of 20m x 2m at a depth of 2m below the current ground level (3.36m aOD) (Fig. 3).
- 3.4.2 The lower deposits consisted of a disturbed chalk backfill or levelling deposits overlying a dark brown grey, silty deposit interpreted as garden soil (107 & 108). This deposit was observed at both the north-west and south-east ends of the trench separated by a disturbed chalk deposit (Fig. 5, Section 100; Plate 1). Subsequent investigation of the chalk layer determined that this deposit was overlying the garden soil and was probably the remains of a levelling deposit within a shallow depression.
- 3.4.3 A sondage was excavated through the garden soil deposit at the south-west end of the trench in order to ascertain both its thickness and to see at what depth the natural chalk was encountered (Fig. 5, section 101). The sondage was excavated to a depth of 1m (2.36m aOD) (Plate 2). The natural chalk was not encountered at this depth and excavation ceased due to health and safety considerations. The sondage revealed a series of backfill/make up layers (110-114 & 116) overlain by the garden soil and a shell rich deposit (109) (Plate 3). Context 109 was observed at 3.30m aOD and may be associated the white shell gravel paths that wound their way around the flowerbeds within Rosherville Gardens (Smith 2006, 13). The lower backfill deposits (110-114) within the sondage may be associated with the infilling the old quarry pits and levelling of the site prior to the construction of the Gardens in the 1840s.
- 3.4.4 At the north-west end of the trench was the remains of a narrow wall (115), constructed from red clay brick and yellow stock brick (Fig. 5, Section 100; Plate 4). The wall was



only one brick length wide and was observed in both the SW and NE facing sections, suggesting a NNE to SSW orientation. The wall appeared to have been truncated within the trench during excavation most likely due to its insubstantial construction. The thin width of the wall suggested it was more likely to be ornamental than structural, perhaps being associated with garden landscaping.

- 3.4.5 A series of disturbed chalk and brown silt backfill or levelling deposits (101 106) (Fig. 5, section 100) cover all the above archaeological features and deposits within Trench 1 to a depth of between 1.5m and 2m. These are mostly the result of the levelling off and raising the ground surface after the closure of the Rosherville Gardens.
- 3.4.6 The buried garden soils, wall and shell path remains seen in Trench 1 only give us a brief insight into that part of the Rosherville Gardens. However, the garden soils may relate to later use of this area due to the presence of allotments in the 1930s, after the gardens went out of use. The wall may also be a later addition relating to the allotments and not the Rosherville Gardens, or it may have been a reused garden feature.

#### 3.5 Trench 2

- 3.5.1 Trench 2 was excavated to the south of Trench 1 and was aligned NE to SW. The trench had an upper footprint of 24m x 6.70m, and was stepped down to a depth of 2.30m with a final footprint of approximately 20m x 2m (Fig. 4).
- 3.5.2 Trench 2 came down onto a curved brick wall (3001) at a depth of 2m from the present upper ground surface. This wall extended approximately 2.40m into the trench and appeared to be the remains of the Bear Pit (Plate 5). A machine excavated sondage was excavated through the inner backfill of this structure and determined that the walls survived to a depth of at least 1.95m. At this depth the remains of a grey slate floor was encountered and excavation ceased (Plate 6). It appears that only the bottom 2m of the Bear Pit survives and that the upper half has been truncated by the site clearance prior to the construction of the Henley Cable Works with additional disturbance during the recent remediation of the site. An extant example of a similarly dated circular Bear Pit in Sheffield Zoological Gardens is 4m deep and it is entirely likely that the Rosherville Bear Pit was of a similar depth.
- 3.5.3 During hand cleaning of the exterior curved wall of the Bear Pit, a metal pulley wheel was observed attached to the brick work. Additional metal fittings were also observed in what appear to be associated rooms, probably subterranean cages, exterior to the circular structure (see 3.5.6) (Plate 7).
- 3.5.4 The upper part of an arch was observed towards the northern side of the Bear Pit. This appears to be the remains of the doorway leading to the subterranean cages. This arch is visible on an undated photograph of the Bear Pit and also appears to confirm the hypothesis that approximately half of the Bear Pit remains (Plate 8).
- 3.5.5 A curved chalk wall, 3003, was observed approximately 1m to the SE of the brick wall of the Bear Pit (Plate 5). It predominantly mirrored the curve of the Bear Pit until it butted against a brick wall to the NE (296). The brick wall ran under the eastern trench baulk. The chalk wall continued to mirror the brick wall to the SW. The function of this wall remains uncertain, but may be associated with the landscaping of the raised Broad Walk, perhaps acting as a retaining wall.
- 3.5.6 Additional brick walls are present to the NE of the Bear Pit and possibly represent rooms or corridors associated with the Bear Pit (294, 288, 287, 286) These rooms may have been where bears where kept at night or were fed, perhaps even providing access for keepers. Walls 288 and 294 appear to be contemporary with the Bear Pit and are



constructed from similar brick with similar bond and are aligned NE - SW. Wall 288 turned to run roughly E - W 3m to the NE of the Bear Pit. This wall appears to be associated with wall 286 and may form an east to west orientated 'corridor' with the remains of a possible arched roof spanning between the two structures at the western trench edge (Plate 9). It is possible that this corridor may have provided an access point between the Bear Pit and lower gardens. Several layers of sloping backfill in the adjacent section may be associated with the arched roof or perhaps the landscaping of Broad Walk and may suggest remains are better preserved immediately to the west of the trench. The layers are disturbed to the east by a wide cut (270) that may represent the demolition and levelling phase of the 1930s, suggesting that very little damage may have been done to the Bear Pit in more recent time.

