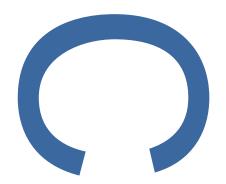
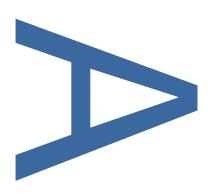




# ARCHAEOLOGICAL EVALUATION AND WATCHING BRIEF



**SITE CODE: KSFA18** 



**SEPETEMBER 2018** 

PRE-CONSTRUCT ARCHAEOLOGY

#### **DOCUMENT VERIFICATION**

### STROOD FLOOD DEFENCE SCHEME, STROOD, KENT. PHASE 1 SITE (CIVIC CENTRE)

#### Type of project

#### ARCHAEOLOGICAL EVALUATION AND WATCHING BRIEF

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## STROOD FLOOD DEFENCE SCHEME, STROOD, KENT. PHASE 1 SITE (CIVIC CENTRE):

#### ARCHAEOLOGICAL EVALUATION AND WATCHING BRIEF

Site Code: KSFA18

Central NGR: TQ 57382 16896

Local Planning Authority: Medway Council

Planning Reference: MC/17/1172 and MC/171173

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#### 1 ABSTRACT

- 1.1 This report presents the results of an archaeological evaluation and watching brief conducted by Pre-Construct Archaeology Ltd at the Phase 1 site (Civic Centre) of the proposed Strood Flood Defence Scheme in Strood, Kent (TQ 57382 16896). The site extends to some 3.65 hectares, and the evaluation trenching focused within a zone of heightened archaeological potential located in the eastern side of the site.
- 1.2 The excavation of evaluation Trenches 6, 7, 8, 9, 12 and 13, all positioned in the east part of the site, found a sequence of masonry structures consisting of stone foundations and floor surfaces spanning between the medieval to the late post-medieval periods.
- 1.3 The evaluation found five different phases of archaeological deposits: Phase 1 (Medieval); Phase 2 (16th century); Phase 3 (17th century); Phase 4 (18th century) and Phase 5 (19th century).
- 1.4 The archaeological evidence for Phase 1 consisted of water management works carried out on site during the medieval/late medieval period. In Trench 6/7 evidence for a north-west to south-east orientated canal, with ragstone walls as its banks, was found together with a sequence of deposits associated with reclamation and consolidation work associated with the early development of the site.
- During Phase 2 the site became occupied with the construction of a chalk foundation, probably belonging to a rectangular building, located at a short distance to the south of the canal. However, the majority of the masonry structures revealed on the site date to the 17th century (Phase 3) when the area to the south of the canal (Trench 6/7) and the area fronting the existing modern road (Trenches 8 and 12) were developed with a number of buildings constructed using ragstone foundations.
- During the 18th century (Phase 4) the 17th century building may have been still standing and in use; however, during the 19th century (Phase 5) the site seems to have been extensively redeveloped with the demolition of Phases 3 4 structures and levelling works for the new buildings.
- 1.7 The 20<sup>th</sup> century development of the site heavily impacted the below ground archaeological remains. It is believed that the majority of the site, in particular its western and north-western parts, contain only modern made ground and structures. The south-eastern part of the site, where the significant archaeological remains were found during the evaluation, also had been a subject to the modern truncation; however, as the late post-medieval remains were mostly lost, this part of the site still contains rich medieval and early to mid post-medieval deposits and structures with a potential for Roman remains below the known sequence.

#### 2 INTRODUCTION

- 2.1 This report describes the results and working methods of an archaeological evaluation and watching brief undertaken by Pre-Construct Archaeology at the Phase 1 site (Civic Centre) of the proposed Strood Flood Defence Scheme in Strood, Kent (Figure 1). The archaeological investigations followed the Written Scheme of Investigation prepared by Pre-Construct Archaeology Ltd (Pozorski 2018).
- 2.2 The works consisted of the evaluation by trial trenching and subsequent watching brief on sheet piling, within the former grounds of the Medway Council Civic Centre, currently being used as a car park, centred at National Grid Reference TQ 57382 16896. The site is bounded by the A2 (Strood High Street) to the north-east, the Esplanade to the south-east, The River Medway to the south, Jane's Creek to the south-west and the Medway Valley Rail Line to the north. The evaluation consisted of the excavation of 7 out of the 11 proposed evaluation trenches (Trenches 2, 3, 5, 6, 7, 8, and 9), one piling trench in place of the evaluation trench (Trench 10) and additional watching brief Trenches 12 and 13.
- 2.3 Initially proposed evaluation Trenches 1, 4, 10 and 11 were not excavated. Ground in Trench 1 area (west end of the site) was recently reduced exposing deep modern truncation throughout. Trench 4 (central/east) was also located within the area of modern disturbance and Trench 11 (north-east of the site) was situated in the area where the current site access has been established. Ben Found of KCC agreed to these changes in trenches layout and also suggested a minor relocation of Trench 6 and joining it with Trench 7 to achieve better exposure of archaeological remains.
- 2.4 The watching brief was carried out immediately after the evaluation was completed and comprised recording of open piling Trench 10 (in approximate location of abandoned evaluation Trench 10) and monitoring of excavation of two piling Trenches 11 and 12 (Figure 2).
- 2.5 A note on the archaeological impacts and recommendations for the project was prepared by Canterbury Archaeological Trust (CAT) in February 2017 (CAT 2017a) followed by an archaeological Desk-Based Assessment (DTA) carried out in March 2017 (CAT 2017b). Both documents were encompassed by a Heritage Impact Assessment prepared in August 2017 (CAT 2017c) which also included results of an archaeological watching brief on geotechnical site investigation.
- 2.6 The archaeological work was carried out in accordance with the following documents:
  - Written Scheme of Investigation for the project (Pozorski 2018)
  - Kent County Council's (KCC) Specification for an archaeological evaluation at the Former Medway Council Civic Centre Site bounded by the A2 (High Street), the Esplanade, the River Medway, Jane's Creek and the Medway Valley Rail Line, Strood, Kent
  - Management of Research Projects in the Historic Environment (MoRPHE Historic England

2016)

- 'Standard and guidance for an archaeological evaluation' (Chartered Institute for Archaeologists CIfA 2014).
- Standard and guidance for an archaeological watching brief' (Chartered Institute for Archaeologists CIfA 2014).
- 2.7 Pre-Construct Archaeology Ltd is a Registered Archaeological Organisation (number 23) with the Chartered Institute of Archaeologists which operate within the Institute 'Code of Conduct'.
- 2.8 The fieldwork was undertaken between 11th June and 8th August 2018.
- 2.9 The site was assigned the unique site code KSFA18.

#### 3 PLANNING BACKGROUND

- 3.1 National Guidance: National Planning Policy Framework
- 3.1.1 The National Planning Policy Framework (NPPF) was adopted in 2012 and updated in 2018. The NPPF constitutes guidance for local planning authorities and decision-takers both in drawing up plans and as a material consideration in determining applications. Chapter 16 of the NPPF 2018 concerns the conservation and enhancement of the historic environment.
- 3.1.2 In considering any proposal for development, including allocations in emerging development plans, the local planning authority will be mindful of the policy framework set by government guidance, existing development plan policy and of other material considerations.

#### 3.2 Local policy and research frameworks

- 3.2.1 Medway Council's Local Development Framework Policy CS12 (Heritage Assets), states that 'Medway's historic environment and heritage assets will be preserved and enhanced' by the following measures.
  - Supporting the conservation and, where appropriate, the enhancement of the historic environment and the contribution it makes to local and regional distinctiveness and sense of place.
  - Assessing new development within historic areas, within the setting of historic areas and landscapes or prominent in key views, in terms of its contribution to the preservation and enhancement of the special qualities of these areas, views and landscapes....
  - Encouraging proposals that make sensitive use of historic assets through regeneration, particularly where these bring redundant or under-used buildings and areas into appropriate and viable use.
  - Requiring design statements which accompany new development proposals to demonstrate an understanding of how the historic environment within which the development will sit, has informed the development of the design.

#### 3.3 Site Specific Planning Constraints and Background

- 3.3.1 Planning permission was granted on 20<sup>th</sup> November 2017 for the construction of new flood defences at the Phase 1 (Civic Centre) site including installation of sheet pile walls and ground raising, removal of an existing flood defence wall and demolition of the Civic Centre building and other ancillary works (Medway Council Planning Ref. MC/17/1172).
- 3.3.2 The planning condition (4) attached to the decision reads as follows:

- 4) No development shall take place until the developer has secured the implementation of a watching brief to be undertaken by an archaeologist approved by the Local Planning Authority so that the excavation is observed, and items of interest and finds are recorded. The watching brief shall be in accordance with a written programme and specification, which has been submitted to and approved in writing by the Local Planning Authority.
- Reason: To safeguard the archaeological interest in the site in accordance with Policy BNE21 of the Medway Local Plan 2003.
- 3.3.3 Although the condition required an archaeological watching brief during the ongoing groundworks on the site, the archaeological evaluation within the Phase 1 site (Civic Centre) has been requested by Mr Ben Found, the Senior Archaeological Officer of Kent County Council and the Archaeology Advisor to the Medway Council. The main reason for the change in the scheme was a high potential for important Roman and/or medieval remains to be present within the site. Subsequently, the programme of archaeological evaluation has been agreed.
- 3.3.4 At the earlier stages of preparation for the project, a note on the archaeological impacts and recommendations for the project had been prepared by Canterbury Archaeological Trust in February 2017 (CAT 2017a) followed by an Archaeological Desk-Based Assessment carried out in March 2017 (CAT 2017b). Both documents were encompassed by a Heritage Impact Assessment prepared in August 2017 (CAT 2017c). It also included results of an archaeological watching brief on geotechnical site investigation.
- 3.3.5 A specification prepared by Kent County Council in March 2018 (KCC 2018) set out requirements for the project. A Written Scheme of Investigation prepared by Pre-Construct Archaeology Ltd (Pozorski 2018) follows those requirements and sets out the detailed scope of work to be undertaken.

#### 4 GEOLOGY, TOPOGRAPHY AND SITE DESCRIPTION

#### 4.1 Geology

4.1.1 According to the British Geological Survey (BGS) of England and Wales, the local geology consists of chalk of the Lewes Nodular Chalk Formation, Seaford Chalk Formation and Newhaven Chalk Formation. The chalk is overlain by superficial deposit of alluvium and head clay and silt according to the BGS. During the geological site investigation gravels and sands were identified beneath finer alluvia in all sufficiently deep boreholes (CAT 2017c).

