



# Archaeological trial trench evaluation at Foundry Yard, South Quay Hayle, Cornwall January 2017

Report No. 17/13

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Illustrator: Olly Dindol



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**OASIS REPORT FORM**

<b>PROJECT DETAILS</b>		<b>OASIS No: Molanorth1-276090</b>	
Project title	Archaeological trial trench evaluation at Foundry Yard, South Quay, Hayle, Cornwall.		
Summary	MOLA (Museum of London Archaeology) was commissioned by Prospect Archaeology to carry out an archaeological trial trench evaluation on land at South Quay, Hayle, prior to the proposed development of the site. Eight trenches were excavated. Two walls and two brick surfaces dating to the 18th or 19th centuries were identified, which correspond with structures previously identified by historic mapping. No features of pre-18th-century date were identified.		
Project type	Trial Trench evaluation		
Site status	UNESCO World Heritage Site 1215		
Previous work	None		
Current land use	Car park		
Future work	Unknown		
Monument type/period	Post-medieval		
Significant finds	None		
<b>PROJECT LOCATION</b>			
County	Cornwall		
Site address	Carnsew Road, Hayle		
Postcode	TR27 4HU		
OS co-ordinates	SW 556 373		
Area (sq m/ha)	0.40ha		
Height aOD	c5m aOD		
<b>PROJECT CREATORS</b>			
Organisation	MOLA (Museum of London Archaeology)		
Project Brief originator	Cornwall County Archaeology Service		
Project Design originator	MOLA Northampton		
Director/Supervisor	Adam Reid, MOLA		
Project Manager	Anthony Maull, MOLA, and Nansi Rosenberg, Prospect Archaeology		
Sponsor or funding body	Prospect Archaeology		
<b>PROJECT DATE</b>			
Start date	17/01/2017		
End date	27/01/2017		
<b>ARCHIVES</b>		Location (Accession no.)	Content
Physical	RCM not receiving		None
Paper			Site records; background data, photographs; plans and sections on permatrace
<b>BIBLIOGRAPHY</b>		Journal/monograph, published or forthcoming, or unpublished client report (MOLA report)	
Title	Archaeological trial trench evaluation at Foundry Yard, South Quay, Hayle, Cornwall, January 2017		
Serial title & volume	MOLA Northampton Reports 17/13		
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# Archaeological trial trench evaluation at Foundry Yard, South Quay Hayle, Cornwall January 2017

## Abstract

*MOLA (Museum of London Archaeology) was commissioned by Prospect Archaeology to carry out an archaeological trial trench evaluation on land at South Quay, Hayle, prior to the proposed development of the site. Eight trenches were excavated. Two walls and two brick surfaces dating to the 18th and 19th centuries were identified, which correspond with structures previously identified by historic mapping. No features of pre-18th-century date were identified.*

## 1 INTRODUCTION

Prospect Archaeology, acting on behalf of Bowmer and Kirkland, commissioned MOLA (Museum of London Archaeology) to undertake archaeological trial trenching of a proposed development site on land at South Quay, Hayle, Cornwall (NGR SW 556 373, Fig 1). Planning permission was granted in December 2011 for the development of the area (Planning Ref: PA10/08142), comprising erection of retail units and a food store, and the creation of a new public realm including quayside promenade and public open space and associated infrastructure.