- 3.5.7 Wall 288 appears to terminate 1m short of the Bear Pit in a brick pier centred roughly on the middle of the arched doorway, perhaps suggesting the subterranean pen had several rooms. An iron bar extended from the Bear Pit towards the pier. The bar had a number of holes through it and may be associated with a gateway separating the rooms (Plate 10).
- 3.5.8 The archaeological structures are covered by a series of brown silt and chalk backfill or levelling off deposits (205, 208-212, 215-221, 223-248, 254-258, 260-264, 272-285, 289-293, 295, 297-299, 3002, and 3004-3007) that appear to be laid down after Rosherville Gardens closed and was demolished with the site then being levelled off and the ground surface raised prior to the construction of the subsequent industrial works. Cuts 266, and 270 (Plates 9 and 12) are filled with loose disturbed chalk deposits. These cuts could possibly be associated with the demolition of the Bear Pit structure and adjacent rooms shortly after Rosherville Gardens closed. However, it is also possible that this is the result of the remediation works carried out after the Henley Cable works were demolished when all hard structures were removed to a depth of around 2.5m below the current ground surface.

#### 3.6 Trench 3

- 3.6.1 Trench 3 was excavated to the south of Trench 2 and was aligned roughly N-S (Plate 11). The trench measured 20m x 4m, and was excavated to a depth of 0.85m.
- 3.6.2 The trench was excavated to the natural chalk which was overlain by 0.55m deep deposit of redeposited chalk, which in turn was overlain by a 0.30m layer of crushed concrete and stone.
- 3.6.3 No archaeological features were observed in this trench.

## 3.7 Finds summary

- 3.7.1 Finds of glass and pottery were recovered from the garden soil deposit 107 in Trench 1. The assemblage has been dated to around 1875-1920.
- 3.7.2 An 18th-19th century button fragment was recovered from Environmental Sample 1 taken from the shell deposit in Trench 1.
- 3.7.3 Further details are presented in Appendix B.



#### 4 Discussion

## 4.1 Reliability of field investigation

- 4.1.1 The evaluation covered a small percentage of the site and was targeted on specific areas of Rosherville Gardens: the Bear Pit, gardens/greenhouses and the Pavilion. Although only a small percentage of the site was evaluated, this exercise has demonstrated that substantial structural remains associated with Rosherville Gardens survive. The extent of preservation across the site remains unclear due to the limited trenching sample.
- 4.1.2 Although rainfall during the course of the evaluation caused slightly damp ground conditions, this did not hinder any visibility of the archaeological deposits/features.

## 4.2 Evaluation objectives and results

- 4.2.1 The specific objectives were to establish the nature of the deposits and the stratigraphy of the site, as well as determine whether any remains associated with the Rosherville Gardens also survived on the site, specifically the Bear Pit.
- 4.2.2 Despite the levelling of Rosherville Gardens in the 1930s and modern demolition and remediation across the site in recent years, features associated with Rosherville Gardens have been identified within the development area.
- 4.2.3 Trench 1 revealed non-structural remains that are probably associated with garden beds. The remains of a narrow garden wall (115) was observed at the northern end of the trench whilst the truncated remains of a possible shell path (109) was seen at the southern end at 3.34m aOD, which may have been the original ground surface.
- 4.2.4 Trench 2 revealed substantial structural remains associated with the Bear Pit, including a network of possible subterranean cages not indicated on any of the Ordnance Survey maps. Although the Bear Pit and associated rooms have suffered substantial truncation associated with the destruction of the gardens and recent levelling, at least 2m of remains are still present.
- 4.2.5 No archaeological remains were encountered in Trench 3.

## 4.3 Interpretation

- 4.3.1 The garden soils, (107 and 108), at the northern and southern ends of Trench 1 are most probably the remains of garden beds that occupied this area of the site during the period of the Rosherville Gardens. The associated wall (115) is not structural and therefore unlikely to be associated with a greenhouse. The Fourth Edition Ordnance Survey map shows allotment gardens were present in the area by 1939 and it remains a possibility that these soils may be associated with the later allotments, perhaps reusing the 19th century garden features (Fig. 6). The layer of shell next to the garden soils at the southern end of Trench 1 are possibly the remnants of the shell that was used to cover the paths around the gardens.
- 4.3.2 The curved brick wall (3001) within Trench 2 represents part of the Bear Pit identified on First and Second edition Ordnance Survey maps. The walls adjacent to the Bear Pit (294, 286, 287, 288) may be subterranean cages in bears may have been kept prior to being displayed to the public or housed overnight. The silt and rubble deposits seen abutting and around the walls are the result of both demolishing and backfilling the features after the Rosherville Gardens closed at the beginning of the 20th century.



4.3.3 No archaeological features were uncovered in Trench 3 which had targeted the location of the Pavilion.

#### 4.4 Conclusion

- 4.4.1 Despite the levelling of Rosherville Gardens after 1939 and modern demolition and remediation across the site in recent years, features associated with Rosherville Gardens have been identified within the development area.
- 4.4.2 The surviving archaeological remains include the Bear Pit, ornamental garden wall (115) as well as the garden soils (107 & 108) and shell path (109). These features provide an isolated glimpse of the layout of Rosherville Gardens.
- 4.4.3 The evaluation has proven that significant structural remains associated with Rosherville Gardens do survive. Those remains found in the Stage 1 evaluation are at depths of around 2m below the current ground level. However, this evidence cannot preclude the survival of further structural remains due to the varied landscape of the Gardens.
- 4.4.4 Although these structures are likely to be preserved by land raising, any piling associated with future development may impact upon these remains and the location of the structures may need to be considered if piling is to take place. Compression from land raising is unlikely to adversely affect the structural remains, although it will have some impact upon deposits such as the garden soils.