#### 4.2 Topography

4.2.1 The site lies between 3.9m and 4.7m OD on land generally sloping towards the river. The site levels will be raised to c. 6.0mOD as part of the flood defences scheme. Along the southern side of the site is Jane's Creek, one of a number of creeks and inlets along the Medway.

#### 4.3 Site description

4.3.1 The Phase 1 site is located at the former Medway Council Civic Centre Site, which is bounded by the A2 (Strood High Street), the Esplanade, the River Medway, Jane's Creek and the Medway Valley Rail Line Figure 1). The proposed site extends to some 3.65 hectares, with the evaluation trenching being focussed within a zone of heightened archaeological potential located in the eastern side of the site (adjacent to the High Street and the Esplanade). The site currently includes areas of surface car parking, roadways, and hardstanding, with areas of public green-space fronting the river. The footprints of several demolished buildings are visible. Access is via the Esplanade (via a junction off the A2 just north of Rochester Bridge) or from the north from Knight Road (via an access next to Strood Retail Park and under a bridge carrying the Medway Valley Rail Line (Figures 1-2).

#### 5 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

#### 5.1 Introduction

5.1.1 The following background is drawn from a detailed Heritage Impact Assessment prepared by Canterbury Archaeological Trust in August 2017 (CAT 2017c) and specification for the project prepared by Kent County Council (KCC 2018).

#### 5.2 Prehistoric

- 5.2.1 Some 4,000 Palaeolithic artefacts were excavated in 1924 in an area 600m from the edge of Phase 2 site, at the top of an old chalk quarry east of Frindsbury Church. An additional hand axe was recovered from a gravel area also in 1924 from Strood Hill (Wenban-Smith *et al* 2007).
- 5.2.2 There is growing evidence for later Prehistoric activity in the Strood area, including possible evidence for Bronze Age salt production a short distance to the north and for a late Iron Age settlement at Rochester of sufficient significance to include, for example, minting of coins which could have implication for late prehistoric activity in the Strood bank (CAT 2017b).

#### 5.3 Roman

- 5.3.1 In the Romano-British period Strood would become the location of an important river crossing over the Medway. A causeway is known across the marsh on the Strood side of the river, which is approximately followed by the line of the modern-day High Street. This causeway led to a bridge, of which possible remains were identified during the construction of the modern-day bridge. The Roman bridge is believed to have been constructed from oak piles driven into the chalk bedrock which supported masonry piers and a timber superstructure and deck. The precise alignment of the Romano-British bridge is not known but is possible that remains associated with this first crossing over the Medway may be present within the area of proposed flood works.
- 5.3.2 The recent geotechnical investigation on the site found a possible and very substantial ragstone structure (Bore Hole 104 located in the north-eastern corner of Phase 1 site) which has been suggested as being of possible Roman date. The ragstone structure would appear to be un the wrong position to be part of the medieval bridge of contemporary riverfront but would lie close to the projected alignment of the Roman crossing.
- 5.3.3 Additionally, there is evidence for Romano-British buildings and occupation flanking the causeway. For example, evidence for a Romano-British building was found immediately to the north of the site where a series of floor surfaces of probable 1st or 2nd century date was observed. There is continued evidence of salt production along the Strood bank of the Medway in the Romano-British period, as well of burials to either side of the causeway. Pottery of probable Roman date was observed during the recent geotechnical investigation on the site. Whilst possible make-up/stabilisation dumps of Romano-British date were encountered underlying the abovementioned ragstone structure.

#### 5.4 Medieval

- 5.4.1 The Roman bridge is reported to have stood until the 14th century (albeit rebuilt and repaired) when it was damaged beyond repair. Construction of a new crossing commenced in 1387 and was completed by 1391. The new medieval bridge was located upstream of the Roman crossing. The medieval bridge was built of stone, consisting of twelve massive piers, spanned by stone arches, but with a wooden draw-bridge towards the Strood end of the bridge to permit the passage of taller vessels. This medieval bridge is shown on the Strood Tithe Map of 1844, which clearly shown the bridge landing on the Strood side of the river at the site.
- 5.4.2 It is likely that the area of the proposed flood defence works would have been occupied by buildings and structures during the medieval period and there is some evidence in the geotechnical logs for consolidation of the waterfront in this period (KCC 2018), as well as for possible floors, surfaces and garden soils.

#### 5.5 Post-Medieval

- 5.5.1 Historic maps from the 17th century onwards, such as the Duke of Northumberland's 1663 map of Rochester by Robert Seath or Smith and the Rochester Bridge Warden's 1717 map (not illustrated), clearly show that the area covered by the evaluation and watching brief discussed in this report was partially developed, and by the time of the Strood Tithe Map (1844) was covered by tightly-packed buildings, including houses, a shipwright's yard, storehouses, wharfs and public houses.
- 5.5.2 Between 1850 and 1856 a new bridge was constructed across the Medway, which had a relatively short life. This new bridge was built a short distance downstream of the medieval bridge, on or close alignment of the Roman crossing. As part of the construction of the new bridge the waterfront on the site was remodelled and numerous properties were demolished. Following the competition of the new bridge the previous medieval structure was demolished with the assistance of the Royal Engineers.
- 5.5.3 The site would be remodelled during the later 19th century, when Thomas Aveling opened a steam traction engine works on the site in 1861. The works would expand considerably, eventually taking up the whole of the proposed site. The present bridge is the result of the very substantial rebuilding of the 1856 structure between 1910 and 1914, when most of the bridge's structure was replaced. The bridge es now designated as a Grade II Listed Building.

#### 6 ARCHAEOLOGICAL METHODOLOGY

- In accordance with the Written Scheme of Investigation prepared by Pre-Construct Archaeology Ltd (Pozorski 2018), the archaeological investigation comprised of evaluation of eleven trenches. Logistical and practical considerations allowed the opening of seven out of the eleven proposed evaluation trenches (Trenches 2, 3, 5, 6, 7, 8, 9) with additional recording of already open piling trench in location of Trench 10. This evaluation was followed by a watching brief on the excavation of Trenches 12 and 13 for sheet piling of the flood defence wall. The excavation of Trenches 3 and 5 revealed modern live drains and as a result they were only partially excavated. In addition, a heavy contamination was revealed in Trench 3 and its excavation was reduced to two shorter trenches within its footprint. Following the machining and the findings from Trenches 6 and 7 it was decided to extend the south-east and north-west corners respectively in order to partially merge the two trenches together forming a larger area of excavation identified as Trench 6/7The changes to the original layout were approved by Ben Found of KCC.
- 6.2 The table below details the dimensions and maximum depth below ground level (BGL) of all evaluation and watching brief trenches:

Evaluation/WB	Orientation	Length	Width	Maximum Depth
Trench				(BGL)
2	NW-SE	21m	2.40m	1.85m
3	NE-SW	30m	2.40m	1.20m
5	E-W	20m	2.20m	1.80m
6	NE-SW	16m	4.70m	1.40m
7	NE-SW	17m	5.20m	2.12m
8	NW-SE	20m	2.40m	1.45m
9	NE-SW	20m	2.70m	1.70m
10	NW-SE	5m	1.50m	1.65m
12	NW-SE	20m	0.80m	1.70m
13	NE-SW	38.40m	1.50m	2.40m

6.3 The removal of the modern hardstanding was undertaken using a 13-tonne mechanical tracked excavator fitted with a breaker. Following the removal of the modern concrete and steel reinforcements, any further machining was preceded by scanning for live services using a CAT scanner. The remaining modern deposits were reduced in 100mm horizontal spits using a flat bladed ditching bucket under the observation of an attending archaeologist.

- 6.4 Following machining, all faces of excavated trenches were cleaned using appropriate hand tools. All investigation of archaeological deposits was carried out by hand, with cleaning, examination and recording both in plan at a scaler of 1:20 and section at 1:10. The single recording system was used for all recording on the site (Taylor & Brown 2009, updated 2018). Context were numbered sequentially and recorded on *pro-forma* context sheets.
- The proposed trenches were designed to reach a maximum depth of 1.2m BGL depending on the stability of the trench edges. Test pits within the trenches were also excavated to the maximum depth of 1.8m BGL and backfilled immediately after recording. Where the test pits unveiled masonry or other structures, then the trenches were stepped to provided safe access and secure the sides and excavation continued to expose the archaeological deposits and structures and allow their recording. The steps were 1.2m wide on each side of the trench.
- 6.6 All archaeological deposits, section locations and Ordnance Datum (OD) levels were surveyed using a Geographical Positioning System (GPS).
- 6.7 The site was assigned the unique site code KSFA18 used to identify the site archive, including written, drawn, and electronic records, as well as artefacts.

#### 7 THE ARCHAEOLOGICAL SEQUENCE BY TRENCH

#### 7.1 Introduction

7.1.1 The following description of the stratigraphy details the main characteristics of each context and its position within the phased stratigraphic matrix. Ordnance Datum levels, physical dimensions and soil descriptions are referenced where relevant to the understanding of the archaeological sequence and, when not cited, can be found in Appendix 1. Contexts have been collated into stratigraphic groups (e.g. Group 24) and are indicated in overall phase plans.

#### 7.2 Trench 2 (Figure 8; Section 1)

- 7.2.1 The earliest deposit recorded in Trench 1 was light to mid-brown sandy clay [2] (Group 39) found at 2.60m OD. This layer, recorded only in section, was 0.45m thick and was interpreted as made ground dating to the 19th century.
- 7.2.2 Context [2] was in turn sealed by firm light grey to white chalk [1] (Group 54) recorded at 3.10m OD. This 0.50m thick deposit was also interpreted as made ground of 19th century date.
- 7.2.3 The post-medieval made ground sequence was sealed by 0.22m thick modern deposit capped by 0.68m thick concrete slab. The top of the concrete slab was recorded at 4m OD.



Plate 1: North-east facing section 1 in Trench 2 (1m scale)

#### 7.3 Trench 3 (Figure 2)

7.3.1 The excavation of this trench revealed modern concrete at 3.16m OD. The concrete was in turn sealed by modern made ground, approximately 0.60m thick in turn capped by 0.42m thick concrete slab and tarmac for the existing car park. The tarmac was recorded at 4.16m OD. The made ground was significantly contaminated and the excavation of the trench was limited to its (proposed) west and east ends. The modern sequence was recorded in the west end of the trench.