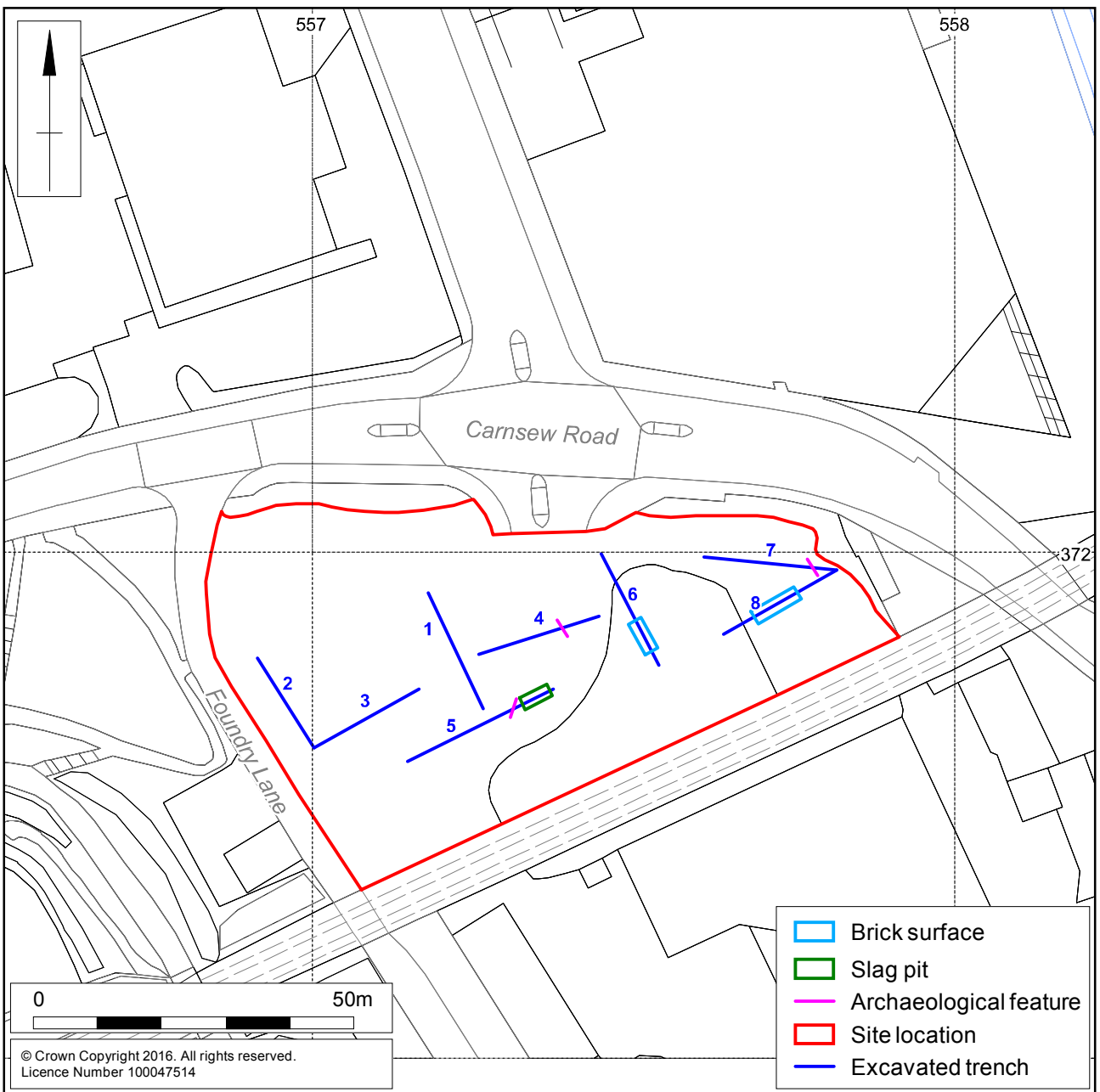
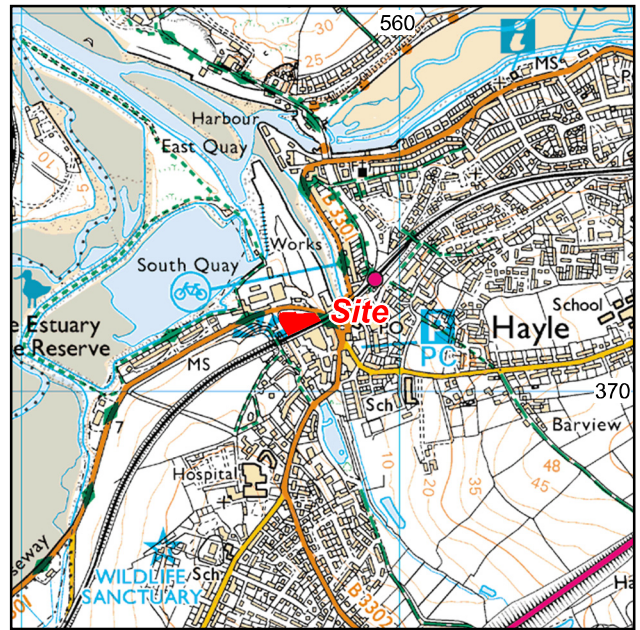
The specification and methodology for the works were set out in the Written Scheme of Investigation (MOLA 2017) and the evaluation conformed to the Chartered Institute for Archaeologists' *Standard and guidance: archaeological field evaluation* (2014a) and *Code of Conduct* (2014b). All stages of the project were undertaken in accordance with Historic England procedural documents (MoRPHE) (HE 2015).

## 2 BACKGROUND

### 2.1 Location, topography and geology

Hayle is located in north-west Cornwall on the eastern side of the Hayle Estuary which opens onto St Ives Bay, c4km south-east of St Ives itself. The harbour lies on the western side of the town with South Quay projecting northwards into the centre of the estuary. The quay is bounded to the south by the mainland, to the west by the Carnsew Channel and to the east by the Penpol River, the latter providing moorings for Hayle's small fleet of private fishing boats and leisure craft. The site is currently a makeshift car park for harbour users, although much of the area is covered in mounds of fly-tipped building debris and very overgrown with scrub.

The modern ground surface lies at a height of c4-5m aOD. The geology is recorded as Middle Devonian (undifferentiated) mudstone, siltstone and sandstone overlain by clay, silt and sand alluvium (BGS 2017).



Scale 1:1000

Site location and excavated trenches Fig 1

## 2.2 Archaeological Background

The following historical background is taken from the South Quay evaluation reports (Upson-Smith 2011) and Mason (2010), with some amendments where new evidence has come to light. The later history of Hayle is closely linked to Hayle Foundry and the rise to prominence of its founders, the Harvey family. The history of the site and its immediate environs has been well documented in works such as Edmund Vale's *The Harveys of Hayle* (2009, first published in 1966) and, more latterly in the *Hayle Historical Assessment* (Cahill 2000). The following background information summarises the key events as set out in these publications.

Quays were first established at Hayle Harbour in 1735 by John Ellis, and later by George Blewitts partnership. The Harvey family's association with the town dates to 1779 when John Harvey, a blacksmith by trade, established a small iron foundry, the first in Cornwall, to supply machinery to the mining industry. The sea provided the principal mode of transport for movement of fuel, raw materials and goods, and one of Harvey's first actions was to deepen the channel of the Penpol River following the grant of a lease in 1780. By 1805 a fleet of three ships served Harvey and Co; there was, however, no foundry quay - the only way of accessing the river was via areas of levelled ground known as 'plots' or 'plats' (Vale 2009, 105).

Following the death of John Harvey in 1803 his son Henry took over the management of the family business. It was during his tenure that the expansion of the Harbour complex, including the construction of South Quay, was triggered in 1817 when the Cornish Copper Company's lease of Carnsew Quay expired. Its owners, whose sympathies lay with Harvey and Co, duly granted it to them. Henry Harvey set about deepening the Carnsew Channel and building South Quay over a reef of Killas rock that outcropped to the west of Penpol River. The quay, which stretched northward into the estuary for a full quarter of mile, was finished late in 1818 and included in its design an archway which allowed a pre-existing fording point over the estuarine sands to pass underneath it. In addition, the quay walls incorporated a series of unusual arcs to allow ships to berth tightly to the dockside, although it has been suggested that this design was actually dictated by the shape of the reef upon which it was built (Vale 2009, 134).

By 1832 Harvey and Co had branched into shipbuilding; two years later a 72-ton schooner, *The John Harvey*, and a 52-ton smack, *The Nautilus*, were seaworthy. The problem of silting in the Carnsew Channel was overcome in the years 1833-4 when a large reservoir was dug to the west of Carnsew Quay and its waters used to flush the channel via a series of sluice gates.