## APPENDIX A. TRENCH DESCRIPTIONS AND CONTEXT INVENTORY

Trench 1							
General d	escription				Orientatio	n	NNW-SSE
Trench co	ntained the	Avg. depti	Avg. depth (m)				
a wall whi	ch relate to	Width at b	ase (m)	3			
during the	19th and ea	Length at	base (m)	20			
Contexts							
Context no.	Туре	Width (m)	Depth (m)	Comment	Finds	Date	
100	Layer	-	0.3	Levelling Deposit	-	-	
101	Layer	-	0.73	Levelling Deposit	-	-	
102	Layer	-	0.19	Levelling Deposit	-	-	
103	Layer	-	0.48	Levelling Deposit	-	-	
104	Layer	-	0.55	Levelling Deposit	-	-	
105	Layer	-	0.12	Levelling Deposit	-	-	
106	Layer	-	-	Levelling Deposit	-	-	
107	Layer	-	0.5	Garden Soil	Pot, Glass, flower pot	c. 1875 - 1920	
108	Layer	-	-	Garden Soil	-	-	
109	Layer	-	0.22	Path	-	-	
110	Layer	-	0.3	Backfill	-	-	
111	Layer		0.08	Backfill	-	-	
112	Layer	-	0.23	Backfill	-	-	
113	Layer	-	0.06	Backfill	-	-	
114	Layer	-	-	Backfill	-	-	
115	Structure	0.22	0.56	Wall	-	-	
116	Layer	-	0.2	Levelling Deposit	-	-	



Trench 2											
General de	General description Orientation NE-SW										
Trench co		Avg. depth (m)	2.3								
associated relating to t		Width at base (m)	2								
the ground				•	Length at base (m	n) 20					
Contexts						·					
Context no.	Туре	Width (m)	Depth (m)	Comment	Finds	Date					
200	Layer	-	0.4	Type 1 stone	-	-					
201		_		VOID	-	-					
202		_	-	VOID	-	-					
203				VOID							
204				VOID							
205	Layer	-	0.06	Re-deposited chalk	-	-					
206	Layer	-	0.65	Re-deposited chalk	-	-					
207	Fill	-	1	Fill of modern cut 266	-	-					
208	Layer	-	0.6	Re-deposited chalk	-	-					
209	Layer	-	0.1	Re-deposited chalk	-	-					
210	Layer	-	0.8	Re-deposited chalk	-	-					
211	Layer	-	1.8	Re-deposited chalk	-	-					
212	Layer	-	0.58	Re-deposited chalk	-	-					
213	Layer	-	0.35	Re-deposited chalk	-	-					
214	Layer	-	0.9	Re-deposited chalk	-	-					
215	Layer	-	0.4	Re-deposited chalk	Glass Bottle	Early 20th Century					
216	Layer	-	0.06	Re-deposited chalk	-	-					
217	Layer	-	0.12	Re-deposited chalk	-	-					
218	Layer	-	-	Re-deposited chalk	-	-					
219	Layer	-	0.12	Re-deposited chalk	-	-					
220	Layer	-	0.12	Re-deposited chalk	-	-					
221	Layer	-	0.1	Re-deposited chalk	-	-					
222	Layer	-	0.9	Re-deposited chalk	-	-					
223	Layer	_	0.2	Re-deposited chalk	-	-					
224	Layer	-	0.04	Re-deposited chalk	-	-					
225	Layer	-	0.03	Re-deposited chalk	-	-					
226	Layer	-	0.04	Re-deposited chalk	-	-					
227	Layer	-	0.04	Re-deposited chalk	-	-					
228	Layer	-	0.1	Re-deposited chalk	-	-					
229	Layer	-	0.08	Re-deposited chalk	-	-					



Trench 2										
General description Orientation NE-SW										
Trench cor			Avg. depth (m)	2.3						
		of demolition/backfill deposits ille Gardens and the raising of	Width at base (m)	2						
the ground					Length at base (n	n) 20				
Contexts										
Context no.	Туре	Width (m)	Depth (m)	Comment	Finds	Date				
230	Layer	-	0.05	Re-deposited chalk	-	-				
231	Layer	-	0.14	Re-deposited chalk	-	-				
232	Fill	-	0.06	Fill of modern cut 268	-	-				
233	Fill	-	0.5	Fill of modern cut 268	-	-				
234	Fill	-	0.2	Fill of modern cut 268	-	-				
235	Fill	-	0.08	Fill of modern cut 268	-	-				
236	Fill	-	0.03	Fill of modern cut 268	-	-				
237	Fill	-	0.1	Fill of modern cut 268	-	-				
238	Layer	-	0.25	Backfill/levelling deposit	-	-				
239	Layer	-	0.4	Backfill/levelling deposit	-	-				
240	Layer	-	0.06	Backfill/levelling deposit	-	-				
241	Layer	-	0.1	Backfill/levelling deposit	-	-				
242	Layer	-	0.05	Backfill/levelling deposit	-	-				
243	Layer	-	0.15	Backfill/levelling deposit	-	-				
244	Layer	-	0.04	Backfill/levelling deposit	-	-				
245	Layer	-	0.04	Backfill/levelling deposit	-	-				
246	Layer	-	0.2	Backfill/levelling deposit	-	-				
247	Layer	-	0.04	Backfill/levelling deposit	-	-				
248	Layer	-	0.1	Backfill/levelling deposit	-	-				
249	Fill	-	0.4	Fill of modern cut 269	-	-				
250	Fill	-	0.25	Fill of modern cut 269	-	-				
251	Fill	-	0.18	Fill of modern cut 269	-	-				
252	Fill	-	0.05	Fill of modern cut 269	-	-				
253	Fill	-	0.19	Fill of cut 259	-	-				
254	Layer	-	0.08	Backfill/levelling deposit	-	-				
255	Layer	-	0.06	Backfill/levelling deposit	-	-				
256	Layer	-	0.06	Backfill/levelling deposit	-	-				
257	Layer	-	0.04	Backfill/levelling deposit	-	-				
258	Layer	-	0.06	Backfill/levelling deposit	-	-				
259	Cut	-	0.19	Cut of unknown feature	-	-				
260	Layer	-	0.08	Backfill/levelling deposit	-	-				