Plate 2: South-east facing section 5 in Trench 3 (1m scale)

#### 7.4 Trench 5 (Figure 8; Section 4)

- 7.4.1 The excavation of the west part of this trench revealed a sequence of modern deposits. The base of the trench revealed modern made ground at 2.90m OD capped at 4m OD by approximately 0.25m thick concrete and tarmac forming the ground level of the existing car park.
- 7.4.2 The excavation of the east part of Trench 5 revealed a sequence of post medieval made ground layers (Plate 3) recorded as [8], [7], [6] (Group 41) and [5] (Group 55) between 2.08m OD and 2.89m OD. The sequence was recorded between the base of Trench 5 (context [8]) and the top of context [5]. The sequence was sealed by modern made ground and in turn capped by the concrete and tarmac for the existing car park at 3.88m OD.



Plate 3: South facing section of Trench 5 (1m scale)

#### 7.5 Trenches 6 and 7 (Figures 8 and 9; Sections 6, 7, 9 and 10)

7.5.1 The excavation of Trenches 6 and 7 revealed sequence of masonry structures consisting of stone foundation and floor surfaces spanning the medieval and late post-medieval periods. To better understand the archaeological sequence in this part of the site it was decided to extend the southern and northern halves of Trenches 6 and 7 and merge the two trenches into one Trench 6/7 (Plate 4).



Plate 4: General view of Trench 6/7, looking south-east

- 7.5.2 The earliest deposits recorded in this trench were located in the northern area of excavation. Here a sequence of alluvial deposits was recorded in north-west facing section 10 as [136], [137], [138] and [139] (Group 1). These alluvial deposits found between 1.94m OD and 1.83m OD, were interpreted as part of the marsh land landscape which characterised the site during the medieval period and earlier periods. A circular copper-alloy mount came, part of a belt strap dated to 1225 1300 was recovered from [137].
- 7.5.3 The earliest evidence for human activity found in this trench consisted of the construction of north-west to south-eat orientated masonry wall [33] (Group 65) found at 2.22m OD. This structure, which truncated firm gravelly clay [136] (Group 1) at 1.94m OD, consisted of ragstones and rare flint nodules bonded with pale brown grey fine sand mortar with shell and mortar fleck inclusions. Some evidence for the partial robbing of the upper part of the wall was observed during the evaluation. [33] (Group3) was 5.90m long by 1.28m wide and extended beyond the north-western limit of the trench. A small test pit excavated alongside the south-western face of [33] found its construction cut at 1.94m OD and evidence for render applied against the south-west face of the was (see Section 6). Its extension to the south-east is unknown as a later masonry following the same alignment abutted it in the south-eastern part of the trench (see Paragraph 7.5.11 below), whilst it extended beyond the north-western limit of the trench. Masonry [33] was dated between 1200 and 1450 and was interpreted as a wall

- associated with a north-west to south-east orientated canal, , defined by [33] on the west and by [127] on the east side (see Paragraph below).
- 7.5.4 Parallel to [33] and at located 6.77m to the north-east of it, was masonry [127] (Group 3), present at 2.22m OD. This masonry extended beyond the northern and southern limits of the trench and measured 2m in length by at least 0.90m in width and 0.40m in height. It was constructed using ragstones bonded with mid grey sandy mortar with frequent chalk and charcoal fleck inclusions. The wall was dated between 1200 and 1450 and defined the north-western side of the canal described in the paragraph above.
- 7.5.5 Following this phase of construction, evidence for the silting up of the canal with alluvial deposits was recorded in section 10 in form of layers [130]/[135], 129]/[134], [128], [133] and [132] (Group 9). These layers represent different phases of the silting up of the canal capped by context [132] found at 2.21m OD which sealed the top of masonry [127] on the eastern part of the canal (see Section 10). [132] contained fragment of the 13th century pottery.
- 7.5.6 Evidence for consolidation of the area to the west of the canal were recorded during the excavation of a small 1m square rectangular test pit located alongside the south-west face of masonry [33]. Here a sequence of chalk and silty clay deposits was recorded as [24], [20], [19], [17], [13] and [18] (Group 10) with an overall thickness of 0.30m. Pottery recovered from contexts [13] and [19] dated this phase of land reclamation between 1225 and 1400.
- 7.5.7 Evidence for activity associated with the consolidation of the silted-up canal was recorded in the northern part of the trench. Here a very firm layer of clayey coarse sand and gravel layer, recorded as [131] at 2.38m OD, sealed Group 9 alluvial deposit. This 0.25m thick layer, stratigraphically dated to the 16th century, was interpreted as consolidation works associated with the construction of a road or thoroughfare orientated north-west to south-east. Alternatively, it can be interpreted just as a levelling/consolidation associated with the post-medieval development of the site.
- 7.5.8 More evidence for activity associated with the consolidation of the site within the area of the canal was recorded in the central area of the Trench 6/7. Section 7 recorded a sequence of shallow layers recorded as [60], [51], [59], and [50] (Group 13) with a total thickness of 0.18m which represents different phases of levelling in preparation for the development of this part of the site.
- 7.5.9 The earliest evidence for the development of the site in the area to the south-west of the postulated canal (see Paragraphs 7.5.3 and 7.5.4) was recorded in the form of chalk foundations [37] and [40] (Group 15) found at 2.36m OD and 2.50m OD, respectively. Masonry [37] followed the same orientation as masonry [33] and was 3.71m long by 0.38m wide and extended beyond the north-western limit of the trench. Evidence for later and partial robbing of south-east part of [37] and the north-eastern part of masonry [40] was also observed.

Foundation [40] was 1.53m long and 0.60m wide and extended beyond the south limit of the evaluation trench.

- 7.5.10 More evidence for the development of the site was recorded in the southern area of the trench. Here walls [44], [167] and [121] (Group 29) formed the east corner of a north-east to south-west orientated rectangular building which extend beyond the southern and northern limits of excavation. All these walls were found between 2.50m OD and 2.93m OD and consisted of rag stones and chalk bonded with coarse sandy mortar. Masonry [44] was 2.34m long by 0.52m wide; masonry [167] was 0.58m long by 0.44m wide and masonry [158] measured 1.61m by 0.42m. A 0.89m gap between masonry [44] and [166] probably represents an entrance into the building from the north-east. Evidence of mortar deposits recorded as [160], [157], [159] and [162] (Group 27) probably represent different phases of resurfacing associated with the threshold.
- 7.5.11 In the central area of the trench, walls [42], [41], [43] and [165] (Group 26) were recorded at 2.58m OD, 2.67m OD, 2.53m OD and 2.55m OD respectively. These masonry remains represent the sides of a north-west to south-east orientated rectangular building with an overall dimension of 5.70m by 5.67m with an internal area of 4.70m long by 3.35m wide. A layer consisting of firm brownish clay with frequent chalk and charcoal fleck inclusions was recorded within the building itself at 2.55m OD and represent a floor surface which was assigned context number [36] (Group 26). Just to the north of the north-east corner of the building was recorded sub-triangular masonry [35] at 2.55m OD. This 0.98m by 0.65m large masonry structure, consisting of one course of bricks and tiles constructed against the south-east face of masonry [41], presented evidence to have been exposed to intense fire and as a result was interpreted as part of a fireplace Plate 5). Brick samples from masonry [35] dated the fireplace between 1600 and 1800.



Plate 5: Fireplace [35], looking south-east (1m scale)

7.5.12 Evidence for the extension of the building described above was recorded in the central part of the trench (Group 26). Two parallel walls, recorded as [53] and [166] at 2.99m OD and 2.50m OD, abutted the north-eastern faces of walls [33] and [42] and extended beyond the north-eastern limit of the trench. This north-eastern extension (Group 25) measured 6.96m north-west to south-east by approximately 2m. Evidence for a brick floor within the extension was recorded as masonry [52] at 2.74m OD (Plate 6). This floor (Group 25) was observed in south-west facing Section 7 and measured 0.89m by 0.20m by 0.09m thickness and was dated between 1600 and 1800.



Plate 6: Close up of brick floor [52] (10cm scale)

- 7.5.13 Further evidence of masonry structure associated with north-eastern building extension (Group 25) was recorded on the west side of masonry [53] where single course of brick set on edge was found 2.63m OD. This masonry structure was assigned context [55] and measured 0.59m by 0.18m and its function has not been established. Brick sample collected from masonry [55] suggested its origins at between 1600 and 1800.
- 7.5.14 Also recorded in the central area of the trench, a sequence of shallow layers was found, probably representing different phases of resurfacing (Figure 8, Section 7). These layers recorded as [58], [65], [62], 64], [56], [63], [61], [89], [88], [47] and [46] had an overall thickness of approximately 0.20m and were collated together as Group (24).
- 7.5.15 In the south area of the trench a short segment a north-east to south-west orientated wall was found at 2.42m OD. This masonry was later unearthed during the excavation of Trench 13 were it was assigned context number [210] (see Paragraph 7.10.2).
- 7.5.16 Evidence for levelling or floor surface was recorded in the central part of the trench. This clay layer was assigned context number [25] (Group 38) and found at 2.50m OD. Context [25] was located within an area defined by masonry [33] to the east and by [41] to the south-east and extended beyond the western limit of excavation. Late 13th 14th century and 14th century coins, late 16th early 17th century pottery and early 18<sup>th</sup> century clay pipes fragments were recovered from [25].
- 7.5.17 In the central area of the trench and within the area defined by masonries [166] and [53] (Group 25) two parallel beam slot were recorded as [49] and [76] (Group 36) at 2.57m OD and 2.63m

- respectively. These cut features were interpreted as part of a partition wall within building extension Group 25.
- 7.5.18 Evidence for levelling which sealed the area occupied by north-eastern building extension (see Paragraph 7.5.12, Group 25) were recorded in south-west facing Section 7. Two layers, [69] and [68], with an overall thickness of 0.16m sealed brick floor [52] at 2.89m OD.
- 7.5.19 Further evidence for the redevelopment of the site during the 19th century was observed in the central part of the trench where a brick lined well partially truncated the south-west facing side of masonry [33] at 2.50m OD. This well, formed by construction cut [28], brick lining [27] and backfill [26] (Group 52) measured 1.31m in diameter and was only partially excavated.
- 7.5.20 Evidence for further 19th century activity on site was recorded in the central part of the trench where pits [73] and [67] were recorded at 2.87m OD and 2.88m OD respectively.
- 7.5.21 In the central area of the trench a short segment of north-west to south-east orientated masonry, recorded as [92] at 2.96m OD, was interpreted as a possible wall foundation dating to the 19th century.
- 7.5.22 The archaeological sequence of Trench 6-7 was sealed by modern made ground and levelling for the modern concrete slab for the car park which in this part of the site was recorded at 3.95m OD.

