

**Archaeological Watching Brief Report
East Street, Spice Island
Portsmouth, Hampshire**

**NGR 462977 099510
SU 62977 99510**

**ASE Project No: 5684
Sitecode: SIP 12**

**ASE Report No. 2012266
OASIS ID: 139832**

**By Philippa Stephenson
with contributions by Gemma Ayton
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Abstract

Archaeology South-East was commissioned by 4Delivery Ltd on behalf of their client Southern Water to undertake an archaeological watching brief during ground works undertaken on 'Spice Island', specifically in a trench and manholes along the north side of East Street.

Natural substrate was not attained. A probable 17th layer identified at a depth of 0.85m towards the eastern extent of the operation contains vegetation remains indicative of a possible wet grassland environment in the immediate area at this date. The earliest construction identified belongs to the mid-late 19th-20th century and is presumed associated to immediate harbour and quayside activity. The southern extent of a brick platform, 2.50m wide – possibly with slight truncation to the east – was identified running northwards under Camber Quay. A single course brick surface abutted its southern limit. This was sealed by a thick reinforced concrete platform supporting a cobbled surface, presumed to be contemporary to existing modern cobbles in the immediate vicinity. Reddish concrete surfaces apparently contemporary to the cobbled area were identified immediately under the modern concrete of Camber Quay and to the west, behind the harbour. To the west, this surface post-dated a large concrete plinth presumed to be associated with the harbour construction.

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1.0 INTRODUCTION

1.1 Site Background

1.0 Introduction

1.1 Archaeology South-East (ASE), the contracting division of the Centre for Applied Archaeology (CAA), University College London (UCL), was commissioned by 4Delivery Ltd on behalf of their client Southern Water to undertake an archaeological watching brief during the installation of new pipework undertaken along East Street on 'Spice Island', Portsmouth (Figure 1).

1.2 Specifically, the watching brief monitored the excavation of a trench for a pipe extending E-W along the northern side of East Street over a distance of 28.0m and the excavations for two associated manhole pits 2.0 x 1.5m.

1.2 Geology and Topography

1.2.1 The site lies on a relatively narrow spit of land on the eastern approach to the modern Portsmouth Harbour but would have served as an effective natural breakwater, affording excellent defensive positions on the seaward approach to the historic port.

1.2.2 The British Geological Survey shows that the site lies on made ground, overlying Quaternary storm beach deposits, overlying Eocene epoch bedrock (Wittering Formation).

1.3 Planning Background

1.3.1 4D have previously established with the Archaeological Advisor to Portsmouth City Council (Dr Andy Russel) that any ground works over 400mm deep taking place on 'Spice Island' should be subject to an archaeological watching brief. Subsequently it was established between ASE and Dr Russel that as the majority of the draining remediation works work was non-invasive the only work requiring an archaeological watching brief was the excavation of a new surface water sewer, associated lateral connections and two inspections chambers (Figures 2 and 3).

1.3.2 The works are 'permitted development' and are therefore not subject to formal planning consent. A Written Scheme of Investigation for the watching brief was produced (ASE 2012) and approved by Dr Russel prior to the commencement of fieldwork.

1.4 Aims and Objectives

1.4.1 The purpose of the watching brief was outlined in the WSI (ASE 2012).

1.4.2 The general objective of the archaeological work was to monitor the specified groundworks in order to ensure that any deposits, features, artefacts or ecofacts of archaeological interest exposed and impacted by the drainage remediation scheme were recorded and interpreted to appropriate standards. Particular attention was made to recording any information on the early development of the gravel spit, in addition to later activity, principally from the

medieval period onwards.

- 1.4.3 A further aim was to make the results of the investigation publicly accessible through submission of a report to the Portsmouth City Council (PCC) Historic Environment Record and the project archive to Portsmouth City Museum. An OASIS (Online Access to the Index of Archaeological Investigations) form has also been completed for the project.

1.5 Scope of Report

- 1.5.1 This report details the results of the archaeological work on the site. The work was undertaken over 7 days between the 4th and 12th December 2012 by Philippa Stephenson (Archaeologist) and Catherine Douglas (Archaeologist). Project Management was undertaken by Neil Griffin (fieldwork) and Dan Swift (post-excavation management). The illustrations were prepared by Antonio Reis and Justin Russell.

2.0 ARCHAEOLOGICAL BACKGROUND

- 2.1 A search of the Portsmouth City Council (PCC) Historic Environment Record (HER) was conducted for the WSI (ASE 2012; see Figure 1). This identified 124 entries within c.500m of the site. The majority of these relate to Listed Buildings (84) or other unlisted historic structures. More than half of all entries lie on the mainland adjacent to Spice Island, generally focused around the historic core of Old Portsmouth and the historic dockyard and highlight the medieval and post-medieval development of the town, associated port and its defences.
- 2.2 Very little pre-medieval activity is recorded with the exception of a number of Iron Age coins and Iron Age coin hoard, the precise locations of which are not known. A number of Roman coins were recovered during the excavation of wall footings on the east side of White Hart Road only c.200m southeast of the site.
- 2.3 An archaeological evaluation undertaken to the north of East Street revealed a number of stone revetment walls, timber-lined wells of 16th/17th century date and at least one metre of 16th-19th century build up containing large quantities of clay tobacco pipe fragments (Dr Andy Russel, *pers comm*). Lime kilns are depicted on Tudor maps of the area whilst a later map of 1762 shows an arrangement of roads, buildings and defences.
- 2.4 Post-medieval artefacts were found in the late 1980s/early 1990s during the digging of foundations at 48 St. Thomas' Street approximately 40m west of the site. The artefacts include animal bone, clay pipe from the late 17th-early 18th century, the top half of a Bellarmine, pottery, nails, one piece of glass and a wooden toothbrush.
- 2.5 As an important naval installation Portsmouth suffered considerable bomb damage during World War II. A contemporary map shows the positions recorded by the ARP (Air Raid Precautions) of the large bombs which fell on Portsmouth during WW2. A number marked along East Street, the westernmost of which is on/close to where the new surface water sewer is to be installed.
- 2.6 Post war re-development and the installation of services, drainage, etc along East Street may have damaged or destroyed any deposits of archaeological significance.

3.0 ARCHAEOLOGICAL METHODOLOGY

(Figures 2 and 3)

- 3.1 An archaeologist was in attendance throughout the excavation of the new surface water sewer, associated lateral connections and two inspections chambers until it became apparent that no further significant archaeological features, deposits, artefacts and ecofacts would be revealed by the excavations.
- 3.2 The drainage contractor allowed ASE archaeologist/s reasonable time and resources to undertake any inspection or recording required.
- 3.3 Dr Russel was kept informed of progress so that he might monitor the work as necessary.
- 3.5 All mechanical excavation was undertaken using a flat-bladed bucket.
- 3.6 Archaeological structures, features and deposits exposed or excavated were planned onto a copy of the Ordnance Survey map not smaller than 1:2500 scale by means of taped offsets from known points.
- 3.7 All archaeological features and deposits were recorded using the standard recording sheets used by ASE and in accordance with IfA guidelines (IfA 2001).
- 3.8 A full digital photographic record was maintained throughout the duration of the work.
- 3.9 All archaeological features and the spoil heaps were scanned with a metal detector.
- 3.10 A representative sample was collected from the large building structure identified in preference to complete recovery.
- 3.11 ASE has been in contact with Portsmouth City Museum regarding the long term repository for this site and an accession number obtained (2012/932). This will be used as the unique site identifier for all site records, photographs and artefacts. The site archive is currently held at the offices of ASE and will be deposited in due course.