Trench 2						
General de	escription				Orientation	NE-SW
Trench co		Avg. depth (m)	2.3			
associated relating to t		Width at base (m	) 2			
the ground					Length at base (n	<b>n)</b> 20
Contexts						
Context no.	Туре	Width (m)	Depth (m)	Comment	Finds	Date
261	Layer	-	0.14	Backfill/levelling deposit	-	-
262	Layer	-	0.09	Backfill/levelling deposit	-	-
263	Layer	-	0.07	Backfill/levelling deposit	-	-
264	Layer	-	0.14	Backfill/levelling deposit	-	-
265				VOID	-	-
266	Cut	-	1	Modern cut	-	-
267	Cut	-	0.85	Modern cut	-	-
268	Cut	-	0.6	Modern cut	-	-
269	Cut	-	0.8	Modern cut	-	-
270	Cut	-	0.9	Modern cut	-	-
271	Cut	-	0.35	Modern cut	-	-
272	Layer	-	0.5	Backfill/Demolition Layer	-	-
273	Layer	-	0.06	Backfill/Demolition Layer	-	-
274	Layer	-	0.40	Backfill/Demolition Layer	-	-
275	Layer	-	0.18	Backfill/Demolition Layer	-	-
276	Layer	-	0.05	Backfill/Demolition Layer	-	-
277	Layer	-	0.28	Backfill/Demolition Layer	-	-
278	Layer	-	0.04	Backfill/Demolition Layer	-	-
279	Layer	-	0.36	Backfill/Demolition Layer	Stem of small sherry glass	Late 18th to Early 20th Century
280	Layer	-	0.09	Backfill/Demolition Layer	-	-
281	Layer	-	0.21	Backfill/Demolition Layer	-	-
282	Layer	-	-	Backfill/Demolition Layer	-	-
283	Layer	-	-	Backfill/Demolition Layer	-	-
284	Layer	-	-	Backfill/Demolition Layer	-	-
285	Layer	-	-	Chalk Demolition Layer	-	-
286	Structure	0.35	-	Wall	-	-
287	Structure	0.16	-	Wall	-	-
288	Structure	0.3	-	Wall	-	-
289	Layer	-	-	Demolition Layer	-	-



Trench 2											
General de	General description Orientation NE-SW										
Trench co		Avg. depth (m)		2.3							
				of demolition/backfill deposits ille Gardens and the raising of	Width at base (m	)	2				
				strial works.	Length at base (r	n)	20				
Contexts											
Context no.	Туре	Finds	Da	ite							
290	Layer	-	-	Demolition Layer	-	-					
291	Layer	-	-	Demolition Layer	-	-					
292	Layer	-	-	Demolition Layer	-	-					
293	Layer	-	-	Demolition Layer	-	-					
294	Structure	0.4	-	Wall	-	-					
295	Layer	-	-	Demolition Layer	-	-					
296	Structure	0.4	-	Wall	-	-					
297	Layer	-	0.15	Demolition Layer	-	-					
298	Layer	-	0.2	Chalk Demolition Layer	-	-					
299	Layer	-	-	Demolition Layer	-	-					
3000	Structure	0.4	-	Wall	-	-					
3001	Structure	0.22	1.95	Bear Pit Wall	-	-					
3002	Layer	5.6	1.95	Demolition/Backfill Deposit	-	-					
3003	Structure	0.22	-	Chalk Wall	-	-					
3004	Layer	1.8	-	Make up/Levelling Deposit	-	-					
3005	Layer	2	-	Make up/Levelling Deposit	-	-					
3006	Layer	1	-	Levelling Deposit	-	-					
3007	Layer	0.9	_	Backfill Deposit	-	-					



Trench 3										
General d	escriptio	n	Orientati	on	NNE-SSW					
			Avg. dep	oth (m)	0.85					
Trench de disturbed			Width at	4						
distarbea	orialit over	nymg a no	Length at base (m)		20					
Contexts										
Context no.	Туре	Width (m)	Depth (m)	Comment	Finds	Date				
300	Layer	-	0.3	Levelling deposit	-	-				
301	Layer	-	0.55	Disturbed chalk	-	-				
302	Layer	-	-	Natural chalk	-	-				



## APPENDIX B. FINDS REPORTS

## **B.1 Pottery**

By John Cotter

## Introduction and methodology

B.1.1 A total of 13 sherds of pottery weighing 1103g were recovered from Context 107 only. All of this is of late 19th- or early 20th-century date. All the pottery was examined and spot-dated during the present assessment stage. For each context the total pottery sherd count and weight were recorded, followed by the context spot-date which is the date-bracket during which the latest pottery types in the context are estimated to have been produced or were in general circulation. Comments on the presence of datable types were also recorded, usually with mention of vessel form (jugs, bowls etc.) and any other attributes worthy of note (eg decoration etc.). Fuller details are recorded in table 1 below.