#### 7.6 Trench 8 (Figure 10; Sections 12 and 13)

7.6.1 The excavation of this trench unearthed a complex sequence of masonry foundations, walls and floor surfaces. The earliest deposit recorded in this trench consisted of clayey chalk [124] (Group 5) with moderate charcoal flecks inclusion. This moderately firm layer was found at 2.70m OD and was 0.70m long by 0.10m thick and was interpreted as part of a consolidation deposit dated to the medieval period. Context [124] was in turn sealed at 2.83m OD by layer [123] (Group 11) which consisted of silty clay with fragments of CBM and charcoal and chalk flecks inclusion. This layer measured 0.90m long and 0.12m thickness and was interpreted as ground raising/consolidation deposit dated to the medieval period.



Plate 7: General view of Trench 8, looking north-west (1m scale)

- 7.6.2 At a short distance to the north-west of [124] was masonry foundation [125] (Group 4), present at 2.70m OD. This north-east to south-west orientated masonry consisted of ragstone and chalk bonded together by mid yellow sandy lime mortar. [124] was partially observed and recorded in section 12 only. It was 1.80m long, 0.40m wide (width not fully exposed) and 0.12m high. This wall, which probably dated to the medieval period, was stratigraphically one of the earliest masonry elements found during the excavation of Trench 8.
- 7.6.3 Evidence of a later re-built above masonry [125] was observed in section 12. Consolidation deposit [123] was truncated at 2.87m OD by construction cut [122] for Masonry [121] (Group 17), found at 2.93m OD. Masonry [121] was constructed on top of wall [125] using bricks, peg

tiles bonded with soft brown sandy mortar with moderate flecks of chalk inclusions. This northeast to south-west orientated structure was 1.80m long, 0.40m wide and 0.23m high and was dated to between 1450 and 1700. Evidence for a possible floor level associated with masonry [121] was recorded at 2.99m OD. This floor consisted of greenish grey firm clay layer [97] (Group 17) and was recorded in section only. Approximately 2.30m to the north-east, layers [147], [146] and [143] (Group 17) were recorded at 2.89m OD, 2.95m OD and 2.99m OD, respectively, and interpreted as associated with clay floor [97]. A finger ring with an unusual double-lozenge bezel was recovered from [147] (see Appendix 6).

- 7.6.4 In the southern part of Trench 8 a north-east to south-west orientated ragstone wall foundation [79] (Group 6) was recorded at 3.12m OD. This 2.21m long, 0.51m wide and 0.18m high masonry was abutted at its north-western side by brick floor [80] (Group 21) which was found at 2.93m OD. This floor extended beyond the north-eastern limit of Trench 8 and measured 2.20m by 1.28m and was 44cm thick. It abutted north-east to south-west orientated wall [81] (Group 21). Brick floor [80] was dated broadly to 1450-1700 and Groups 6 and 21 may have been parts of the structure of the late 15th or more likely of the early 16th century date.
- 7.6.5 Approximately 0.30m to the south-east and parallel to masonry [79] was masonry foundation [78] (Group 20). This foundation was present at 2.87m OD and was constructed using ragstones and peg tiles bonded with pale brown sandy mortar and measured 2.30m long, 0.45m wide and 0.17m height. Masonry [78] was interpreted as a possible wall dated to between 1450 and 1700 which may have been a part of the same structure as parallel [81].
- 7.6.6 A further phase of construction above masonry [121] (see Paragraph 7.6.3) was recorded in north-east facing Section 12. In the northern part of Trench 8, a clay floor [97] was truncated at 2.89m OD by construction cut [96] for masonry [82] (Group 34). This L-shaped wall constructed above [121], measured 1.35m north-east to south-west and 1.16m north-west to south-east, it was 0.48m wide and 0.20m high and was truncated to the north-east by a modern intrusion. Furthermore, masonry [82] seems to have also been associated with north-east to south-west orientated masonry [83] to the north, forming a rectangular north-west to south-east orientated structure (Group 34). The overall dimensions for this structure are 2.24m north-west to south-east, 1.50m north-east to south-west and approximately 0.40 in height.
- 7.6.7 In the north part of Trench 8 walls [84] and [148] (Group 66) were recorded at 2.89m OD and 3.20m OD respectively. Both masonries were orientated north-east to south-west and were constructed using ragstone, tiles and bricks bonded with pale yellow brownish sandy mortar. The provisional dated for these masonries is 1600 to 1800 and their function unknown.
- 7.6.8 In the northern part of Trench 8, masonry [151] (Group 33) abutted the north side of masonry [84] at 2.92m OD. This masonry was recorded in section 12 only and measured 0.42m wide by 0.34m height. Two layers positioned against the north-west face of masonry [151] were

- recorded also in section. Layer [153], found at 3m OD, consisting of firm very light grey chalk was in turn overlaid by firm light mid brown clay at 3.13m OD. These layers interpreted as part of ground raising and floor surface associated with masonry [151].
- 7.6.9 The sequence of walls and floors was sealed by an extensive deposit consisting of loose mottled brown grey sandy clay with frequent fragment of CBM and mortar inclusions which was recorded as context [86] and interpreted as a demolition deposit.
- 7.6.10 The archaeological sequence was sealed by modern make up in turn capped by the concrete slab forming the existing car park surface recorded at 4m OD.

#### 7.7 Trench 9 (Figure 9; Section 8)

7.7.1 The archaeological deposits observed in Trench 9 were all recorded in Section 8. The earliest deposit consisted of post-medieval made ground [115] (Group 19) recorded at 2.74m OD. This was in turn sealed by post-medieval deposit [114] (Group 43) to the east at 3.12m OD and truncated to the west by large post-medieval rubbish pit [113] (Group 42) which was backfilled by a series of fills recorded as [112], [111], [110], [109], [108] sealed by upper fill [107] at 3.29m OD. The overall dimensions of cut [113] were approximately 3m south-west to north-east and 1m depth but the pit was not fully excavated. [109] consisted mainly of post-medieval roof tiles.



Plate 8: South-east facing section in Trench 9 (1m scale)

7.7.2 The upper fill of the post-medieval rubbish pit was truncated by two post-medieval cut features recorded as cut [104] and [106] at 3.29m OD and 3.22m OD, respectively. These two cut features (Group 59) were both interpreted as post-medieval rubbish pits.

- 7.7.3 Group 59 was sealed by 19th century made ground, layers [102] and [101], found at 3.40m OD and 3.64m OD respectively and collated together as Group 60 with an overall thickness of approximately 0.45m.
- 7.7.4 In the south-western part of Trench 9, Group 42 was truncated by a 19th century well (Group 58) at 3.23m OD consisting of construction cut [118] brick lining [117] and backfill [119]. The diameter of the partially exposed well as shown in section was 0.50m, whilst its depth was 0.79m.
- 7.7.5 In the north-eastern area of Trench 9 Group 60 was truncated by a possible brick soakaway or manhole (Group 61) consisting of construction cut [116], masonry [100] and backfill [99] Plate8). Group 61 was found at 3.64m OD and measured 0.70m wide and 0.90m deep.
- 7.7.6 The archaeological sequence was sealed by the modern levelling layer for the concrete slab of the existing car park which in this part of the site was recorded at 4.04m OD.

#### 7.8 Trench 10 (Figure 8; Section 2)

- 7.8.1 The earliest archaeological deposit recorded in Trench 10 consisted of greenish brown layer [4] found at 2.60m OD. Context [4] was in turn overlined by firm black silty charcoal layer [3] at 2.69m OD. Layers [3] and [4] which had an overall thickness was 0.27m, were assigned together as Group 40 and were interpreted as 18th century reclamation dumps.
- 7.8.2 The archaeological sequence in Trench 10 was sealed by modern made ground in turn capped by the concrete slab for the car park which was recorded at 3.98m OD in this part of the site.
- **7.9** Trench 12 (Figure 10; Sections 100 and 103)
- 7.9.1 The earliest archaeological deposit recorded in this trench consisted of firm deposit of silty clay recorded as [205] and [206] (Group 7) in the northern part of Trench 12. These *c.* 0.30m thick layers found between 2.46m OD and 2.44m OD, were interpreted as consolidation deposits. In the south part of the trench firm and clayey chalk and silt [215] (Group 7) was recorded at 2.43m OD and interpreted as consolidation deposit or made ground.
- 7.9.2 In the north part of the trench, consolidation deposit Group 7 were truncated by masonry [219] (Group 6) at 3.26m OD. This north-east to south-west orientated masonry, previously recorded as [79] in Trench 8 (see Paragraph 7.6.4) extended beyond the east limit of the trench.
- 7.9.3 In the northern part of Trench 12 a firm greyish green sand layer [204] was interpreted as bedding for brick floor [216] (Group 21) and found at 2.93m OD. The floor, previously recorded in Trench 8 (see Paragraph 7.6.4), extended beyond the north-eastern limit of the excavation.
- 7.9.4 Approximately 1m to the north-west and parallel to masonry [219] was masonry [222] (Group 21). This masonry, found at 2.92m OD, was previously recorded in Trench 8 as [81] (see Paragraph 7.6.4) and define floor [216] to the north. The stratigraphic relationship between masonries [219]/[79], [222]/[81] and brick floor [216]/[80] is unclear at this stage of the

- archaeological investigation. However, all the masonry elements seem to be dated to the 16th century.
- 7.9.5 Just 0.30m to the south-east of masonry [219] was recorded masonry [218] (Group 20) at 2.92m OD. This masonry was previously recorded in Trench 8 as [78] and extended beyond the northeast limit of excavation of the trench.
- 7.9.6 Located 1.25m to the south-east of masonry [218] was wall [202] (Group 44) at 3.31m OD. This masonry was parallel to [218] was constructed with rag stone, chalk and flint nodules bonded by sandy lime mortar, measured 0.81m long and 0.63m wide and was recorded in Trench 12 only. It extended beyond the north-east limit of excavation of the trench and was interpreted as a masonry foundation dated to the post-medieval period.
- 7.9.7 In the north part of the trench, light grey crushed chalk [207] (Group 44) was found abutting the north-west face of masonry [202] at 3.14m OD. This 0.14m thick layer measured 2m north-west to south-east and 0.80m wide and was interpreted as a possible floor surface associated with masonry [202].
- 7.9.8 All masonry elements recorded in Trench 12 were sealed by a substantial deposit consisting of firm dark brown grey rubble silt which was recorded as [213] (Group 63) at 3.64m OD. This 0.74m thick deposit was interpreted as part of a demolition material and was dated to the late 19th century.
- 7.9.9 The archaeological sequence was sealed by the modern levelling layer for the concrete slab for the car park which in this part of the site was recorded at 3.93m OD.