Number of Contexts	26
No. of files/paper record	1
Plan and sections sheets	5
Bulk Samples	2
Photographs	48
Bulk finds	1 box
Registered finds	3

Table 1: Quantification of site archive

the eastern end descending to an unknown depth. The structure formed a low platform with a flat brick surface.

- 4.3.3 An upper brick surface [16] set into a thick white lime mortar [08], overlay two lower courses. The construction of this surface evidences some care, the southern limit having an edge revetment of headers, the bricks elsewhere organised into blocks of headers and stretchers. There was a localised concrete repair to the lower brick elevation course [09] at the eastern limit of the structure. The platform was supported along its southern limit by a brick-built stanchion [11], 0.40m wide and 0.30m deep, the lower courses of which are stepped. The western limit of the structure had a similar brick stanchion, with 5 courses descending to a depth of 0.37m. Within the body of the structure the brick platform was supported by a plinth of very compacted lightly bonded with cement [12], the upper horizon of which [14] was less compressed, together forming a layer 0.24m thick.
- 4.3.4 The structure was supported at the eastern end by a sunken foundation [17], 0.45m wide, constructed of brick fragments at the base overlain by a 0.20m thick deposit of concrete, within cut [22]. To the west, the foundation cut [22] truncated a loose underlying layer of hogging [19] to a depth of 0.26m.
- 4.3.5 To the east a deep cut [27] truncated the concrete plinth [03] forming a trench 0.87m deep and 0.68m wide against the eastern limit of the structure. Clearly out of phase with the construction of [07] this cut is a more recent intrusion, pre-dating only the modern concrete of Camber quay, and probably indicating the truncation of the structure at this end. No brick stanchion corresponding to those limiting the structure to the west and south was observed on this side of the structure.
- 4.3.6 A loose dark-grey sandy-silt with brick rubble and frequent inclusions of mortar [15] abutted the southern edge of the platform structure [07]. It was sealed by a single course brick surface [10], abutting the upper surface [16] of the structure [07]. Constructed of frogged brick and brick fragments, this forms an irregular, poorly-founded circulation surface showing evidence of subsidence into the loose underlying deposit [15]. Two fragments of pottery date this deposit to the later 19th-20th century, a date supported by a clay pipe stem and bowl, the latter dated between 1850-1910. An iron bolt with hexagonal nut falls within the same broad date range. Ceramic building material retrieved from this deposit include a late 18th-19th century peg tile which had been re-used in construction, its broken edges being covered in mortar, and small fragments of brick of types B1, B2 and B4.
- 4.3.7 A series of brick samples was taken from the platform structure [07] and the adjacent surface [10] in an attempt to establish its original construction date and any repairs and the later construction date of [10]. A typology established by Luke Barber establishes the presence of three brick-types with dates ranging from the late 18th to the early 20th century (circa 1940). The latest brick-type, B1, however, proves to be present throughout the structure, with the exception of the foundation [17], the single sample of which belongs to type B3. The evidence is sufficient to situate the original construction of the platform between the mid-later 19th century and the earlier part of the 20th century. Brick of a probably slightly earlier production date may have been in re-use within the structure. The bricks of the adjacent surface [10] belong to the same period.

- 4.3.8 Two environmental samples were taken in the vicinity of the platform, contexts [15] and [18], the latter corresponding to the dark grey clay-silt deposit [18] = [06] discussed in the previous section, and here truncated to the west by foundation cut [22].
- 4.3.9 A small sample from [15] was taken to identify the presence or absence of coal-rich deposits in the vicinity of the brick platform. It was thought possible that this structure corresponded to industrial coal-storage structures identified in the area. The sample however only produced one coal granule and a low density of small charcoal fragments. This tends to disprove coal-associated activity within the vicinity of the platform. However the formation process of this deposit is not established and it may not provide accurate data regarding the use of the platform. No other deposit clearly associated to this structure was available for sampling.
- 4.3.10 A 10L sample from deposit [18] produced a further 2 coal granules but, of more interest, a high proportion of uncharred vegetation including uncharred weed seeds from meadow / creeping / bulbous buttercups (*Ranunculus acris* / *repens* / *bulbosus*) and seeds from the pink (Caryophyllaceae) family. A small quantity of charcoal remains were identified as beech (*Fagus sylvatica*) and oak (*Quercus*). The residue also contained a small amount of burnt and unburnt mammal bones and marine shells. The artefact assemblage included clay pipes, possible leather, slag, slate, CBM and textile. The results from this sample would tend to support the earlier 17th date proposed for this deposit, reflecting a possible wet grassland environment on the margins of settlement for this period. They tally less well with the later 19th-20th century date proposed by possibly contaminant pot sherds when the area would almost certainly have had a more industrial function related to use of Camber quay.

Context	Type	Description	Max. Length m	Max. Width m	Depth m	Depth below Ground m
07	Construction	Brick structure	2.50	>0.92	0.50	0.50
07	Construction	Lower brick courses of structure [07]	2.50	0.22	0.15	0.67
08	Construction	Bonding between [16] and [09] in [07]	2.50	>0.60	0.50	0.50
09	Construction	Concrete in [07]				
10	Construction	Brick surface	>1.30	>0.45	0.11	0.55
11	Construction	Brick foundation of [07]	2.50	0.40	0.30	0.75
12	Construction	Foundation plinth of [07]	2.50	>0.92	0.14	0.90
13	Construction	Concrete surface	>4.0	>0.25	0.10	0.18
14	Construction	Infill of St. [07]	-	0.55	0.10	0.75
15	Deposit	Made ground below [10]	>1.30	>0.36	>0.38	0.62
16	Construction	Upper surface of [07]	2.50	0.92	0.11	
17	Construction	Foundation of [07]	0.70	0.50	-	0.90
18 = 06	Deposit	Grey clay-silt layer	>1.10	>0.60	>0.15	0.87
19	Deposit	Made ground	>1.10	Tr.	0.26	0.82
21	Deposit	Fill of [27]	-	0.68	0.87	0.30
22	Cut	Construction cut for [07]	0.35	0.30	0.26	0.90
27	Cut	Modern intrusion/robbing?	-	0.68	0.87	0.30

Table 3: Contexts recorded for Manhole 1

4.4 The Western Trench

(Figure 3)

- 4.4.1 Length: 22.0m Width: 0.50m Depth: 0.65 – 1.0m
- 4.4.2 A major concrete plinth [26] extended across the western end of this trench at a depth of 0.65m believed to correspond to construction for the harbour situated immediately to the north. This was left *in-situ*.
- 4.4.3 A friable mid-dark brown silt deposit [25] corresponding to made ground, with frequent inclusions of CBM, broken concrete and stony rubble, wood fragments and some bone, seals the plinth [26] at the west to a depth of approximately 0.40m, being deepest to the west where it abuts the brick platform, structure [07]. This is sealed to the east by the concrete plinth [03] = [24] supporting the cobbled road [02], and to the west by the pinkish red concrete [23]. A fragment of iron pipe of probably late 19th-early 20th century date was retrieved from this deposit.
- 4.4.4 Concrete [23], 0.05m in depth, extended westward from a starting point a short distance from the western edge of [03] = [24] over a distance of 6.50m where it was truncated by modern service trenches. The modern road surface [01] seals both concrete [23] and the cobbles [02], initially 0.05m in depth, becoming 0.17m in depth to the west.
- 4.4.5 The trench was monitored to a distance of 4.00m from its western limit.