## Date and nature of the assemblage

B.1.2 The pottery assemblage is in a fresh but mainly fragmentary condition although two complete vessels survive. Normal domestic pottery types are represented but the thickness and heaviness of a smallish modern English stoneware bottle might suggest it was meant to contain something valuable or toxic like mercury or perhaps acid. However, similar vessels were commonly used to hold ink - but are not generally as thick as this. Besides the stoneware bottle there are three vessels in Staffordshire-type refined white earthenware including dishes and a small cylindrical pot for preserved meat paste or cosmetics. These and the stoneware bottle are all of late appearance - probably within the years c 1875-1925. Large fresh fragments from at least five red terracotta flowerpots were also recovered. No further work is recommended.

Table 1. Pottery

Context No	Spot- date	No.	Weight (g)	Comments	
107	c1875- 1925	3	203	3x vessels. Staffordshire-type refined white earthenware (REFW). Includes profile small cylindrical jar or pot for preserved meat, paste, or ointment with lid-seating for a 'pot lid', diam 70mm x 31mm tall, on underside a small indistinct mark - probably quantity (1 3/4 oz?). Rim from dish/plate in vitreous white earthenware with green border. Rim from similar large bowl with blue banding - all of L19C character.	
107	c1875- 1925	1	501	Complete smallish cylindrical-bodied bottle in Bristol-type glazed cream stoneware. Conical neck with pair of decorative grooves and narrow sub collared rim. Height 124mm, rim diam 28mm, body diam 73mm. Unusually thick walled/heavy - possibly for mercury or corrosives? Otherwise possibly ink. Unmarked but similar to late Doulton (Lambeth) products.	
107	c1875- 1925	9	399	Rims from a minimum of 5 red terracotta flowerpots & holed bases from 3. Large fresh sherds. Handmade/wheel-thrown traditional type 19/E20C.	
Total		13	103		



## **B.2 Ceramic Building Material (CBM)**

By John Cotter

## Introduction and methodology

B.2.1 The CBM assemblage comprises 3 pieces weighing 1953g from two contexts. The assemblage was examined and spot-dated during the present assessment stage following standard Oxford Archaeology procedures. All the material appears to be relatively modern or 'Victorian' in date.

## Date and nature of the assemblage

B.2.2 Full details of all the CBM may be consulted in the table below. Approximately one half of a brick was found in Context 109. This is a common frogged red brick of early to mid 19th-century appearance. The other two items are from Contexts 107 and 109. These appear to be fragments of identical moulded architectural tiles or facing bricks with the same deeply moulded frieze of radial palm or laurel leaves. One is clearly from a wedge-shaped tile - perhaps a voussoir or a keystone from a door or window arch. Both are in a very dense fine-grained cream fabric with a grey core. They are most likely to be ceramic (terracotta) but it is not impossible that they are in an unusually fine-grained cement. The decoration is typical of architectural tiles of the 19th and early 20th centuries such as are found in houses, railway stations and civic buildings etc. No further work is recommended.

Table 2. CBM

Context No	Spot- date	No.	Weigh t (g)	Comments	
107	19/E20 C	1	312	Moulded fragment of decorative terracotta or cement as in (109). See below. Lacks original edges. Thickness 25-35mm. Traces hard grey bonding mortar on underside.	
109	19/E20 C	1	491	Moulded architectural tile or facing brick in fine very hard cream-coloured terracotta or possibly fine-grained cement? The outer surface & margins are cream and the interior is light grey to greybrown (suggesting ceramic) and has fine bubbles or voids. From a wedge-shaped keystone or voussoir with two surviving splayed sides, but top and bottom missing. Width varies from 123mm at bottom to 135mm at top. Thickness 28-38mm incl layer of flat grey bonding mortar 6mm thick on underside - preserving fine horizontal impressions from attachment to wooden board or possibly cut stone? Deeply moulded radial design comprising radial overlapping palm or laurel leaves. Possibly from an archway or arched window moulding? Traces of pale grey whitewash or paint in recesses.	
109	E- M19C	1	1150	Approx one half of dark reddish-brown house or 'stock' brick with a fairly shallow rectangular frog - possibly containing an indistinct letter of a maker's mark? Yellowish surface leaching in places. Rough/coarse texture. Slightly worn. Width 105mm, thickness 65mm.	
Total		3	1953		



#### **B.3 Glass**

By Ian R Scott

## Introduction and methodology

B.3.1 Four pieces of glass were recovered. These comprise 3 sherds of vessel glass and single piece of window glass and are described in the table below.

Table 3. Glass

Context No.	Description	Date
107	Neck of wine bottle with champagne finish. Free blown bottle neck has a angled finish and applied flattened string rim.	Mid to late 19th century.
109	Window glass. Trapezoid fragment with slightly irregular faces. One short angled edge with traces of leading.	Post medieval. Not closely datable.
215	Small bottle of flattened oval section with screw cap finish. Colourless metal. Aluminium screw cap in situ. Bottle embossed 'YEAST VITE' on across shoulders and 'UG8 28' on base. Bottle for 'Yeast-Vite' tonic tablets.	
279	Foot, stem and lower bowl of a small sherry glass with wheel-cut decoration. Late Victorian or Edwardian sherry glass with fern pattern, some certainly produced for the public house trade.	1870 or later.

#### **Conclusions**

B.3.2 None of the vessel glass need date earlier than the late 19th century. The window glass is post-medieval in date in the broadest sense, since post-medieval window glass is very difficult to date.