#### **7.10** Trench 13 (Figure 2)

- 7.10.1 The earliest deposit recorded in this trench consisted plastic greenish brown sandy clay [201] and [200] (Group 2) found at 1.65m OD. These deposits, recorded in section only (not illustrated), were located in the central part of the trench and were interpreted as undated alluvial deposits.
- 7.10.2 Alongside the east side of the trench a 15m long by 0.60m wide wall was present and it was orientated north-east to south-west and found at 2.50m OD. It was recorded as [210] (Group 35) (Plate 9). This masonry consisted of chalk, flint nodules and ragstone with the north-western face constructed with small rough-hewn ragstones. This masonry, previously recorded in Trench 6-7 as [156], was interpreted as a boundary wall or a wall defining the south-eastern side of a north-east to south-west orientated alleyway with a possible 17th century date. Possible threshold or steps [157] also recorded in Trench 6/7 appeared to have been associated with [210].



Plate 9: Close up of masonry [210], looking south-east (10cm scale)

- 7.10.3 Masonry [210] was later sealed by firm mid grey brown silty clay with frequent mortar inclusion recorded as layer [211] and [212] (Group 46, not illustrated). Group 46 was recorded at 2.45m OD and represented post-medieval made ground dated between the late 18th and 19th century.
- 7.10.4 The archaeological sequence was sealed by modern make up and levelling for the concrete slab which in this part of the site was recorded at 3.85m OD.

#### 8 ARCHAEOLOGICAL PHASE DISCUSSION

#### 8.1 Introduction

8.1.1 The archaeological evaluation identified 5 main phases and 3 sub-phases spanning the medieval to the later post-medieval periods. The phasing is based on evaluation results and may change following the next stage of archaeological works (full excavation).

#### **8.2** Phase 1a: Medieval (Figure 9; Section 10)

8.2.1 This earliest archaeological evidence on the site is represented by a sequence of alluvial deposits identified in the base of Trenches 6/7 and 13 and collated together as Groups 1 and 2, respectively. Of note was the sequence of alluvial deposit in Trench 6/7 which was partially excavated and recorded in section 10. These alluvial deposits found between 1.94m OD and 1.83m OD, were interpreted as part of the marsh land landscape which characterised the site during the medieval period and earlier periods. The sub-phase was dated to the medieval period stratigraphically.

#### 8.3 Phase 1b: Medieval (Figure 3)

- 8.3.1 The earliest evidence for human activity, recorded during the evaluation of Trench 6/7, is represented by the construction of two parallel north-west to south-east orientated masonry walls (Group 3) which were interpreted as a part of water management works aimed to control local inundation and convert the land to one more inhabitable. The construction of a 6.75m wide canal (Group 3) was carried out some time during the 13th century and shows how the site had taken part in, presumably, wider reclamation works on the Medway riverbanks during the mid to late medieval period.
- 8.3.2 Further evidence for the development of the site during this sub-phase was recorded in the northern area of Trench 8 were ragstone foundation (Group 11) was recorded, potentially indicating some form of structure adjacent to the north-eastern side of the canal.

#### 8.4 Phase 1c: Medieval (Figure 3)

- 8.4.1 This sub-phase represents a medieval activity associated with reclamation works associated with the development of the area. The evaluation recorded reclamation and consolidation deposits in the area to the southeast of the canal in Trench 6/7. Here the excavation of a small test pit adjacent to the west wall (masonry [33]) of the canal recorded a sequence of compacted deposits sealing the construction cut of masonry [33]. These deposits collated together as Group 10 were dated between 1225 and 1400.
- 8.4.2 Evidence of alluvial deposits (Group 9) were recorded within the canal which eventually silted up and become redundant at some point during the 15th to early 16th century.
- 8.4.3 In the southern area of Trench 8 a north-east to south-west orientated masonry foundation (Group 6) was interpreted as part of a phase of development of the site between the late

medieval and early post-medieval periods, most likely dating to the late 15<sup>th</sup> or early 16<sup>th</sup> century.

#### **8.5** Phase 2: 16th Century (Figure 4; Section 12)

- 8.5.1 By the 16<sup>th</sup> century the canal silted up completely and become redundant. Evidence for consolidation works were recorded within the former internal area of the canal were a very firm clayey sandy gravel layer (Group 131) sealed the alluvium. This harden deposit may indicate the construction of a road in the area previously occupied by the now redundant canal. It also represents phase of wider consolidation works associated with the development of the site during the post-medieval period.
- 8.5.2 Evidence for a north-west to south-east orientated building (Group 15) was recorded in the central area of Trench 6/7. The building extended beyond the north and west limit of excavation of the trench and measured 5.47m north-west to south-east and 2.42m wide.
- 8.5.3 Evidence for the development of the site during this phase was also recorded in the southern area of Trench 8. Here two parallel north-east to south-west orientated walls (Groups 20 and 21) were recorded together with a brick floor (Group 21). These remains probably represent more than one phase of building construction carried out between in the 16th century.
- 8.5.4 Further evidence for the development of the site during this phase was recorded in south-west facing Section 12. Here a sequence of floor bedding and floor surfaces were recorded together with a masonry (Group 2) suggesting other structures which may have stood on the site in the 16th century.

#### **8.6 Phase 3: 17th Century** (Figure 5)

- 8.6.1 During this phase a rectangular north-west to south-east orientated building was constructed in the central area of Trench 6/7. All element of this building including foundations, internal floor surface and a fireplace were collated together as Group 26. This building, constructed alongside the west wall of the redundant Phase 2b canalised canal Group 3, had an overall dimension of 5.70m by 5.67m with an internal area of 4.70m long by 3.35m wide.
- 8.6.2 Building Group 26 was later extended to the north-east with the construction of two parallel foundations and a brick floors collated together as Group 25.
- 8.6.3 In the south area of Trench 6/7 the south-east corner of a north-west to south-east orientated masonry building (Group 29) was assigned to this phase. The building extended beyond the south, west and north limit of excavation of the trench with an entrance facing to the north-east. Evidence for floor surfaces associated with the threshold were recorded in in the entrance area and collected together as Group 27.
- 8.6.4 A north-east to south-west wall (Group 35) was later constructed against the north-east corner of building Group 29. This 15m long masonry, observed during the excavation of Trench 13,

- defined the southeast side of a north-east to south-west orientated alleyway located alongside the southeast side of building Groups 26 and 25.
- 8.6.5 In the central area of Trench 8, a rectangular and north-west to south-east orientated masonry structure was assigned to Group 34. This 2.30m long by 1.35m wide probably represent a stone lined cess pit dating to the post-medieval period.
- 8.6.6 In the north area of Trench 8, a north-east to south-west orientated masonry [84] (Group 66) was found, together with a number of masonries and floor surface. This sequence, recorded in north-east facing Section 12, was interpreted as part of the development of the sited during the 17th century.

#### 8.7 Phase 4: 18th Century (Figure 6)

- 8.7.1 During this phase a possible external surface (Group 38) was constructed in the area located to the northeast of building Group 26. This external surface, consisting of firm gravelly clay, measured 5.73m by 5.88m and extended beyond the western and northern limits of Trench 6/7.
- 8.7.2 The archaeological evidence shows that during this phase most of the buildings from Phase 3 were still standing and probably in use. Evidence for the possible internal modification of building Group 25 was observed in the central area of Trench 6/7 where beam slot Group 36 were interpreted as part of a partition wall subdividing the internal area of building Group 25. The lay layer [25] adjacent to the building may have been a yard surface. It contained various residual medieval and post-medieval finds.
- 8.7.3 In the north area of Trench 12, a north-east to south-west orientated masonry foundation [202] was assigned to this phase on pure stratigraphic relationships.

#### **8.8** Phase 4: 19th Century (Figure 7)

- 8.8.1 The archaeological evidence for this phase shows that during the 19th century most of the earlier structures on the site were demolished and the ground levelled for development. In the north central area of Trench 6/7 a 19th century brick lined well (Group 52) truncated the external surface Group 38 from Phase 4.
- 8.8.2 A small section of Victorian wall foundation found in the central area or Trench 6/7 and orientated north-west to south-east was interpreted as part of the backwall of a property fronting the main road to the northeast.
- 8.8.3 The later 20<sup>th</sup> century development of the site heavily impacted the below ground archaeological remains. It is believed that the majority of the site, in particular its western and north-western parts, contain only modern made ground and structures. The south-eastern part of the site, where the significant archaeological remains were found during the evaluation, also had been a subject to the modern truncation; however, as the late post-medieval remains were mostly lost, this part of the site still contains rich medieval and early to mid post-medieval deposits and structures with a potential for Roman remains below the known sequence.

#### 9 ORIGINAL AND REVISED RESEARCH OBJECTIVES

#### 9.1 Original Research Design

9.1.1 The evaluation was designed by KCC as the project:

"(...) specifically targeting an area of identified high potential for Roman and later archaeology, including trenching near the very substantial ragstone structure encountered during the geotechnical investigations. The evaluation work is to determine whether any archaeological remains survive on site and if so to provide sufficient information for their significance to be assessed. If archaeological remains are encountered, then further mitigation measures will likely be required. Such measures may, for example, include safeguarding measures, further detailed archaeological investigation, or an archaeological watching brief during construction work (...).

The evaluation is thus to ascertain the extent, depth below ground surface, depth of deposit, character, significance and condition of any archaeological remains on site" (KCC 2018).

- 9.1.2 The archaeological evaluation found significant archaeological evidence spanning the medieval to the late post-medieval periods representing urban development of the area near the Medway crossing. The surviving archaeology was enclosed in the south-eastern and eastern parts of the site. The archaeological sequence was found at approximately 1.5m below ground level below the modern foundations and deposits of made ground.
- 9.1.3 Modern made ground and concrete foundations associated to the 20th century development of the site where encountered across the site and in the central and western parts of the site the excavation of all the evaluation trenches was not possible due to those modern intrusions and land contamination.
- 9.1.4 The archaeological sequence was limited to its depth to the waterlogged nature of the site. However, it is very likely that earlier archaeological deposits are still present of site.