Context	Type	Description	Max. Length m	Max. Width m	Deposit Thickness m	Depth Below Ground m
23	Construction	Pink/red Concrete	6.50	Tr.	0.05	0.11
24 = 03	Construction	Concrete	13.50	Tr.	0.16	0.27
25	Deposit	Made ground	21.30	Tr.	0.40	0.43
26	Construction	Concrete	8 - 10	Tr.	-	0.65

Table 4: Contexts recorded in the western trench segment

5.0 THE FINDS

5.1 Summary

A small assemblage, mainly of late post-medieval date, was recovered during the excavations. Overviews can be found in Tables 5 and 7. Finds were all washed and dried or air dried as appropriate. They were counted, weighed and bagged by material and by context. Registered finds numbers were allocated to a number of objects (RF <00>; Table 7); these were recorded on individual *pro forma* sheets for archive. None of the metal finds require x-ray.

Context	Pottery	Wt (g)	CBM	Wt (g)	Bone	Wt (g)	Fe	Wt (g)	CTP	Wt (g)
7			2	13174						
10			1	3914						
11			1	2570						
15	2	<2	1	76			2	186		
16			1	2892						
17			4	800						
18	5	30							1	<2
20			1	202						
25					3	44				
Total	7	30	11	23628	3	44	2	186	1	<2

Table 5: Quantification of the bulk finds.

5.2 Spot Dates

- 7 – 1850/75-1940 (brick only)
- 10 - 1850/75-1940 (brick only) same bricks but different mortar to [7]
- 11 - 1850/75-1940 (brick only) same mortar as [7]
- 14 - 1850-1940 (brick, slate only)
- 15 - 1850-1925 (x 2 small sherds pot only)
- 16 - 1850/75-1940 (brick only)
- 17 – 1750-1900+ (brick only)
- 18 – 1850-1925 (x 5 pot but also some abraded residual material of C17th-century date)
- 20 – 1875-1940+ (ceramic drain only)

5.3 The Pottery by Luke Barber

- 5.3.1 The archaeological work recovered a very small assemblage of pottery, all of which is of post-medieval date. By far the earliest consists of a heavily abraded 6g bodysherd of yellow glazed Border ware from context [18] (environmental residue <2>). Although the sherd probably belongs to the 17th century it is clearly residual as [18] also produced five (28g) quite fresh sherds from a mid 19th- to early 20th- century mug in refined white earthenware. The only other context to produce pottery was [15]. This contained a heavily abraded 2g sherd of early 19th- century transfer-printed pearlware with flow blue decoration as well as a 2g sherd from a later 19th- or early 20th- century refined white earthenware mug with green rim-edge line decoration.

5.4 The Ceramic Building Material by Luke Barber

5.4.1 A relatively large assemblage of CBM (ceramic building material) was recovered from the site. This has been fully listed on *pro forma* for archive. The assemblage is dominated by bricks and includes several complete examples. The different types are summarised in Table 6.

Fabric code	Description	Dimensions	Suggested date
B1	Crudely formed red frogged bricks. Medium fired. Fabric: Sparse sand with moderate voids, sparse chalk to 3mm and rare quartz pebbles to 7mm	229-239mm long 96-104mm wide 65-70mm high (vast majority 65mm)	Mid/late C19th – early 20th
B2	Well formed red frogless bricks. Medium/well fired. Fabric: Sparse fine sand with rare black iron oxides to 1mm and very rare flint grits to 1mm	155mm+ long 105mm wide 67mm high	C19th – early 20th
B3	Well formed red frogless bricks. Medium/well fired. Fabric: Sparse fine sand with rare quartz pebbles to 3mm	130mm+ long 110mm wide 66mm high	Late C18th/C19th – early 20th
B4	Quite well formed red frogless bricks. Low/medium fired. Fabric: Sparse fine sand with moderate red iron oxides to 3mm and sparse white marl streaks	No measurable dimensions	C18th – 19th

Table 6: Brick types

5.4.2 The largest group of the bricks from the site was recovered from context [7]. This assemblage is dominated by a block consisting of three B1 bricks and a single B2 brick crudely bonded together with a grey sandy cement mortar (17kg). There is also another complete B1 brick (2205g), somewhat warped/curved and with traces of similar mortar.

5.4.3 The two bricks from context [11] consist of a B1 example of the same type as in [7] as well as part of a B3 brick. The two are bonded together in a hard blue grey fine cement with occasional chalk inclusions to 2mm, a notably different bonding agent to that noted in [7].

5.4.4 Context [11] produced a single complete B1 brick of the same type as in [7] (2595g) with traces of a similar grey sandy cement mortar adhering. The bricks from context [16] were also similar B1 types in a grey sandy cement mortar.

5.4.5 Context [14] produced a number of small brick fragments from the environmental residue including pieces in B1 (24/54g), B3 (10/20g) and B4 (1/48g). The environmental residue from context [18] produced pieces of the same three fabrics (3/38g, 14/102g and 1/42g respectively). The only brick recovered from context [17] consisted of four pieces of B3.

5.4.6 The only other ceramic building material consists of a 76g fragment from a well formed and fired late 18th- to 19th- century peg tile, tempered with sparse fine sand and rare marl, and an unglazed piece of later 19th- to mid 20th- century drain (contexts [15] and [20] respectively). The tile has been reused in construction as there is mortar on all of its broken edges.

5.5 The Clay Tobacco Pipe by Elke Raemen

5.5.1 A small assemblage consisting of 11 clay tobacco pipe (CTP) fragments was recovered from two different contexts. Included are hand-collected pieces as well as pipe fragments recovered from the environmental residues. The assemblage contains three plain stem fragments from [15], dated to c. 1640-1680. Another four stem fragments as well as two small bowl fragments of this date were found in [18]. Context [15] contained in addition a plain stem fragment dated to c. 1750-1910 and a complete bowl dated to c. 1850-1910. Ribs on a slight platform are moulded over both back and front seams of the latter. None of the fragments retain maker's marks.

5.6 The Bulk Metalwork by Elke Raemen

5.6.1 Two pieces of ironwork were found in [15]. Both are amorphous lumps, probably representing just iron concretions. Both are too severely corroded to assist identification through x-ray.

5.7 The Registered Finds by Elke Raemen

5.7.1 Three finds were assigned registered finds numbers (Table 3). All three are of late post-medieval date. Wooden stake RF <1> is complete, measuring 198mm long with a diameter of 17mm. The bolt (RF <3>) from the same context contains a screw thread as well as a hexagonal nut, suggesting a late 19th- to early 20th-century date. An iron pipe (e.g. for water) from [25] is likely to be of similar date.