## **B.4 Worked Bone**

By Leigh Allen

## Introduction

B.4.1 An incomplete bone button was recovered from the environmental processing of Sample 1 from context 109.

### **Discussion**

B.4.2 Two thirds of the button survive, it has four central perforations encircled by a groove and a raised rim, and the back is flat. The button is in poor condition the upper surface is worn and pitted although patches of the original polished surface survive on the back. Lathe turned buttons of this form date to the 18th and 19th century.



## APPENDIX C. ENVIRONMENTAL REPORTS

## C.1 Environmental samples

By Dr Rebecca Nicholson and Julia Meen

#### Introduction

C.1.1 An environmental sample was taken from the archaeological evaluation at Henley Cable Works, Northfleet, in October 2012. The sampled deposit, context 109, was a suspected ground surface thought to be contemporary with the nineteenth century pleasure gardens that were located at the site. Documentary records show that white marine shell was used to gravel paths in the gardens, and therefore the aim of taking this sample was to identify the presence and species composition of marine shell and to confirm that the excavated ground surface belonged to one of the nineteenth century garden paths. The sample was a light olive brown (2.5Y 5/3) sandy silt, with abundant marine shell visible during sampling.

## Methodology

C.1.2 Sample <1> was 10L in volume. It was wet-sieved to 500µm and the residues were dried in a heated room. Identifications of marine shell species were made by Rebecca Nicholson.

#### Results

C.1.3 The marine shell assemblage was dominated by cockles (*Cerastoderma* sp.), including juvenile examples, with other species present including periwinkles (*Littorina* spp., including *L. litorea* and *L. obtusata*), tellins (Tellinidae), mussels (Mytilus edulis), Hydrobia sp., netted dog whelks (*Nassarius reticulatus*) as well as occasional terrestrial snails. The majority of shells were crushed. The remainder of the residue was composed of pebble/small cobble sized pieces of flint and chalk, and occasional items of broken pottery, glass and clinker. A partial button was also recovered (see Section B.4).

#### **Discussion**

C.1.4 The species of marine shell present in the sample are indicative of material that would be collected from the tide line of a shell-rich beach; most of the individuals present are of a small size and hence are unlikely to have been consumed, although it is possible that some of the larger examples may have been. It is feasible that the material formed the surface of a garden path, and the highly crushed nature of the shell supports this interpretation. All residues have been retained in case further study is required.



## APPENDIX D. BIBLIOGRAPHY AND REFERENCES

CgMs, 2006, Baseline Built Heritage Assessment In Respect of Northfleet Embankment East

KCC, 2012, Specification for targeted trial trenching on the North East Embankment, site of the former Henley Cable works, Northfleet, Kent County Council

OA, 2012, North East Embankment, Former Henley Cable Works, Northfleet, Kent. Interim Archaeological Evaluation Report, Oxford Archaeology

Smith, L, 2006, *The Place to Spend a Happy Day. A History of Rosherville Gardens.* Gravesend Historical Society

Wilkinson, D (ed.), 1992, OAU Fieldwork Manual (first edition), Oxford Archaeological Unit.



## Appendix E. Summary of Site Details

Site name: Stage 1 Trial Trenching North East Embankment, Former Henley

Cable Works, Northfleet, Kent

Site code: NOHC12

**Grid reference:** NGR: TQ 636 743

Type: Evaluation

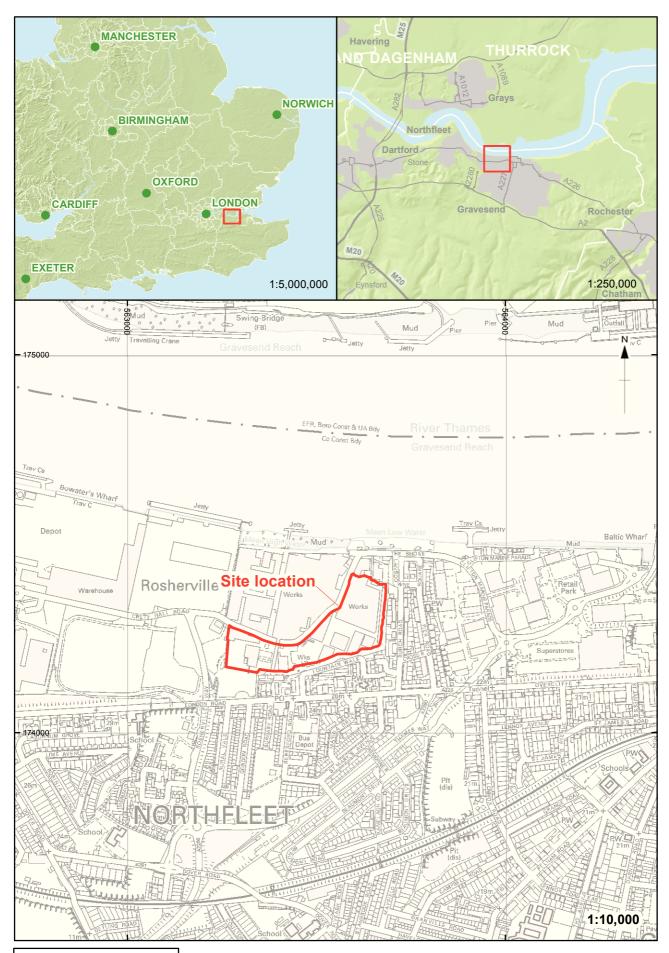
**Date and duration:** 1st - 12th October 2012

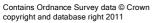
Summary of results: Between the 1st and the 12th of October 2012 Oxford Archaeology (OA) undertook a field evaluation of land at the former Henley Cable Works, Northfleet, Gravesham, Kent.