Further prestige was conferred when Harvey and Co were commissioned by the Dutch government to supply the world's largest steam engine; construction took place between 1843-9. The 1840s also saw Harvey's shipyard building iron-hulled ships for the first time. In 1867 they acquired the waterside premises of their old rival, the Cornish Copper Company thus uniting much of the harbour under a single ownership.

By the end of the 19th century, however, lack of investment coupled with the absence of strong leadership saw the business go into decline. In 1903 the foundry was broken up and sold, but Harvey and Co continued to trade as merchants, importing coal, timber and building materials. Ship breaking also took place on the slips and quayside in the years following the First World War.

In 1966 the company, who still owned much of the harbour, were operating as a general building merchants; three years later they were bought out by United Builders Merchants Ltd. Sluicing of the harbour ceased in 1972 leading to the effective end of



commercial traffic in 1977. In 1983 the harbour was put up for sale, South Quay being one of ten lots made available for purchase.

Trial trench evaluations have been undertaken to the north in 2010 and 2011 by Northamptonshire Archaeology (now MOLA) (Mason 2010 and Upson-Smith 2011), although the current site was not evaluated. Historic map evidence shows that Foundry Square was developed by at least the early 19th century, and is noted as the location of 'Mr Ellis's House' (Cahill 2000; fig 7a). A gasworks for this site with a single circular gas-holder was designed in 1830, and built in 1843 (Cahill 2000). Gas was extracted from coal; the coal was heated in a retort house and gas was then condensed and purified before being stored in the gas-holder. By-products of the process included tar, which was stored in tanks, and coke which was either used to fuel the retorts or sold on to the public as smokeless fuel. By the third quarter of the 18th century, the site also housed a copper smiths and sawmill to the north and west (Cahill 2000; fig 16d). The railway formed the southern boundary of the site. By the early 20th century, the gas works no longer appears to have been present, although there were a number of buildings on the site.

### 3 AIMS AND OBJECTIVES

The main objective of the evaluation was to record the location, extent, date, character, condition, significance, and quality of any surviving archaeological remains. The trenching specifically aimed to examine:

- the date, nature, significance and extent of activity or occupation in the development site;
- the relationship of any remains found to the surrounding contemporary landscapes;
- the potential for the recovery of artefacts to assist in the development of type series within the region;
- the potential for palaeo-environmental remains to determine local environmental conditions;
- the impact of the proposed works upon any surviving archaeological remains.

Specific research objectives for the project are given in the regional and local research frameworks documents (Webster 2007 updated by Grove and Croft 2012, Cahill 2000, Gillard and Newell 2005). Cahill has identified the site as an area of buried archaeological potential (Cahill 2000; fig 12), and states:

*...[T]his area presents a rare opportunity to study a single phase, single use industrial complex of this sort. Harvey's, in conjunction with William Brunton of the Eagle Foundry in Birmingham, designed and built gasworks at the same period for Falmouth and Penzance, so that investigation here could have wider implications for understanding this class of site elsewhere in the County. The adjacent area to the east may retain evidence of 'Mr Ellis's House', part of the mid 18th century development of Carnsew Quay that was the earliest of all developments in this part of Hayle (Cahill 2000).*

Research objectives related to the industrial history of the Foundry Yard relate to its potential for industrial heritage regarding the *Production of Capital and Consumer Goods* (14.8.3 Webster 2007), the historical setting of the foundry and its environs, as well as the potential for pre-industrial activity, possibly related to Carnsew hillfort situated to the west or the presence of 5th-century deposits as suggested by the findspot of the Cunaide stone on Foundry Lane (Gillard and Newell 2005).

## 4 EXCAVATION METHODOLOGY

Eight trenches measuring 20m long were excavated (Fig 1). Two trenches, Trench 1 and Trench 4, were moved from their intended location in order to avoid the existing hoardings and material stockpiles that were encountered at the site.

Trenches were excavated using a 360° mechanical excavator fitted with a 1.8m-wide toothless ditching bucket. Modern construction deposits were removed under archaeological direction to reveal archaeological features or natural substrate. All trenches were backfilled with their up-cast material and were then compacted by the mechanical excavator. All procedures complied with MOLA Health and Safety provisions and MOLA Health and Safety at Work Guidelines (MOLA 2014).

The evaluation conformed to the Chartered Institute for Archaeologists' *Standard and guidance: archaeological field evaluation* (2014a). All stages of the project were undertaken in accordance with the procedural document *Management of Research Projects in the Historic Environment* (MoRPHE) (HE 2015). The evaluation was carried out in accordance with Written Scheme of Investigation (WSI) prepared by MOLA (MOLA 2017).

All archaeological deposits encountered during the course of the excavation were fully recorded, following standard MOLA procedures (MOLA 2014). All deposits were given a separate context number in a sequence assigned to each trench. They were described on *pro-forma* context sheets to include details of the context, its relationships and interpretation. All trench locations were recorded using Leica Viva Global Positioning System (GPS) survey equipment using SMARTNET real-time corrections, operating to a 3D tolerance of  $\pm 0.05\text{m}$ . A full digital photographic record was maintained. The field data from the evaluation has been compiled into a site archive with appropriate cross-referencing.

## 5 THE EXCAVATED EVIDENCE

### 5.1 General stratigraphy

The general stratigraphy varied little across the site. The natural substrate mostly comprised light blue-grey or yellow-grey mudstone or siltstone, which was exposed at depths ranging from 0.30m to 0.45m below the current ground surface. This was overlain by layers of modern build-up, ranging in depth from 0.20m to 0.25m. Overlaying this was a layer of type 1 aggregate or gravel, which was encountered across the site and ranged from 0.10m to 0.20m thick. All features were cut into the natural and were overlain by layers of modern build-up, unless otherwise stated.