RF No	Cxt	Object	Material	Period	Wt (g)	Description
1	15	STAK	WOOD	PMED	24	cylindrical wooden stake
2	25	PIPE	IRON	PMED	4328	segment of a corroded pipe with hexagonal nut and screw thread
3	15	BOLT	IRON	PMED	246	

Table 7: Summary of the Registered Finds

5.8 The Geological Material by Luke Barber

5.8.1 Stone was recovered from the environmental residues of two contexts. The assemblage consists of three tiny granules of coal (contexts [15] 1/<1g and [18] 2/1g) and nine pieces of Welsh roofing slate (contexts [14] 8/40g and [18] 1/1g). All would be in keeping with a 19th- to early 20th- century date.

5.9 The Slag by Luke Barber

5.9.1 Slag was recovered from the environmental residues of two contexts. The assemblage consists of 15 small pieces of fuel ash slag (contexts [15] 13/66g and [18] 2/2g), almost certainly derived from the burning of coal during the

late post-medieval period.

5.10 The Animal Bone by Gemma Ayton

5.10.1 Context [25] produced three fragments of animal bones which are in a poor state of preservation. The fragments have been identified as the distal end of a cattle metapodial and are likely to have derived from the same bone. No evidence of butchery, burning, gnawing or pathology has been noted. Sample <2>, context [18] produced 13 fragments of bone, 2 of which are calcined and unidentifiable. The remaining assemblage includes small fragments of butchered vertebrae identified as medium-mammal and a further 7 unidentifiable fragments.

5.11 The Marine Shell by Elke Raemen

5.11.1 A small assemblage of 23 shell fragments was recovered from [18], environmental residue <2>. Included are 21 right valve fragments from an oyster shell (*Ostrea edulis*), representing a minimum of one individual shell. Two small fragments, from a scallop and a cockle, were also recovered.

6.0 ENVIRONMENTAL SAMPLES by Karine Le Hégarat & Dawn Elise Mooney

6.1 Introduction & Methodology

6.1.1 Two bulk soil samples were collected during the archaeological watching brief at Spice Island, Portsmouth primarily to assist finds recovery, and more precisely to establish the presence of coal in the deposits. In addition, the samples were taken for the recovery of environmental remains such as charcoal, charred macrobotanical remains, fauna and mollusca. Sample <1> originated from rubble deposit [15], and sample <2> came from a further modern layer ([18]). The samples were processed in their entirety in a flotation tank, and the flots and residues were retained on 500µm and 250µm meshes and air dried. The residues were passed through graded sieves (8, 4 and 2mm) and each fraction sorted for artefactual and environmental remains (Table 8). The flots were entirely scanned under a stereozoom microscope at x7-45 magnifications, and an overview of their contents recorded (Table 9). Preliminary identifications were made for the macrobotanical remains by comparing them with modern reference specimens and taxa recorded in reference atlases (Cappers *et al.* 2006 and NIAB 2004). Nomenclature used follows Stace (1997).

6.1.2 Charcoal fragments recovered from the heavy residue of the samples were fractured along three planes (transverse, radial and tangential) according to standardised procedures (Gale & Cutler 2000). Specimens were viewed under a stereozoom microscope for initial grouping, and an incident light microscope at magnifications up to 400x to facilitate identification of the woody taxa present. Taxonomic identifications were assigned by comparing suites of anatomical characteristics visible with those documented in reference atlases (Hather 2000, Schoch *et al.* 2004), and by comparison with modern reference material held at the Institute of Archaeology, University College London. Identifications have been given to species where possible, however genera, family or group names have been given where anatomical differences between taxa are not significant enough to permit satisfactory identification. Nomenclature used follows Stace (1997).

6.2 Results

6.2.1 Sample <1>

Sample <1> produced a very small flot (<2ml) which was dominated by sediment and small flecks of vitrified material which may represent coal. Nonetheless, sampling produced small quantities of wood charcoal. The sample flot produced mainly uncommon small charcoal fragments <4mm in size and highly degraded charcoal flecks. The sample residue produced only a small quantity of charcoal fragments, which were too small to permit taxonomic identifications. No other biological remains were present in the sample. The residue contained a small amount of artefact remains including coal but also slate, CBM and industrial waste.

6.2.2 Sample <2>

The flot from sample <2> was larger (100ml); it contained a high proportion of uncharred vegetation (representing 98% of the total flot) including broken down plant matter, an indeterminate bud and some uncharred weed seeds.

The latter were uncommon, but meadow / creeping / bulbous buttercups (*Ranunculus acris* / *repens* / *bulbosus*) were best represented followed by seeds from the pink (Caryophyllaceae) family. Sample <2> contained a small quantity of charred wood fragments, recorded in the flot and the residue. A small quantity of charcoal remains were identified as beech (*Fagus sylvatica*), oak (*Quercus* sp.) and common buckthorn (*Rhamnus cathartica*). Although a larger quantity of uncharred wood fragments was present in this sample, the preservation of these was insufficient for the assignment of taxonomic identifications. The residue contained a small amount of burnt and unburnt mammal bones and marine shells. Although artefact remains in the residue were varied, they were only present in low quantity. The assemblage included coal (see Barber) as well as fragments of clay pipes, possible leather, slag, slate, CBM and textile.

6.3 Discussion

- 6.3.1 Sampling at Spice Island in Portsmouth confirmed the presence of small quantities of artefact remains including coal. The samples have also provided evidence for charcoal, uncharred macroplant remains, bones and marine shells.
- 6.3.2 Infrequent uncharred weed seeds of meadow / creeping / bulbous buttercups and seeds of the pink family were evident in sample <2>. Seeds of meadow / creeping / bulbous buttercups are indicative of wet grassland. The seeds may be contemporary with the layer if the deposit was sufficiently waterlogged or well-sealed to enable preservation in anaerobic conditions. The plant could have grown in the surrounding area. However, the origin of the deposit is unclear, and the seeds could have come from further afield. Overall, the assemblage of macroplant remains is too limited to enable any detailed interpretation relating to the past local vegetation of the site.

6.3.3 The charcoal	Context	Context / deposit type	Sample Volume litres	Sub-Sample Volume litres	Charcoal >4mm	Weight (g)	Charcoal <4mm	Weight (g)	Charcoal Identifications	Bone and Teeth	Weight (g)	Burnt bone 2-4mm	Weight (g)	Marine Molluscs	Weight (g)	Other (eg ind, pot, cbm)
1	15	Layer	2	2			*	<2								Slate */38g, CBM **/122g, Slag */58g, Industrial waste */6g, coal */<2g
2	18	Layer	10	10	**	2	*	<2	<i>Fagus sylvatica</i> (3), <i>Rhamnus</i> <i>cathartica</i> (1), <i>Quercus</i> sp. (2)	**	24	*	<2	**	16	Textile */<2g, Pot */6g, Clay pipes */2g, Leather */<2g, Coal */<2g, Slag */4g, Uncharred wood **/12g, Slate */<2g, CBM **/198g

Table 8: Residue Quantification (* = 1-10, ** = 11-50, *** = 51-250, **** = >250) & weights in grams