#### 9.2 Revised Research Objectives

9.2.1 The next phase of archaeological work should aim to ascertain the full extent of the medieval and post-medieval development in the eastern/south-eastern part of the site. It should also aim to establish a presence or absence of Roman remains as those ere found in close vicinity of the site before and the site itself is located near the Roman river crossing. Although the very south-eastern corner of the site appears to have been located on a land reclaimed in the medieval and early post-medieval periods, the eastern/north/eastern part of the site may contain remains earlier then medieval.

- 9.2.2 The ragstone walls have been identified during the evaluation; however, the structure encountered during the geotechnical investigation appears not being one of them and there is a very high potential for further masonry remains on the site.
- 9.2.3 Further archaeological excavation would also clarify the stratigraphy of the site in order to better understand the different phases of development on the site.

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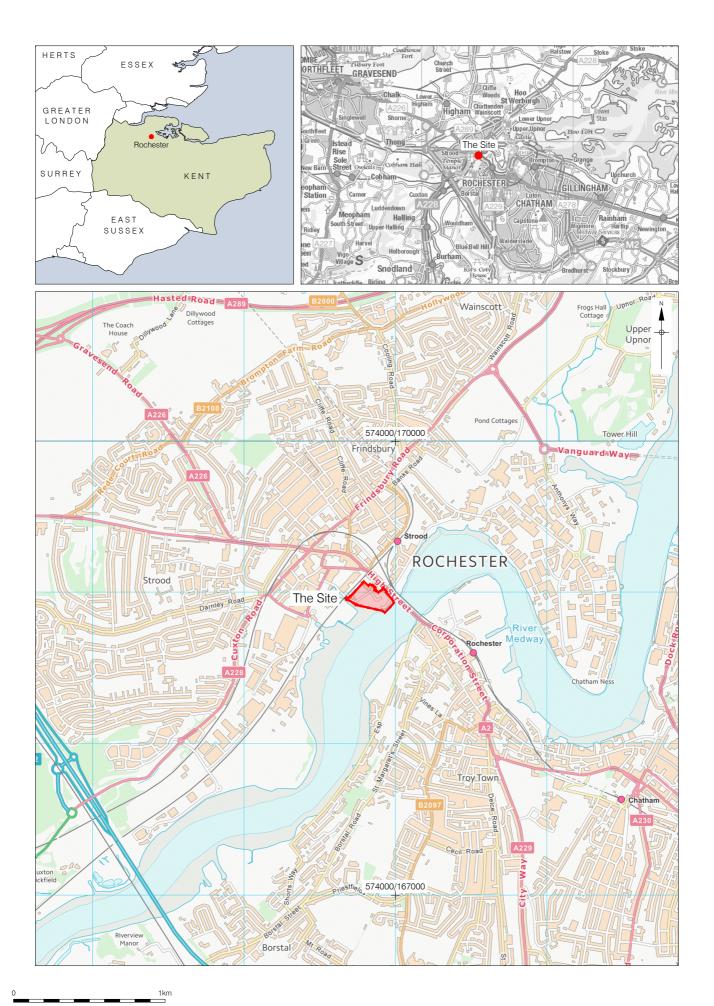
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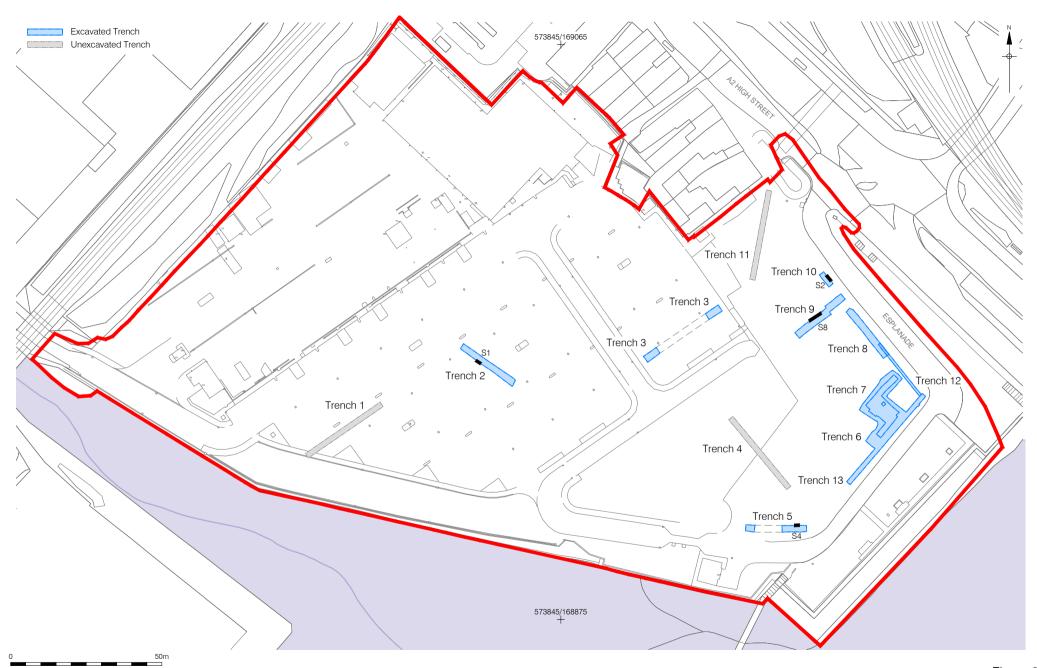
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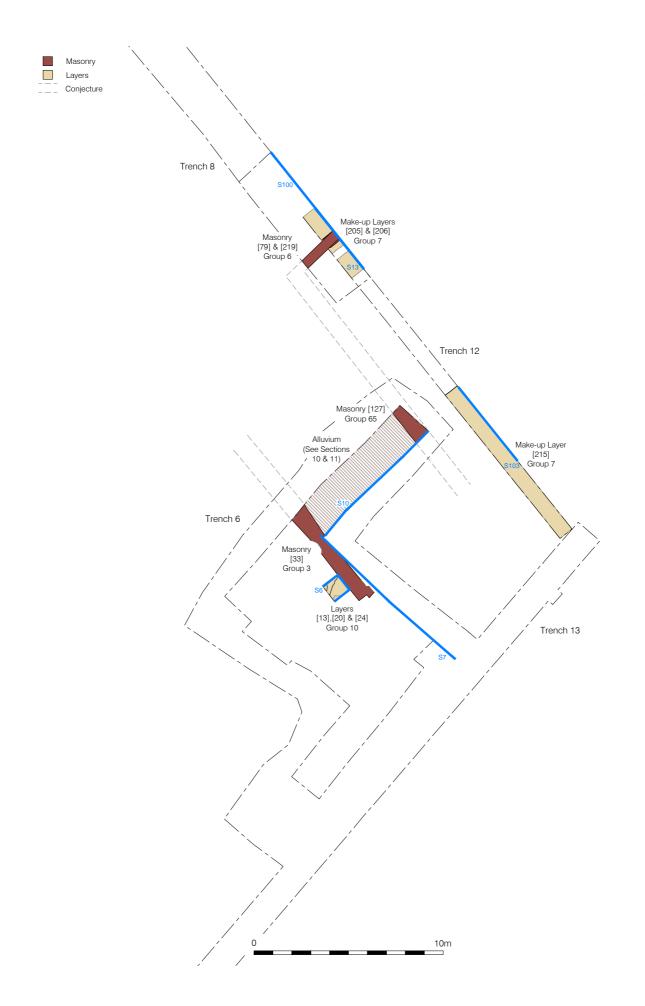
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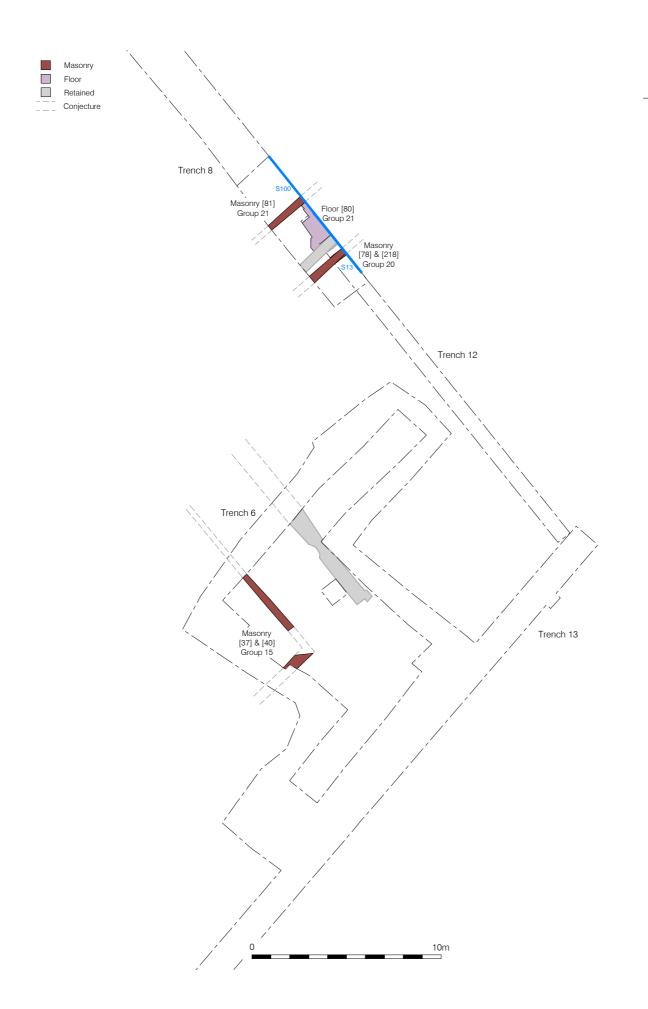