### 5.2 Post-medieval features

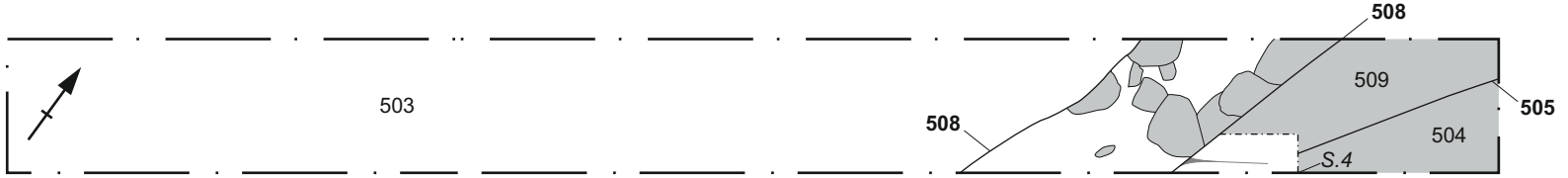
Part of a wall (704), aligned north-east to south-west, was located at the eastern end of Trench 7 and was cut into make-up or demolition layers, which contained fragments of red brick and glass. The construction cut for the wall measured 0.85m wide and 0.30m deep and it was packed by fills of dark black silty sand with occasional brick fragments. At least 1.25m of its length was visible and it measured 0.71m wide. It was constructed from rectangular bricks, with a layer of flat tiles at the base. The bricks were bound with lime mortar and measured 0.15m+ x 0.12m x 0.06m.



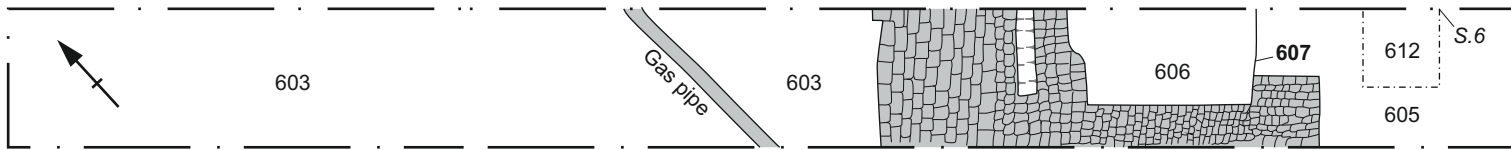
Wall (704), looking north-east Fig 2

Scale 1:100

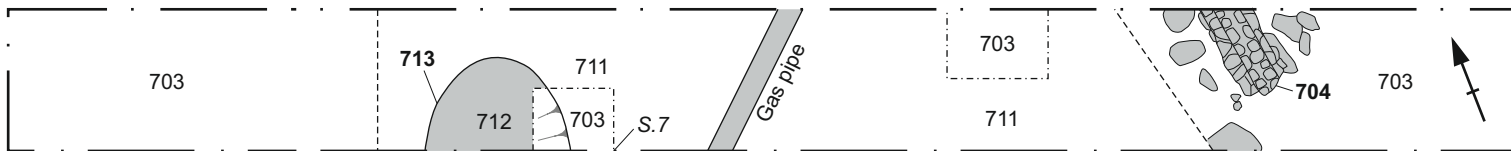
### Trench 5



### Trench 6



### Trench 7



0 5m

Trench plans 2, 3 and 5 Fig 3

A brick surface (804), measuring 10m long and at least 1.8m wide, was uncovered in Trench 8 (Fig 4). The surface was composed of a mixture of square and rectangular red and yellow bricks, measuring 0.11m x 0.07m x 0.07m, and was only one course thick. No clear bonding material was visible between the bricks. The surface had been repaired and levelled in places with the addition of concrete, suggesting that it was a long-lived feature that lay outside of the buildings, such as a yard surface.



Brick surface (804), looking north-east Fig 4

A second brick surface (604) was located in the centre of Trench 6 (Figs 3 and 5). It had a length of 6.0m and a visible width of 1.80m and was composed of square and rectangular red and grey bricks approximately 0.10m x 0.15m x 0.07m. The bricks were straight sided and bound by a small quantity of lime mortar. The surface was truncated to the east and south by more recent disturbances, including a square cut [607] of uncertain purpose, which measured 2.50m long and at least 1.00m wide.



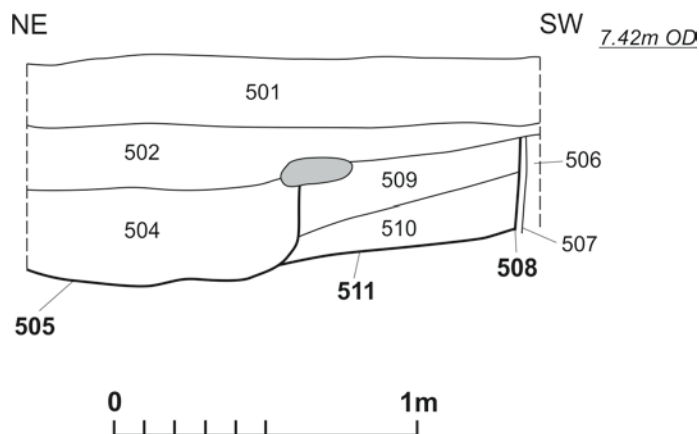
Brick surface (604), looking north-west Fig 5

A wall (506), aligned north-east to south-west, was located in Trench 5 (Figs 3 and 6). The wall was constructed from large blocks of roughly hewn granite of variable size, measuring up to 0.60m x 0.70m x 0.24m, which were bound by large quantities of lime mortar. The wall measured 1.40m wide and had a visible length of at least 2.0m. It had a straight sided cut [508], which extended at least 0.50m below the natural stratum, and had a small amount of dark brown-grey sandy silt packing material. The feature corresponds with a wall aligned north-east to south-west that is depicted on the 1876 OS map but which appears to have been removed by 1908.

Wall (506) truncated an earlier slag pit [511], which was located to the north-east and extended for 4m to the end of the trench. Pit [511] was 0.29m deep, with a width of at least 1.8m. At its base there was a deposit of dark brown-grey sandy silt with large slag inclusions, which was overlain by a deposit of light brown-yellow sandy silt. Pit [511] was truncated to the east by a more recent pit [505], which had steep, near vertical sides and a flat base. A deposit of dark brown-grey sandy silt containing frequent large pieces of slag had been dumped into the feature. Pits [505] and [511] both contained a similar form of slag, which it has been characterised as dark vesicular clinker, the incombustible residue from a coal-fired furnace or oven (A. Chapman pers. com.).