Sample Number	Context	Weight g	Flot volume ml	Volume scanned	Uncharred %	Sediment %	Seeds uncharred	Charcoal >4mm	Charcoal <4mm	Charcoal <2mm	Large mammal bone	Industrial debris hammerscale
1	15	<2	<2	<2	2	28	-		*	*		****
2	18	24	100	100	98	2	** <i>Ranunculus acris / repens / bulbosus</i> , Caryophyllaceae, indet. bud		*	*	*(1) fgt	

Table 9: Flot Quantification (* = 1-10, ** = 11-50, *** = 51-250, **** = >250)

6.0 DISCUSSION AND CONCLUSIONS

- 6.1 Three phases of activity pre-dating the modern ground surface were identified, both apparently related to the harbour and quayside situated to the north of the site.
- 6.2 The earliest deposit attained [06] = [18] at a depth of 0.85m was a dark grey silty layer with a high proportion of uncharred vegetation and seeds indicative of a wet grassland environment. Almost certainly dated to the 17th century, it would appear to indicate a non-built environment in the immediate area, occasional artefacts and butchery remains indicative of the known occupation in the surrounding vicinity at this date.
- 6.2 A substantial brick platform [07] was recorded. This is of a reasonable construction quality and pre-dates the modern surface of Camber Quay, extending approximately 1.0m to the south of the present limit of this surface. The structure is bounded to the west and south by shallow brick footings or stanchions, the body of the structure being in-filled with compacted, lightly cemented hogging. The surface comprises two brick courses across the structure, the upper-most of which may evidence repairs. The eastern limit of the platform may have been subject to robbing. This side also appears to have been reinforced by a more deeply sunken foundation not observed to the west, but possibly not attained. The structure is dated to the late 19th-early 20th century, possibly incorporating some bricks slightly earlier in date in a re-use context.
- 6.2 A shallow brick surface, one course deep, abutted the southern limit of the platform. It is built of frogged brick bonded with hard concrete/mortar. It is without hard-core reinforcement being built directly onto a loose rubbly dump or make-up deposit, presumably in order to improve the quality of the circulation in this area and/or to raise the circulation level. It represents a relatively poor quality construction with poor load-bearing capacity; having suffered from subsidence, it has an irregular upper horizon.
- 6.3 To the west a substantial concrete plinth, probably relating to the construction of the harbour was identified at a depth of 0.65m.
- 6.4 The second phase of activity corresponds to the establishment of a cobbled surface, extending southwards from Camber Quay and established on a platform of reinforced concrete the width of the quay-front. As such it constitutes a substantial load-bearing construction. To the west and north, surfaces of red concrete - were identified, apparently contemporary to the cobbled road. In the quay area this is seated on the same reinforced concrete platform. To the west, it seals a friable rubbly dump or make-up deposit without other foundation. The concrete plinth [03] clearly represents an important reinforcement of the quay area and its southern access area. It is late 19th-20th century in date and was replaced by the contemporary tarmac surface of East Road.

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HER Summary Form

Site Code	SIP 12					
Identification Name and Address	East Street, 'Spice Island', Portsmouth, Hampshire, PO1 2JJ					
County, District &/or Borough	Portsmouth					
OS Grid Refs.	SU 62977 99510 / 462977 099510					
Geology	Made Ground, overlying Quaternary storm beach deposits, overlying Eocene Period Bedrock (Wittering)					
Arch. South-East Project Number	5684					
Type of Fieldwork	Eval.	Excav.	Watching Brief <input checked="" type="checkbox"/>	Standing Structure	Survey	Other
Type of Site	Green Field <input checked="" type="checkbox"/>	Shallow Urban	Deep Urban	Other <input checked="" type="checkbox"/> Built		
Dates of Fieldwork	Eval.	Excav.	WB. 4 th -12 th December 2012	Other		
Sponsor/Client	National Trust					
Project Manager	Neil Griffin					
Project Supervisor	Philippa Stephenson / Catherine Douglas					
Period Summary	Palaeo.	Meso.	Neo.	BA	IA	RB
	AS	MED	PM <input checked="" type="checkbox"/>	Other Modern <input checked="" type="checkbox"/>		
<p>Summary</p> <p>Archaeology South-East was commissioned by 4Delivery Ltd on behalf of their client Southern Water to undertake an archaeological watching brief during ground works undertaken on 'Spice Island', specifically in a trench and manholes along the north side of East Street.</p> <p>Natural substrate was not attained. A probable 17th layer identified at a depth of 0.85m towards the eastern extent of the operation contains vegetation remains indicative of a possible wet grassland environment in the immediate area at this date. The earliest construction identified belongs to the mid-late 19th-20th century and is presumed associated to immediate harbour and quayside activity. The southern extent of a brick platform, 2.50m wide – possibly with slight truncation to the east – was identified running northwards under Camber Quay. A single course brick surface abutted its southern limit. This was sealed by a thick reinforced concrete platform supporting a cobbled surface, presumed to be contemporary to existing modern cobbles in the immediate vicinity. Reddish concrete surfaces apparently contemporary to the cobbled area were identified immediately under the modern concrete of Camber Quay and to the west, behind the harbour. To the west, this surface post-dated a large concrete plinth presumed to be associated with the harbour construction.</p>						

OASIS Form

OASIS ID: archaeol6-139832

Project details

Project name	East street, 'Spice Island', portsmouth, Hampshire, P01 2JJ
Short description of the project	Archaeology South-East was commissioned by 4Delivery Ltd on behalf of their client Southern Water to undertake an archaeological watching brief during ground works undertaken on 'Spice Island', specifically in a trench and manholes along the north side of East Street. Natural substrate was not attained. A probable 17th layer identified at a depth of 0.85m towards the eastern extent of the operation contains vegetation remains indicative of a possible wet grassland environment in the immediate area at this date. The earliest construction identified belongs to the mid-late 19th-20th century and is presumed associated to immediate harbour and quayside activity. The southern extent of a brick platform, 2.50m wide - possibly with slight truncation to the east - was identified running northwards under Camber Quay. A single course brick surface abutted its southern limit. This was sealed by a thick reinforced concrete platform supporting a cobbled surface, presumed to be contemporary to existing modern cobbles in the immediate vicinity. Reddish concrete surfaces apparently contemporary to the cobbled area were identified immediately under the modern concrete of Camber Quay and to the west, behind the harbour. To the west, this surface post-dated a large concrete plinth presumed to be associated with the harbour construction.
Project dates	Start: 04-12-2012 End: 12-12-2012
Previous/future work	No / Not known
Any associated project reference codes	SIP 12 - Sitecode
Type of project	Recording project
Site status	None
Investigation type	""Watching Brief""

Project location

Country	England
Site location	HAMPSHIRE PORTSMOUTH PORTSMOUTH East Street, 'Spice island', Portsmouth
Postcode	P01 2JJ
Study area	35.00 Square metres
Site coordinates	SU 62977 99510 51 -1 51 41 25 N 001 05 19 W Point

Project creators

Name of Organisation	Archaeology South East
Project brief originator	4 Delivery Ltd
Project design originator	Archaeology South-East
Project director/manager	Neil Griffin
Project supervisor	Philippa Stephenson
Type of sponsor/funding body	Developer
Name of sponsor/funding body	4Delivery Ltd