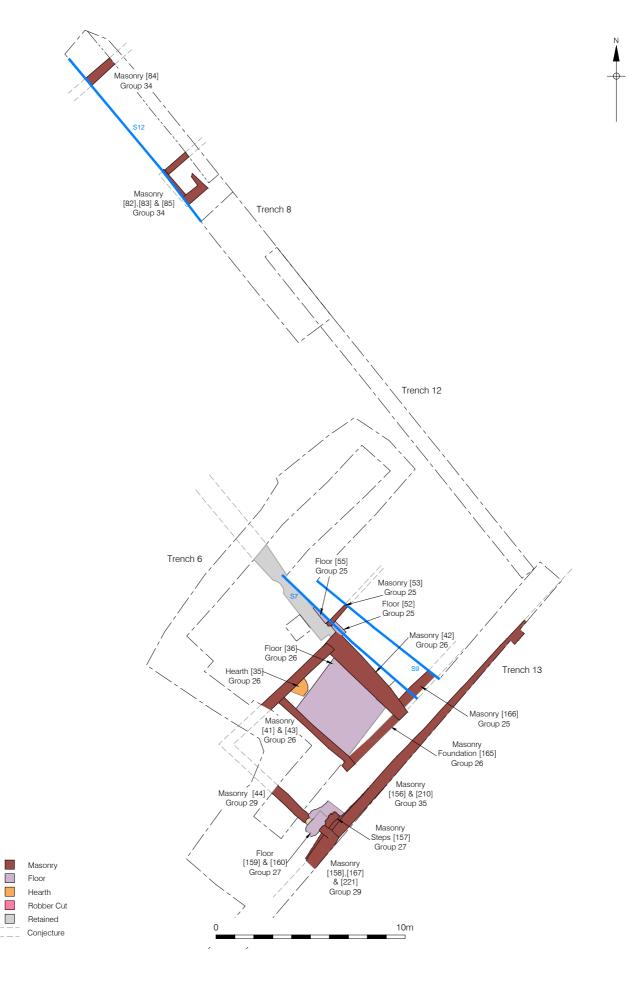


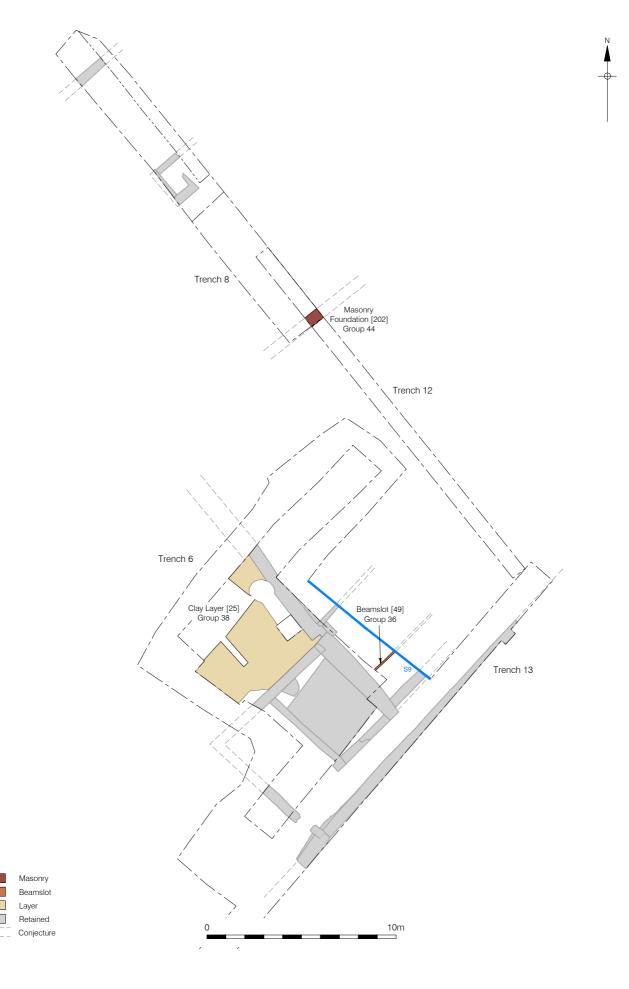
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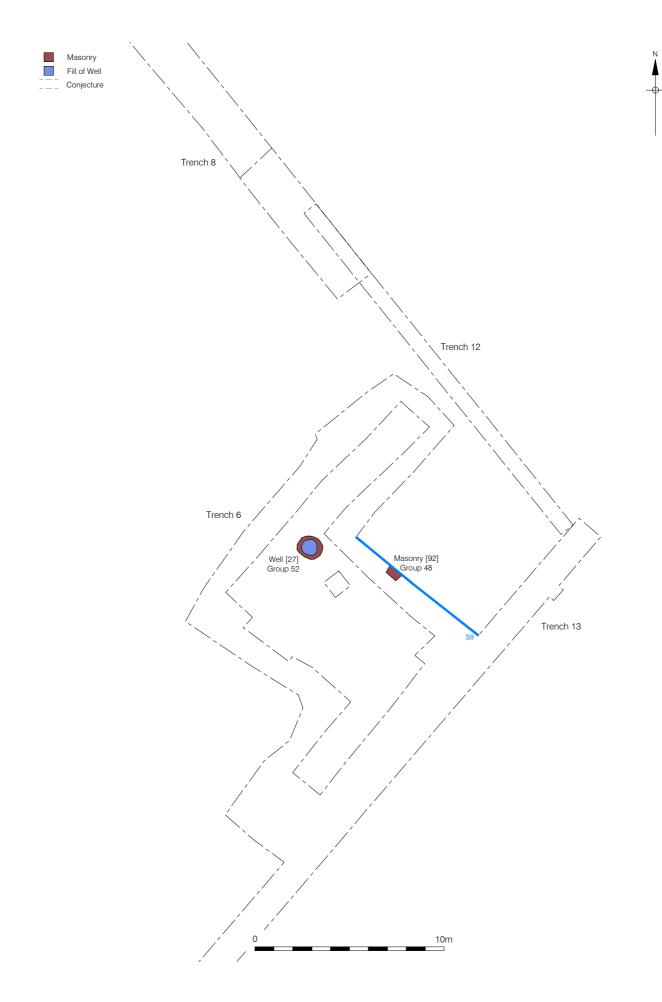
© Pre-Construct Archaeology Ltd 2018 21/09/18 MR Figure 2 Detailed Site Location 1:1,250 at A4