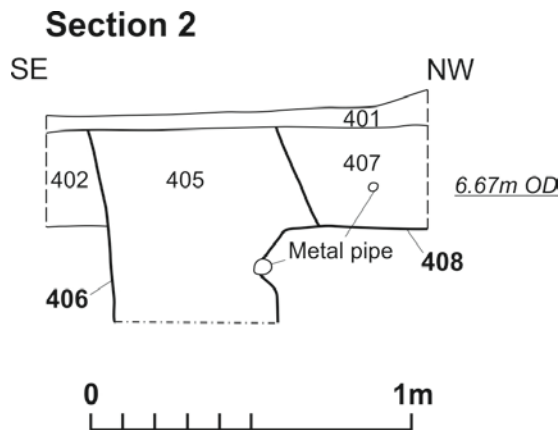


**Section 4**



Pit [511] and Wall (506), looking south, section scale 1:25 Fig 6

A linear feature [407], aligned north-west to south-east, was located at the eastern end of Trench 4 (Figs 3 and 7). Excavation of the feature revealed a concrete slab measuring c0.30m wide at a depth of 0.65m from the present surface level. The concrete block was packed with wood and overlain by a deposit of firm grey-black sand, which contained frequent stones, tarmac and other industrial waste. A more recent intrusion containing an iron gas pipe had truncated the western edge of the feature.



Modern feature [406], looking south-east, section scale 1:25

Fig 7

A circular posthole [806] with a diameter of 0.49m was located at the south-western end of Trench 8 (Fig 8). The feature was cut into modern make-up deposits to a depth of 0.19m and had a straight-sided profile. A deposit of firm red-black silty sand containing pieces of brick and glass had accumulated in the feature.



Posthole [806], looking south-west Fig 8

## 6 BRICKS By Rob Atkins

External brick surfaces (604 and 804) were recorded on site with the bricks photographed and measured. None of the bricks were kept due to contamination on site. Whilst not ideal, the photographs, their measurements and their location on site has meant a fairly specific date and function can be assigned with some confidence.

Brick surface (604) survived over a c6m by 1.8m area. It comprised largely white (pale yellow colour) bricks with the occasional orange brick. The surface was extremely well made. It was flat, consisted of tightly laid rows of bricks, all lengthways, with no gap or mortar between the rows or the individual bricks themselves. Photographs of the individual bricks showed they were also extremely well made with vertical arrises. The way the surface was constructed allowed no movement between the bricks and thus gave great strength to the surface, with the ability to take heavy weights. The bricks themselves were measured at 0.15m wide and 0.07m deep. The extremely well-made nature of the bricks implies they were machine made, with their deep depth also suggesting a probable late date. They would therefore date after c1820 with a mid 19th-century date probable. It is extremely likely the surface relate to the gas works recorded on the 1st Edition Ordnance Survey map with the yard located directly to the north of the round gas holder itself. At some stage the brick yard was disused, probably in the 20th century, as remains of a concrete surface was recorded over part of the surface and pits were dug through it.

Brick surface (804) survived over a c10m by 1.8m area. It comprised largely orange bricks. The yard surface was of the same construction, but unlike surface (604), the remnants show signs of extreme ware. The bricks themselves were the same depth,



0.07m. A similar date for the yard is suggested, after c1820 with a mid 19th-century date probable. The surface is located between two sub-rectangular buildings shown on the 1st and 2nd Edition Ordnance Survey maps. It is extremely likely the surface was built at the same time as these buildings. It was a long lived surface and this is suggested by stone cobbles used as repairs to patch areas of the yard, and the slightly warped/buckled remains of the brick surface in areas.

## 7 DISCUSSION

The evaluation did not identify any features dating to before the 18th century; however, it did identify post-medieval walls and surfaces, all of which correspond to features noted on historical mapping and appear to relate to the site's use as a gasworks and foundry yard in the post-medieval to modern periods (Fig 9).