Project archives

Physical Archive recipient	Portsmouth City Council
Physical Archive ID	SIP 12
Physical Contents	"Animal Bones","Ceramics","Environmental","Metal"
Digital Archive recipient	Portsmouth City Council
Digital Archive ID	SIP 12
Digital Contents	"Animal Bones","Ceramics","Environmental","Metal","Stratigraphic","Survey"
Digital Media available	"Text"
Paper Archive recipient	Portsmouth City Council
Paper Archive ID	SIP 12
Paper Contents	"Animal Bones","Ceramics","Environmental","Metal","Stratigraphic","Survey"
Paper Media available	"Context sheet","Correspondence","Photograph","Plan","Report","Section"

Project bibliography 1

Publication type	Grey literature (unpublished document/manuscript)
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Title archaeological watching brief report, east st, spice island,
portsmouth

Author(s)/Editor(s) Stephenson, P

Other bibliographic
details ASE Report No. 2012266

Date 2013

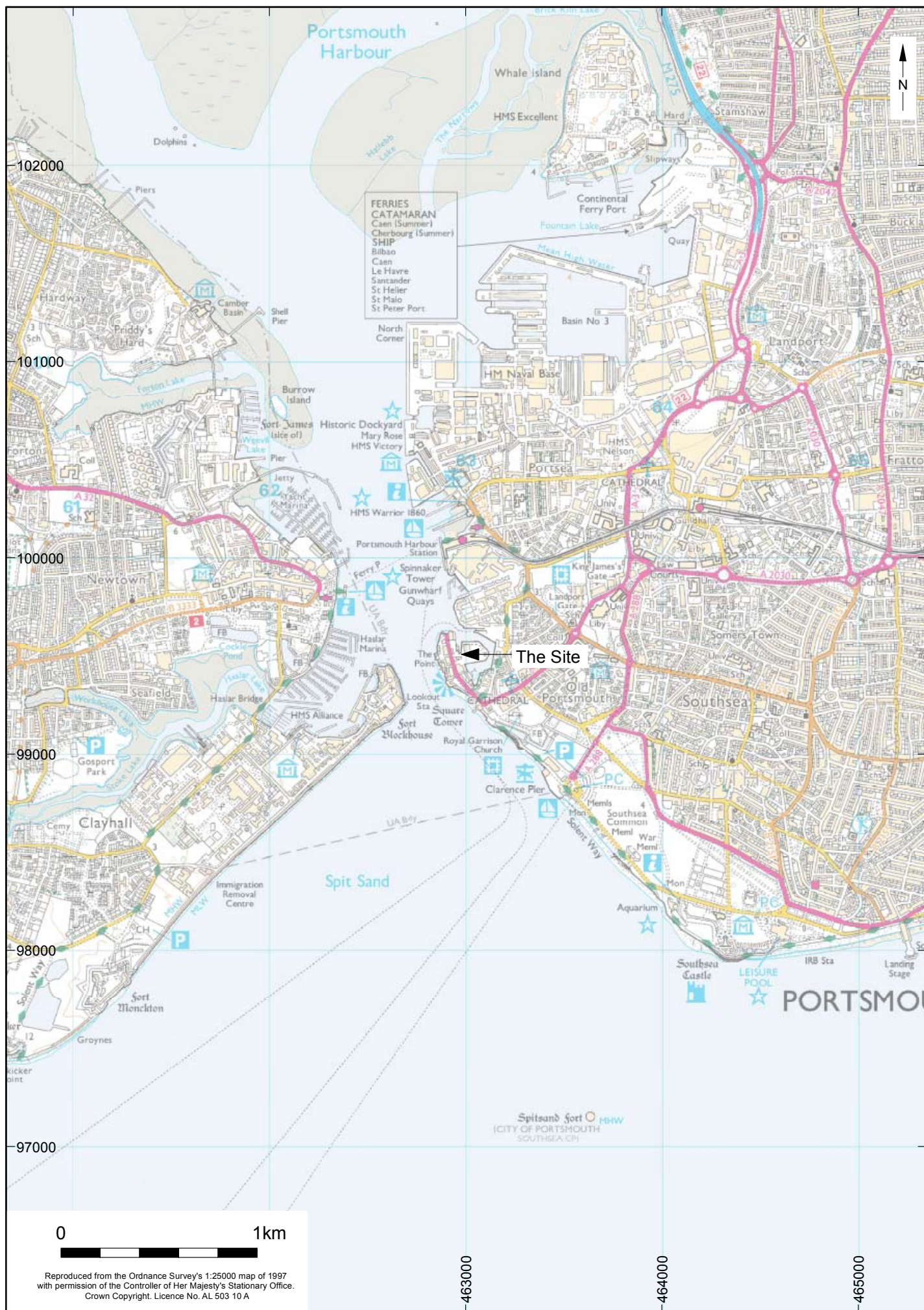
Issuer or
publisher ASE

Place of issue or
publication Portslade

Description grey lit bound rep

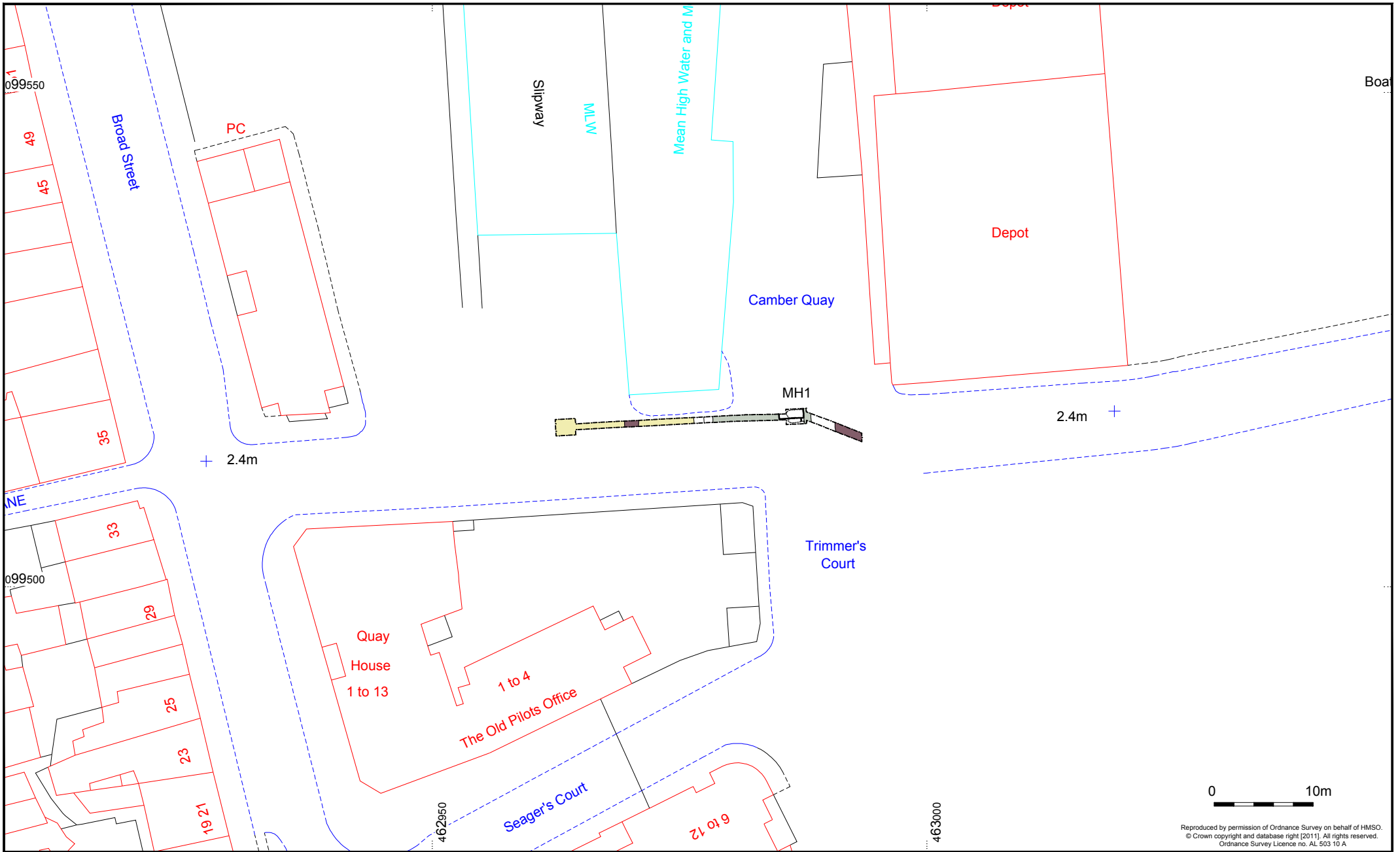
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© Archaeology South-East		Spice Island	Fig. 1
Project Ref: 5684	Jan 2012	Site location	
Report Ref: 2012226	Drawn by: JLR		