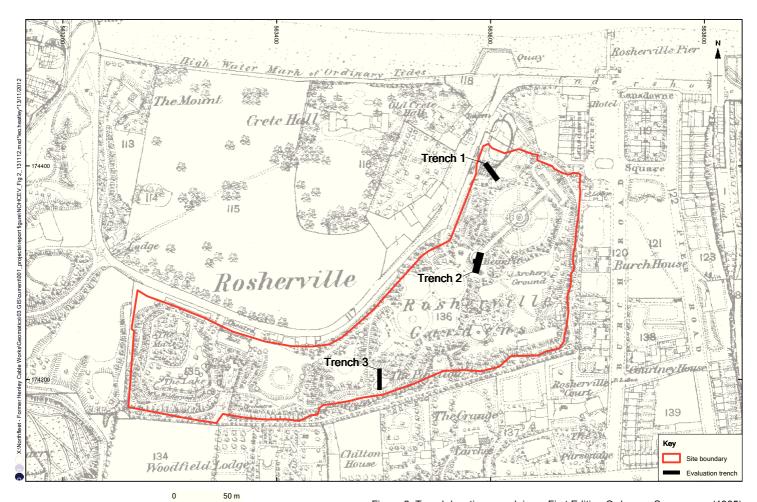
The Stage 1 phase of evaluation consisted of three trenches which were excavated with the intention of investigating whether any structures relating to Rosherville Gardens still survive below the present ground level.

A buried soil, ornamental wall and the possible remains of a shell path were observed towards the north of the site in Trench 1 and may represent an old ground surface possible associated with flowerbeds. The remains of a circular structure and associated walls were uncovered towards the centre of the site in Trench 2 and appear to be the remains of the Bear Pit – a well known feature within Rosherville Gardens. Trench 3, to the south of the site, revealed no archaeological deposits.

**Location of archive:** As no receiving museum is available, the archive will temporarily be held at Janus House, Osney Mead, Oxford, OX2 0ES.







1:2,500 @ A4

Figure 2: Trench locations overlain on First Edition Ordnance Survey map (1865)

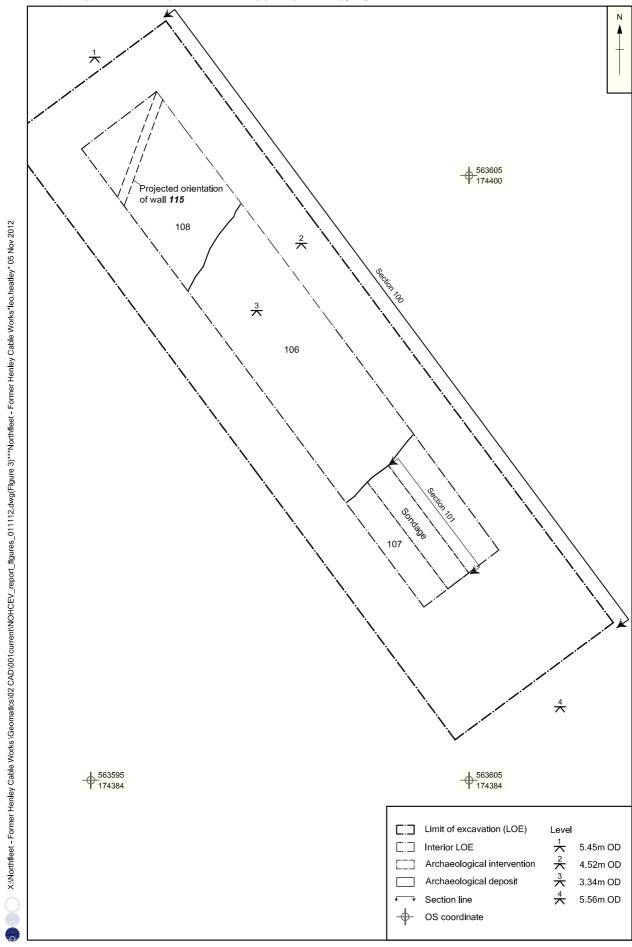
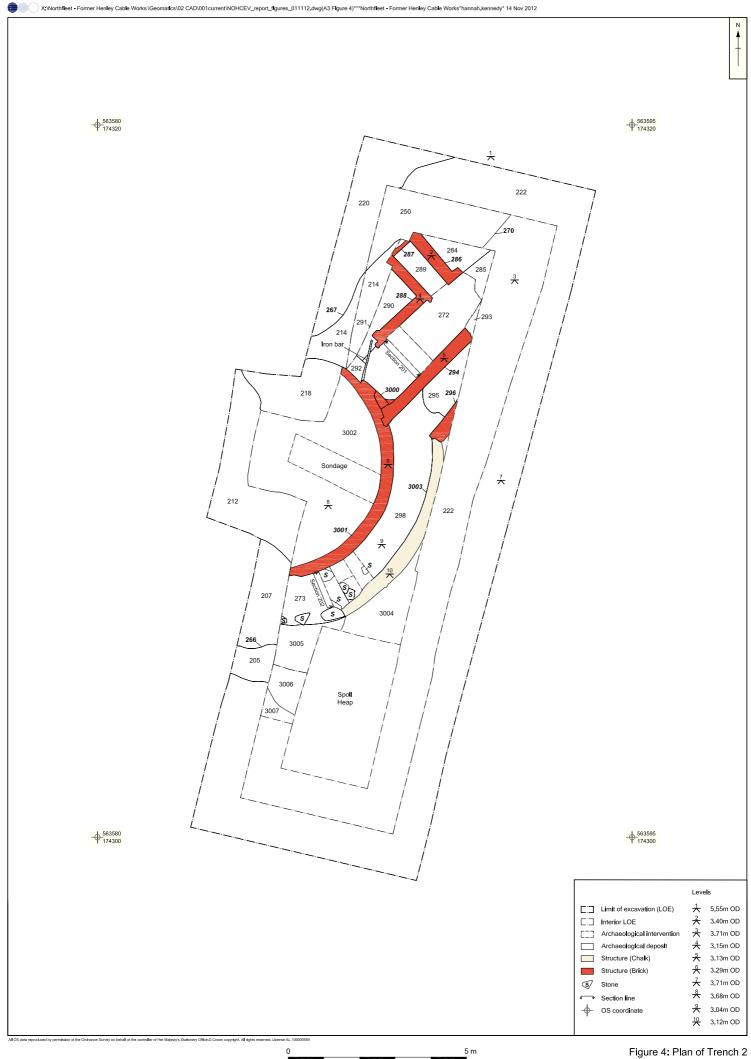