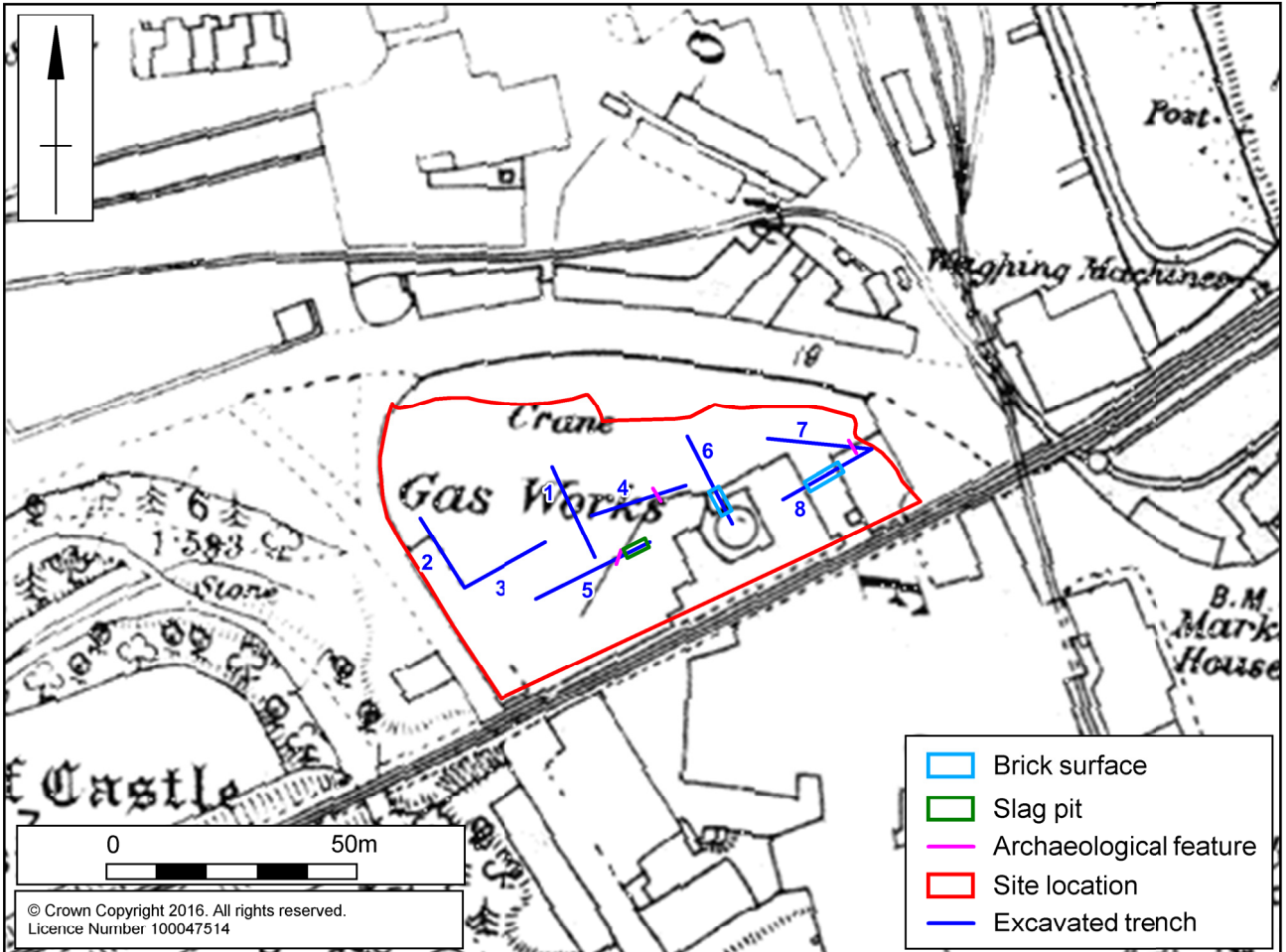
The slag pit at the north-eastern end of Trench 5 appears to be the earliest feature that was identified by the evaluation. The fact that it was truncated by a wall that was associated with the gas works suggests that it probably pre-dates the construction of the foundry. The wall corresponds with a feature noted on the 1876 Ordnance Survey map, which appears to be a boundary wall rather than part of a structure. The same feature does not appear on the 1908 OS map, suggesting that it was not a long-lived feature.

The brick surfaces that were located in Trenches 6 and 8 align with structures that are visible on both the 1876 and 1908 Ordnance Survey maps. It is unclear if the brick surface that was located in Trench 6 is related to the circular gas holder that is visible on the 1876 Ordnance Survey map, or if it relates to the later building that appears to have been erected in the same location prior to the creation of the 1908 map.

The wall that was located in Trench 7 appears to correlate with the north-west to south-east aligned wall belonging to the structure abutting the north-eastern corner of the disused foundry, which is indicated by the 1908 OS map.

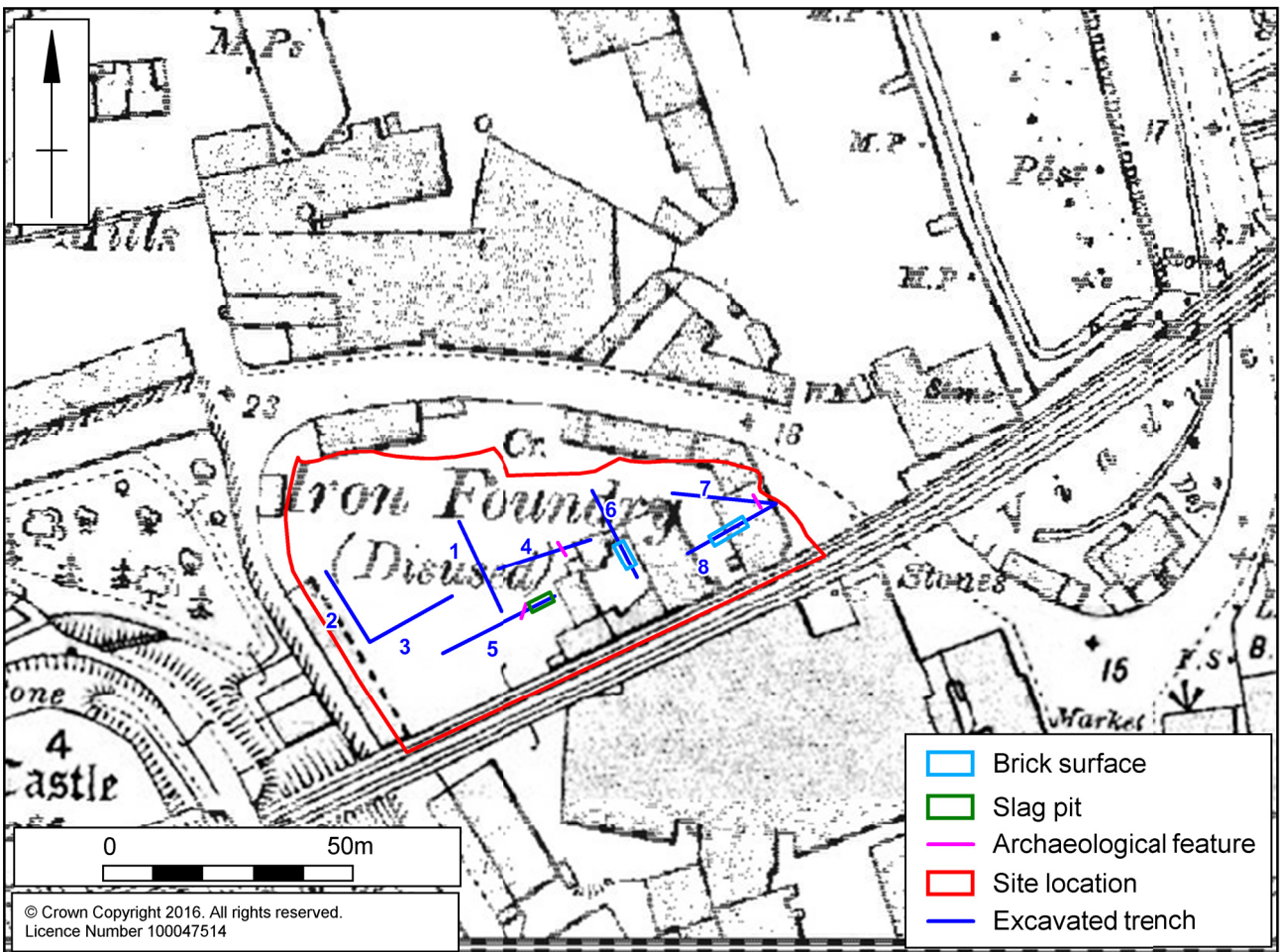
The purpose of the feature containing wood and concrete that was located in Trench 4 is unclear, but it bears similarities to concrete blocks overlain by wooden sleepers that were identified during evaluation work on the South Quay (Upson-Smith 2011), which were interpreted as part of the base for a crane. The 1876 Ordnance Survey map suggests that a crane was located in the northern part of the current site, in the vicinity of Trenches 1 and 4.