© Archaeology South-East		Spice Island	Fig. 2
Project Ref: 5684	Jan 2013	Location of monitored work	
Report Ref: 2012226	Drawn by: AR		

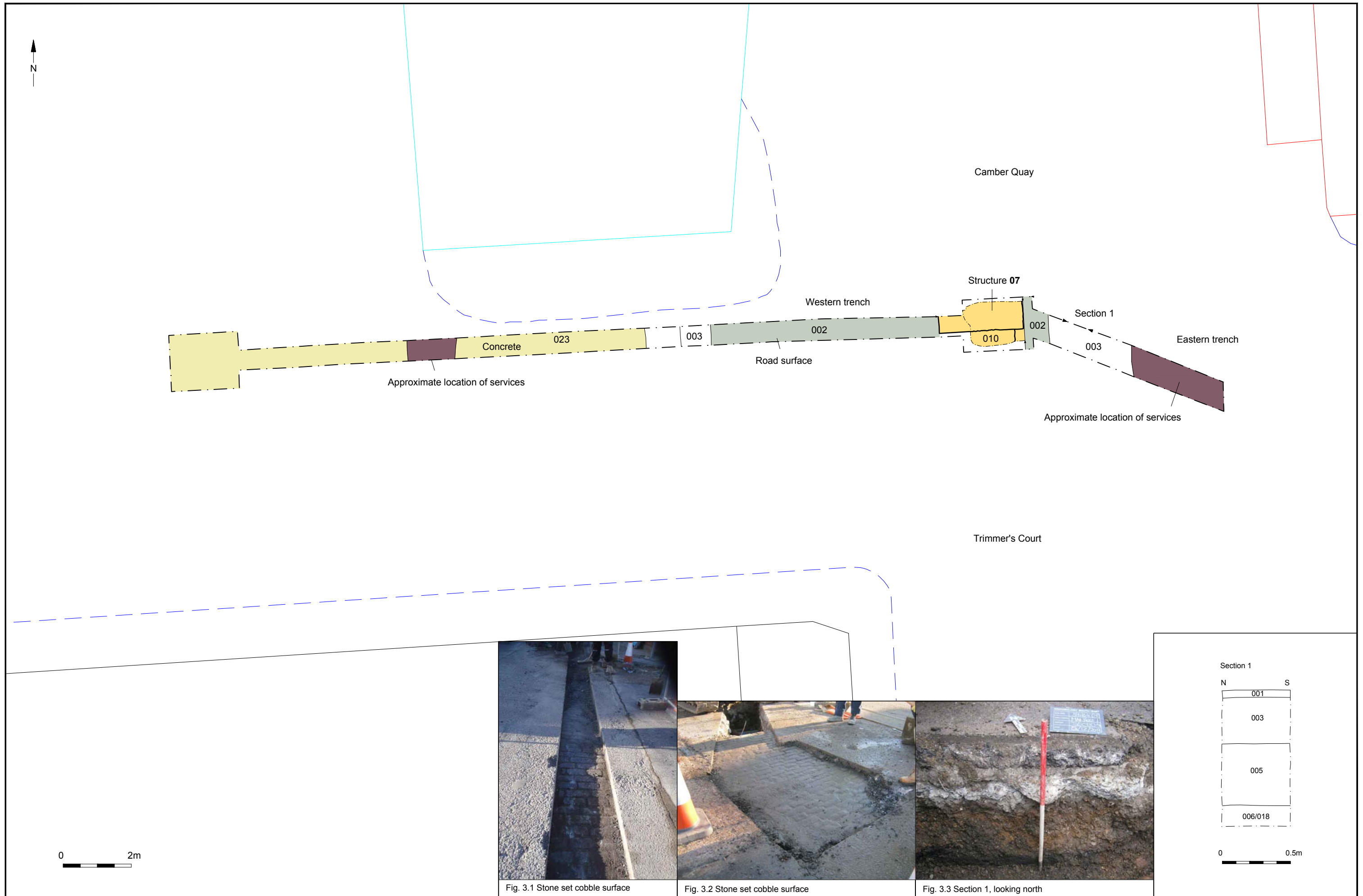


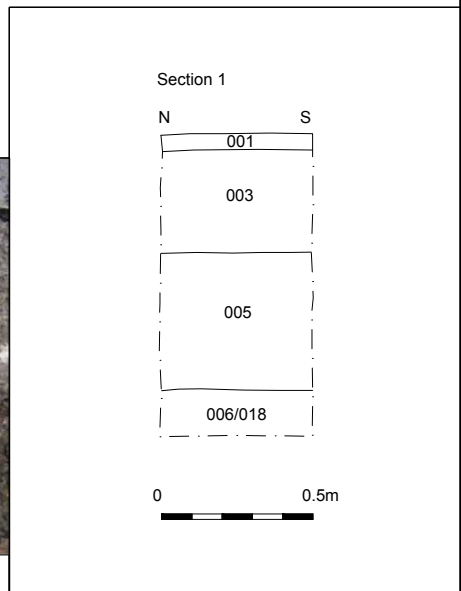
Fig. 3.1 Stone set cobble surface

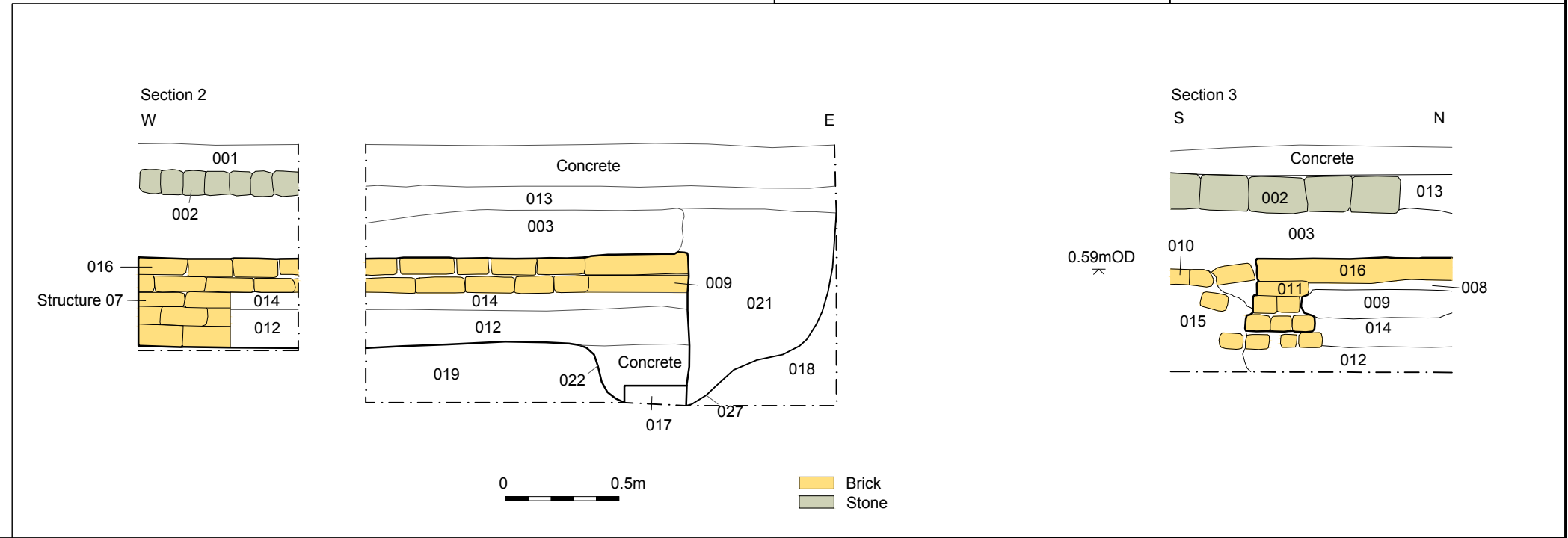