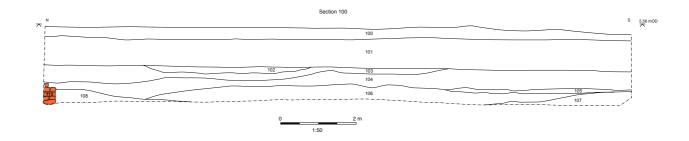
Figure 3: Plan of Trench 1

Scale at A4 1:100

5 m



Scale at A3 1:75



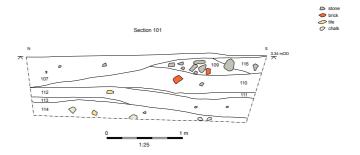


Figure 5: Sections 100 and 101

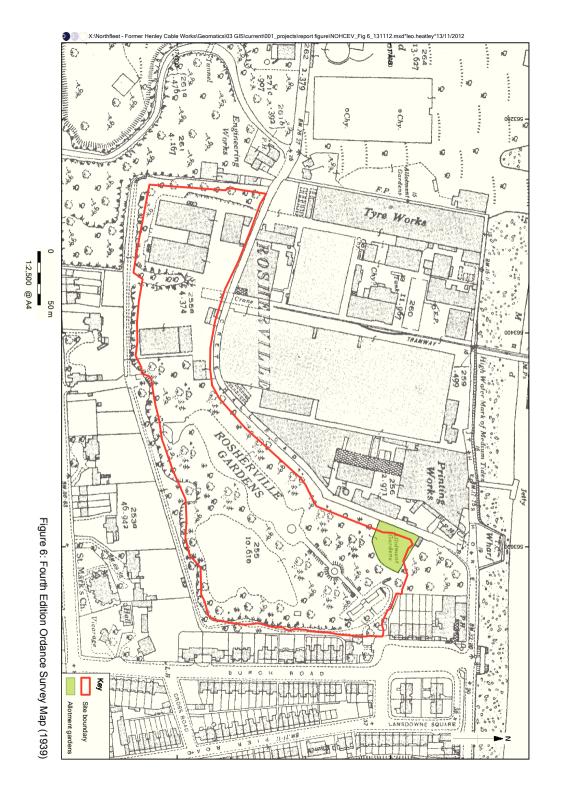




Plate 1: Trench 1, looking to south-east



Plate 2: Sondage, looking north-east



Plate 3: Shell deposit, looking north-east



Plate 4: Brick wall, looking south-west



Plate 5: Trench 2. Bear pit, looking south-west



Plate 6: Base of bear pit, looking east-south-east

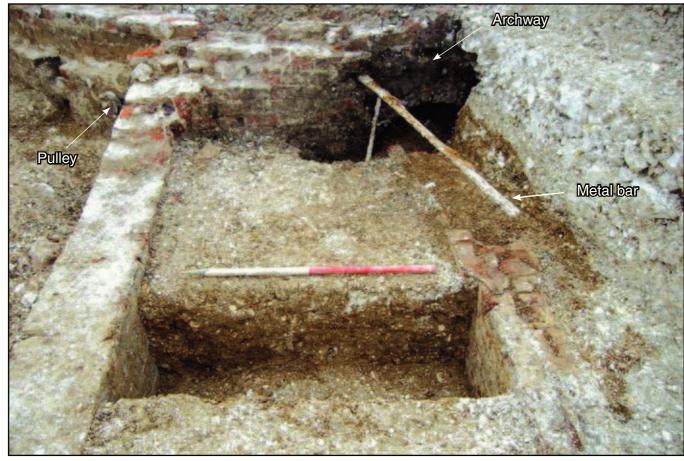


Plate 7: Metal pulley, bar and archway, looking south-west

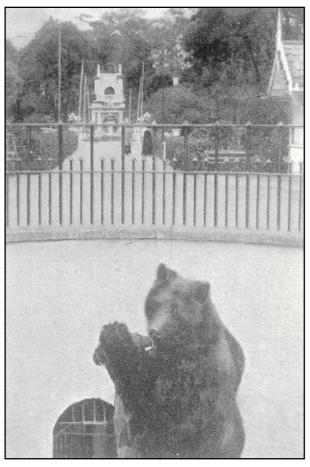


Plate 8: Bear pit showing archway (undated photograph: © Lynda Smith)



Plate 9: Walls and remains of arched roof and demolition cut 270, looking north-west



Plate 10: Iron bar and arch, looking south-west



Plate 11: Trench 3, looking south



Plate 12: Trench 2. Demolition cut 266 and bear pit, looking west



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