Historic mapping suggests that the structures that were associated with the Trench 8 brick surface were removed from site at some point between 1938 and 1963 and that all of the buildings that were located in the development area were demolished by 1987.



Scale 1:1500

1876 OS map



Scale 1:1500

1908 OS map Fig 9

## **BIBLIOGRAPHY**

ClfA 2014a *Standards and Guidance for archaeological field evaluation*, Chartered Institute for Archaeologists

ClfA 2014b *Code of Conduct*, Chartered Institute for Archaeologists

Cahill, N, 2000 *Hayle Historical Assessment, Cornwall*, Cornwall Archaeological Unit and English Heritage

DCLG 2012 *National Planning Policy Framework*, Department of Communities and Local Government

EH 1991 *Exploring Our Past*, English Heritage

Gillard, B, and Newell, K, 2005 *Cornwall and Scilly Urban Survey, Historic characterisation for regeneration: Hayle*, Cornwall County Council

Grove, J and Croft, B, 2012 *The Archaeology of South West England: South West Archaeological Research Framework Research Strategy 2012–2017*, Somerset County Council

HE 2015 *Management of Research Projects in the Historic Environment: The MoRPHE Project Managers Guide*, Historic England

MOLA 2014 *Archaeological Fieldwork Manual*, MOLA Northampton

MOLA 2017 *Written scheme of investigation for archaeological evaluation on land at South Quay, Foundry Yard, Hayle, Cornwall*, MOLA Northampton

Mason, P, 2010 *Archaeological Evaluation at South Quay Hayle Harbour, Cornwall August 2010*, Northamptonshire Archaeology report, **10/142**

Upson-Smith, T, 2011 *Archaeological evaluation at South Quay, Hayle Harbour, Cornwall, June-July 2011*, Northamptonshire Archaeology report, **11/164**

Vale, E, 2009 *The Harveys of Hayle*, The Trevithick Society

Webster, C J, 2007 *The Archaeology of South-West England: South-West Archaeological Research Framework, Resource Assessment and Research Agenda*, Somerset County Council

## **Websites**

BGS 2017 British Geological Survey <http://www.bgs.ac.uk/geoindex/home.html>

MOLA Northampton  
14 February 2017

**APPENDIX 1: CONTEXT INVENTORY**

Trench No.	Length, width & alignment	Grid Reference (NW end)	Surface height, NW end (aOD)	Depth & height of natural (aOD)
1	20m x 1.8m NW-SE	155718, 37194	7.01m	6.70m 0.30m deep
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
101	Layer	Loose friable gravel bound with light yellow-grey silty sand.	0.10m deep	-
102	Layer	Modern make-up layer comprising friable dark grey-brown silty sand with frequent brick fragments, slag and iron fragments.	0.20m deep	-
103	Natural	Firm light grey-yellow siltstone.	-	-
104	Layer	Tightly packed stone layer bound by tar	D:0.30m	

Trench No.	Length, width & alignment	Grid Reference (NW end)	Surface height, NW end (aOD)	Depth & height of natural (aOD)
2	20m x 1.8m NW-SE	155691, 37183	7.14m	6.80m 0.35m deep
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
201	Layer	Friable gravel/aggregate layer	0.10m deep	-
202	Layer	Modern make-up layer containing glass, brick and iron bound with dark grey-brown sandy silt.	0.25m deep	-
203	Natural	Firm light blue-grey mudstone.	-	-
204	Fill of [205]	Friable mid brown-red sandy silt containing frequent glass and iron rebar.	D:0.10m	-
205	Modern cut	Cut of modern feature with straight sides and concrete at base.	L:0.50m+ W:0.60m D:0.10m	

Trench No.	Length, width & alignment	Grid Reference (NE end)	Surface height, NE end (aOD)	Depth & height of natural (aOD)
3	20m x 1.8m NE-SW	155717, 37179	7.30m	7.00m 0.30m deep
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
301	Layer	Loose light grey gravel.	0.10m deep	-
302	Layer	Modern make-up layer containing glass and iron fragments bound with dark grey-brown sandy silt.	0.20m deep	-
303	Natural	Firm light blue-grey-orange siltstone/mudstone.	-	-

Trench No.	Length, width & alignment	Grid Reference (SW end)	Surface height, SW end (aOD)	Depth & height of natural (aOD)
4	20m x 1.8m NE-SW	155726, 37184	7.26m	6.85m 0.40m deep
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
401	Layer	Loose light brown-grey gravel/aggregate layer	0.15m deep	-
402	Layer	Modern make-up layer containing large stone fragments bound by dark silty sand.	0.25m deep	-
403	Natural	Firm light yellow-grey siltstone/mudstone.	-	-
404	Layer	Dense concentration of firmly compacted stones bound with tarmac, including metal fragments.	D:0.25m	
405	Fill of [406]	Firm grey-black sand with frequent stones, tarmac and other industrial waste.	W:c.1m D:c.1m	-
406	Linear feature	NW to SE aligned linear feature with straight, near vertical, sided profile. Feature not fully excavated due to concrete at base.	W:c.1m D:c.1m	-