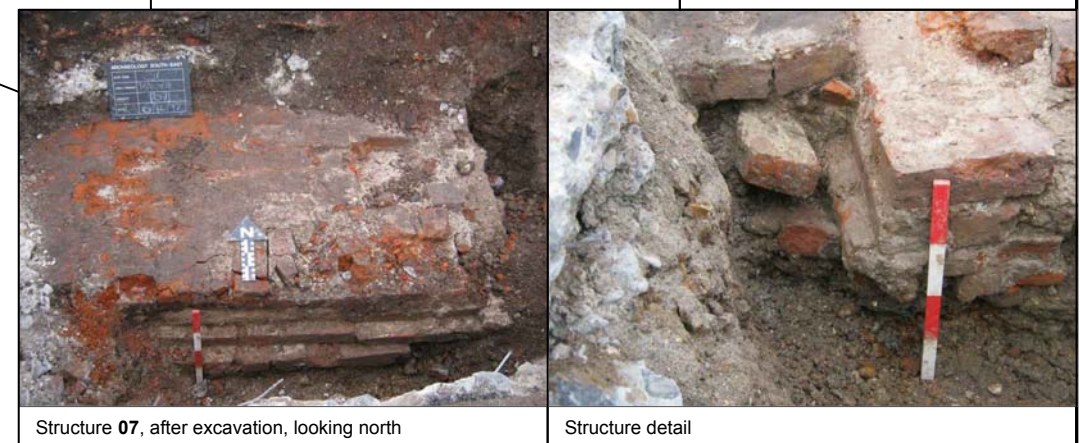
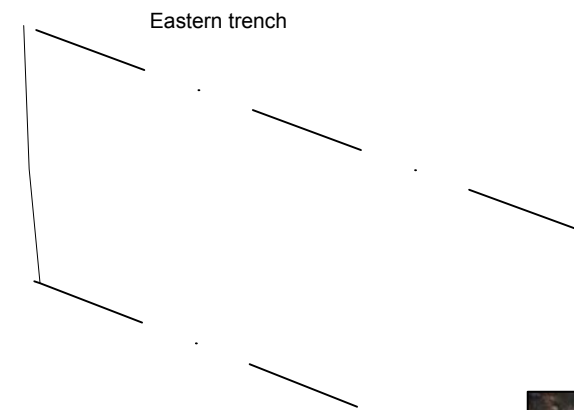
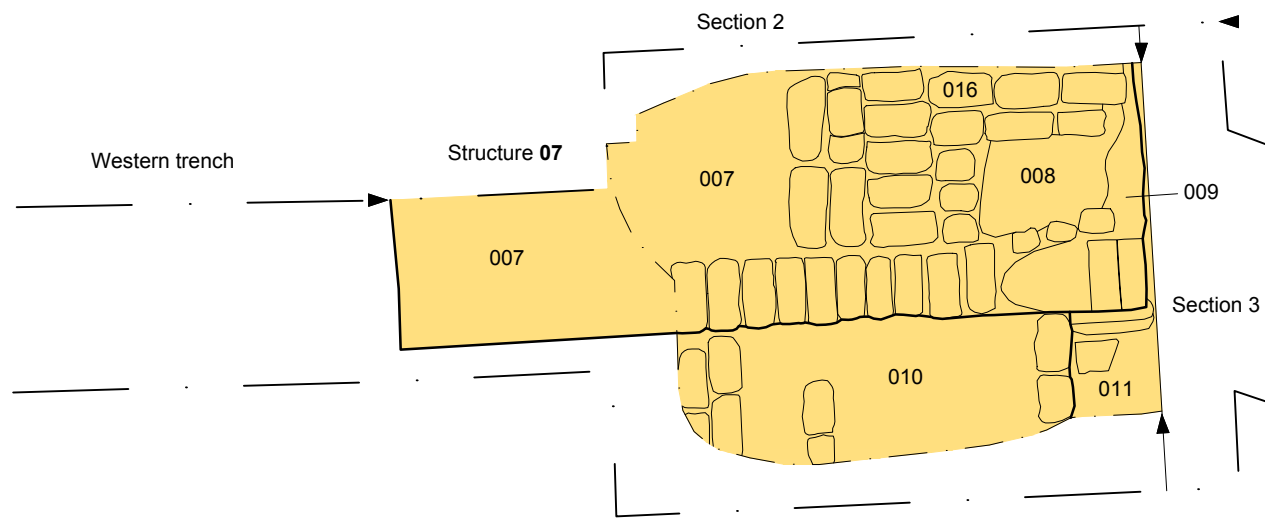
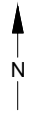


Fig. 3.2 Stone set cobble surface



Fig. 3.3 Section 1, looking north





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