Trench No.	Length, width & alignment	Grid Reference (SW end)	Surface height, SW end (aOD)	Depth & height of natural (aOD)
5	20m x 1.8m NE-SW	155715, 37167	7.69m	7.30m 0.40m deep
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
501	Layer	Type 1 aggregate – friable dark brown-grey sandy gravel.	0.15m deep	-
502	Layer	Modern make-up layer comprised of firm black sandy silt with frequent stones.	0.25m deep	-
503	Natural	Firm light yellow-grey mudstone.	-	-
504	Fill of [505]	Friable-loose dark brown-grey-black sandy silt with frequent gravel and large slag inclusions.	D:0.32m	-
505	Pit	Cut of large pit of uncertain shape, with steep sides and flat base. Cut by later wall [508].	W:5m D:0.32m	-
506	Wall	NE to SW aligned wall constructed from large blocks of roughly hewn granite bound by lime mortar, max size: 0.60m x 0.70m x 0.24m.	L:2m+ W:1.50m	-
507	Fill of [508]	Firm dark brown-grey sandy silt wall packing.	W:0.10m D:0.50m	-
508	Wall cut	Straight sided wall cut, aligned NE to SW.	L:2m+ W:1.50m	-

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509	Fill of [511]	Friable-firm light brown-yellow sandy silt with occasional small stones.	W:0.75m D:0.18m	-
510	Fill of [511]	Firm dark brown-grey sandy silt with frequent slag inclusions. Slag appears similar to that recovered from (504).	W:0.75m D:0.17m	-
511	Pit	Cut of large pit of uncertain shape. Cut by wall [508] and Pit [505]	W:4m+ D:0.29m	

Trench No.	Length, width & alignment	Grid Reference (NE end)	Surface height, NW end (aOD)	Depth & height of natural (aOD)
<b>6</b>	<b>20m x 1.8m NW-SE</b>	<b>155745, 37200</b>	<b>6.63m</b>	<b>6.20m 0.45m deep</b>
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/ Samples</i>
601	Layer	Firm dark brown-grey silty sandy gravel aggregate layer.	0.20m deep	-
602	Layer	Modern make-up layer containing brick, iron fragments and frequent large stones bound by dark brown-grey silty sand.	0.25m deep.	-
603	Natural	Firm light yellow-grey mudstone.	-	-
604	Brick layer	Brick surface comprised of red and grey bricks, c. 0.10m x 0.15m x 0.07m. Bricks were straight sided and bound by small quantity of lime mortar.	L:6m W:1.80m excavated	-
605	Layer	Modern layer containing brick, slag and ash bound by dark silty sand. Not excavated	D:0.12m	-
606	Fill of [607]	Friable-firm mid brown-grey sandy silt with modern brick and plastic.	L:2.50m W:1m	-
607	Modern intrusion	Square cut of modern intrusion.	L:2.50m W:1m	-
608	Layer	Soft white ashy sandy silt. Possible destruction layer.	D:0.04m	-
609	Layer	Hard red-brown modern destruction layer containing frequent bricks and stone fragments.	D:0.07m	
610	Layer	Firm pink-grey modern destruction layer containing a lot of stones and brick fragments. Uneven and partially loose.	D:0.12m	-
611	Layer	Soft-loose dark grey sandy silt with occasional stones.	D:0.41m	-
612	Layer	Hard light red-brown sandy silt with frequent stones.	D:0.47m+	-

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Trench No.	Length, width & alignment	Grid Reference (W end)	Surface height, W end (aOD)	Depth & height of natural (aOD)
7	20m x 1.8m E-W	155761, 37199	6.44m	6.05m 0.40m deep
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
701	Layer	Loose light grey gravel/aggregate layer.	0.15m deep	-
702	Layer	Modern make-up layer containing frequent bricks and glass bound by dark grey-brown sandy silt.	0.25m deep	-
703	Natural	Firm light grey/orange mudstone.	-	-
704	Wall	NW to SE aligned wall constructed from rectangular bricks, with a layer of flat tiles at the base. Bricks were bound with lime mortar and measured 0.15m x 0.12m x 0.06m.	L:1.25+m W:0.71m D:0.21m	-
705	Fill of [706]	Firm dark black silty sand with occasional stones and pieces of brick. Packing fill for wall 704.	W:0.13m D:0.28m	-
706	Wall construction cut	Steeply sloping V-shaped cut for NW to SE aligned wall 704, with flattish base.	W:0.85m D:0.30m	-
707	Fill of [709]	Hard dark red sandy destruction layer, containing high frequency of bricks and other debris.	W:2.07m D:0.22m	-
708	Fill of [709]	Loose dark grey sand with flecks of white mortar, containing occasional small stones.	W:0.81m	-
709	Linear feature	Cut of feature truncated by wall cut [706]. True profile and alignment of feature is uncertain.	W:2.07m	-
710	Fill of [706]	Firm dark black silty sand with occasional small stones and brick fragments.	W:0.31m D:0.18m	-

Trench No.	Length, width & alignment	Grid Reference (SW end)	Surface height, SW end (aOD)	Depth & height of natural (aOD)
8	20m x 1.8m NE-SW	155764, 37187	6.42m	6.05m 0.35m deep
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
801	Layer	Loose light grey gravel/aggregate layer.	0.15m deep	-
802	Layer	Modern make up layer containing brick, glass and iron fragments bound by friable dark grey-brown sandy silt.	0.20m deep	-
803	Natural	Firm light yellow-grey siltstone.	-	-
804	Layer	Brick surface comprised of red and yellow bricks measuring 0.11m x 0.07m x 0.07m with straight sides. No clear bonding material was noted.	L:10m W:1.8m+	-

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805	Fill of [806]	Firm red-black silty sand with occasional very small pieces of modern brick and glass.	W:0.49m D:0.19m	-
806	Posthole	Circular cut of modern posthole with straight sides and rounded base.	W:0.49m D:0.19m	-





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