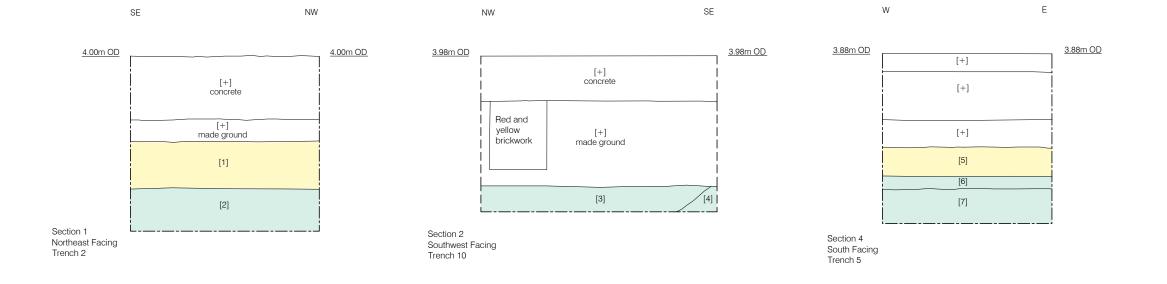


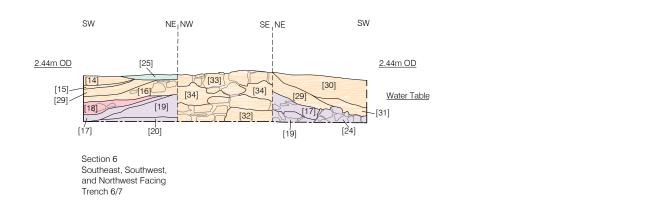


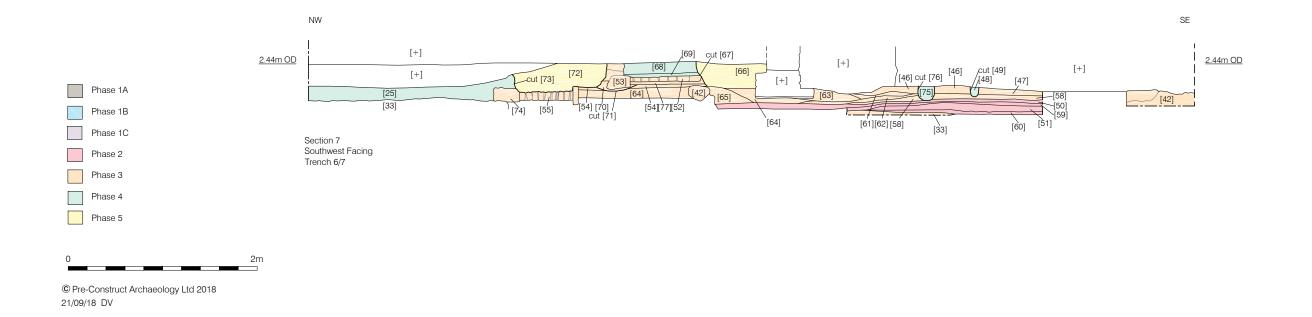


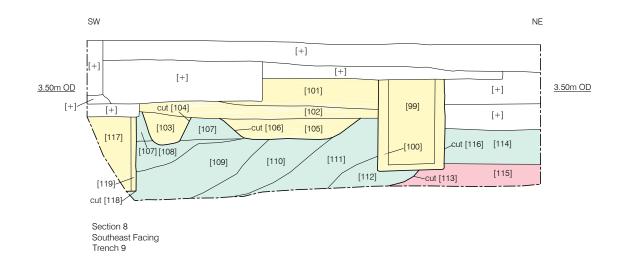


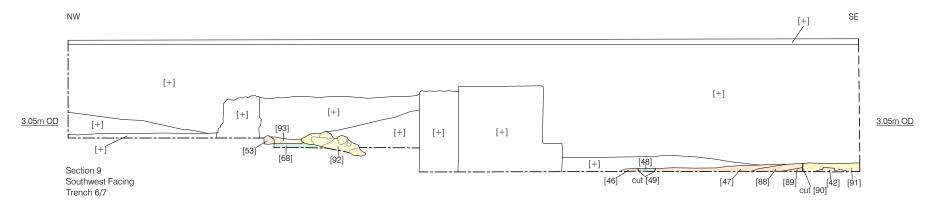


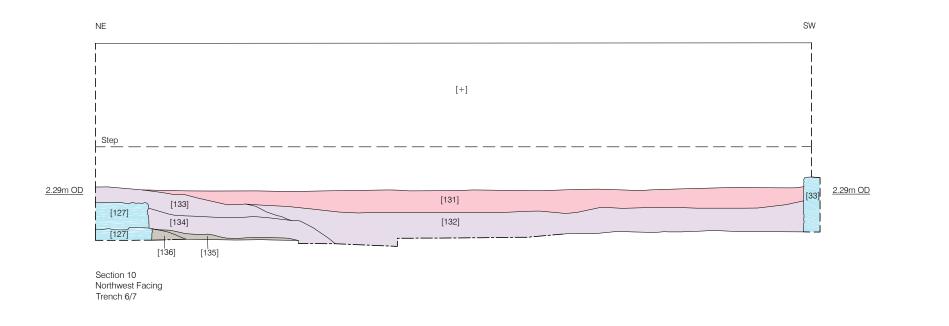






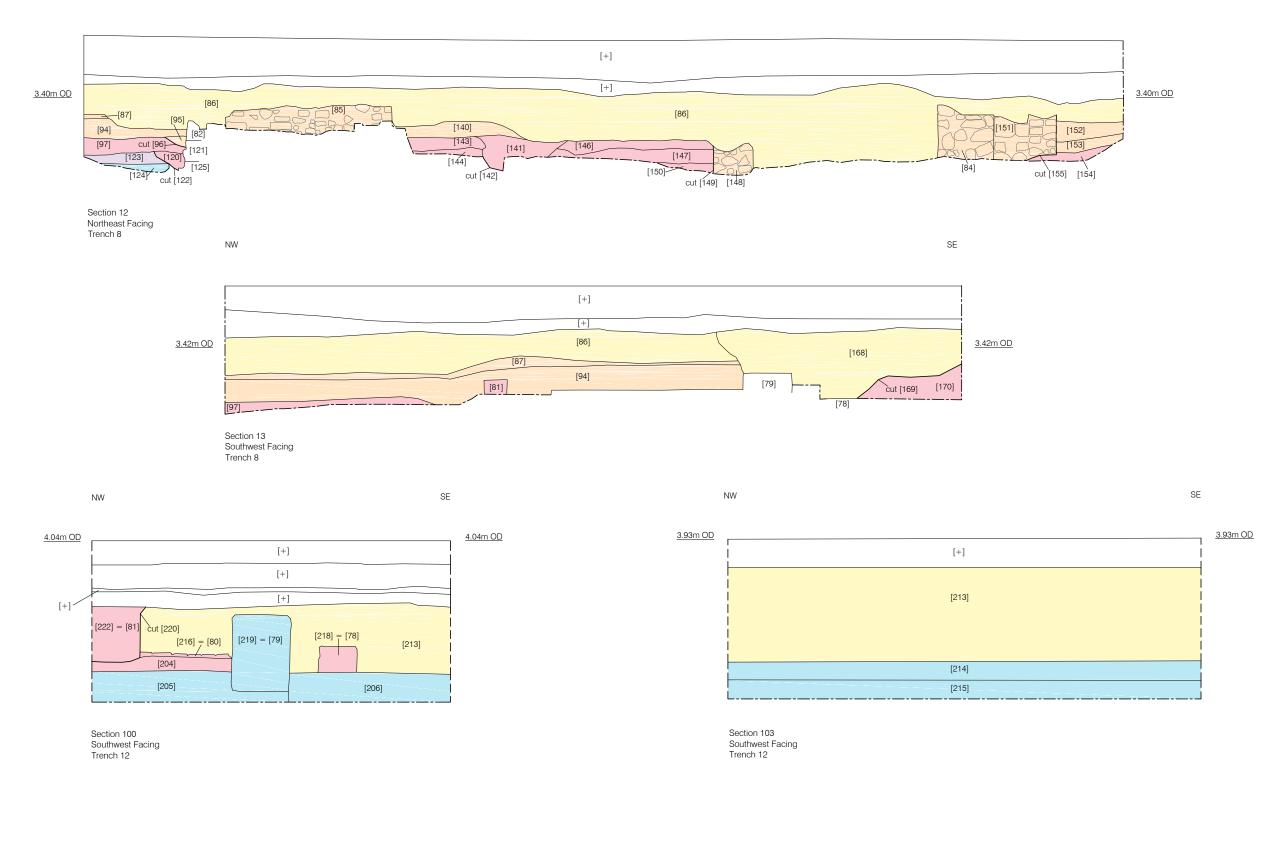






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SE NW



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Phase 1A
Phase 1B

Phase 1C
Phase 2
Phase 3
Phase 4
Phase 5

# **APPENDIX 1: CONTEXT INDEX**

Context	Phase	Group	Interpretation	Highest Level	Lowest Level	Туре	Trench
1	5	54	19thC made ground	3.1		Layer	2
2	4	39	19thC made ground	2.6		Layer	2
3	4	40	Post-med made ground	2.61	2.6	Layer	10
4	4	40	Possible Roman layer	2.6	2.33	Layer	10
5	5	55	Late Post-med made ground 2.89 2.88		Layer	5	
6	4	41	Post-med made ground	2.58	2.57	Layer	5
7	4	41	Post-med made ground	2.45	2.41	Layer	5
8	4	41	Post-med made ground	2.08		Layer	5
9	2	16	Fill of posthole [10]	2.37		Fill	6/7
10	2	16	Cut of post-med posthole	2.37	2.28	Cut	6/7
11	2	16	Fill of small pit/large posthole [12]	2.34		Fill	6/7
12	2	16	Cut of post-med feature.	2.34	2.16	Cut	6/7
13	1	10	Early post-med dump layer?	2.39	2.15	Layer	6/7
14	3	30	Compacted chalk layer.	2.43	2.38	Layer	6/7
15	3	30	Dump of charcoal rich rake-out	2.39	2.33	Layer	6/7
16	3	30	Layer of made ground	2.39	2.3	Layer	6/7
17	1	10	Silty dump deposit	2.23	1.92	Layer	6/7
18	2	10	Silty made ground	2.22	2.15	Layer	6/7
19	1	10	Mortar dump layer.	2.24	1.97	Layer	6/7
20	1	10	Silty made ground	2.03	2.01	Layer	6/7
21	1	3	Backfill of construction cut [33]	1.94		Fill	6/7
22	1	3	Construction cut for wall [33]	1.94		Cut	6/7
23	1	1	Alluvial deposit	1.9		Layer	6/7
24	1	10	Compacted chalk layer.	mpacted chalk layer. 2.12 L		Layer	6/7
25	4	38	Post-med demolition material	2.5			6/7
26	5	26	Backfill of well [27]	2.5 Fill		6/7	
27	5	52	Post-med brick lined well	2.5 Masonry		6/7	
28	5	52	Construction cut for brick well [27]	2.5		Cut	6/7

Context	Phase	Group	Interpretation	Highest Level	Lowest Level	Туре	Trench
29	3	30	Made ground	2.46	2.11	Layer	6/7
30	3	30	Demo layer, resulting from demo of [33]	2.47	2.39	Layer	6/7
31	3	31	Very silty, possibly alluvial deposit	2.24	2.1	Layer	6/7
32	1	3	Accumulation of cess like material	2.1	2.07	Layer	6/7
33	1	3	N-S aligned wall.	2.55	2.52	Masonry	6/7
34	1	3	Render on wall [33].	2.34	2.3	Other	6/7
35	3	26	Hearth constructed against southern side of wall [41].	2.55		Masonry	6/7
36	3	26	Compacted clay floor	2.55	2.52	Layer	6/7
37	2	15	Chalk wall foundation.	2.36	2.33	Masonry	6/7
38	5	53	Fill of robber cut [38]; assoc. with wall [37]	2.36		Fill	6/7
39	5	53	Robber cut	2.36		Cut	6/7
40	2	15	Chalk wall foundation.	2.5		Masonry	6/7
41	3	26	Ragstone wall	2.67	2.52	Masonry	6/7
42	3	26	Flint nodule, chalk and ragstone wall	2.58	2.49	Masonry	6/7
43	3	26	Flint nodule and ragstone wall	2.53	2.46	Masonry	6/7
44	3	29	Flint nodule, chalk and ragstone wall	2.5		Masonry	6/7
45	2	14	Compacted chalk surface	2.2		Layer	6/7
46	3	24	Compacted chalk surface	2.65	2.55	Layer	6/7
47	3	24	Compacted clayey floor layer	2.56	2.53	Layer	6/7
48	4	36	Fill of beamslot [49].	2.57		Fill	6/7
49	4	36	Cut of 17thC beamslot for an interior wall.	2.57	2.22	Cut	6/7
50	2	13	Finely laminated 16th c. layer	2.5		Layer	6/7
51	2	13	Compacted chalk surface 2.46 L		Layer	6/7	
52	3	25	Brick floor surface 2.74 Masonry		Masonry	6/7	
53	3	25	17thC ragstone wall on an e-w 2.99 2.88 Masonry alignment.		6/7		
54	3	25			Layer	6/7	
55	3	25	Remnant of 17thC brick structure.	2.63		Masonry	6/7

Context	Phase	Group	Interpretation	Highest Level	Lowest Level	Туре	Trench
56	3	24	17thC compacted chalk surface	2.48		Layer	6/7
57	3	29	17thC compacted chalk surface	2.45		Layer	6/7
58	3	24	17thC crushed chalk and mortar surface	2.58		Layer	6/7
59	2	13	16thC layer 2.48			Layer	6/7
60	2	13	16thC layer	2.39		Layer	6/7
61	3	24	17thC levelling layer	2.58	2.5	Layer	6/7
62	3	24	17thC alluvial deposit, indicative of a flood event	2.5		Layer	6/7
63	3	24	17thC made ground	2.61		Layer	6/7
64	3	24	Post-med demolition material	2.63		Layer	6/7
65	3	24	Made ground	2.63		Layer	6/7
66	5	50	Fill of pit [67]	2.88		Fill	6/7
67	5	50	Cut of 18thC rubbish pit	2.88 2.63		Cut	6/7
68	5	37	18thC made gound	2.89		Layer	6/7
69	5	37	18thC layer	2.78		Layer	6/7
70	3	25	Fill of con. cut [71] for 18thC wall [53]	2.69		Fill	6/7
71	3	25	Construction cut for 18thC wall [53]	2.69	2.58	Cut	6/7
72	5	51	Fill of 18thC rubbish pit [73]	2.87		Fill	6/7
73	5	51	Cut of 18thC rubbish pit	2.87	2.57	Cut	6/7
74	3	25	Post-med layer	2.61		Layer	6/7
75	4	36	Fill of 17thC beam slot [76]	2.63		Fill	6/7
76	4	36	Cut of 17thC beam slot	2.63	2.48	Cut	6/7
77	3	25	18thC made ground	2.68		Layer	6/7
78	2	20	16thC ragstone and tile wall	2.87		Masonry	8
79	1	6	Medieval ragstone wall with render	3.12		Masonry	8
80	2	21	Remnant of 16thC brick floor 2.93		Masonry	8	
81	2	21	16thC ragstone, flint and tile wall, 3.08 probably internal			Masonry	8
82	3	34	17thC internal wall. 3.14			Masonry	8
83	3	34	17thC ragstone and brick internal wall.		•	Masonry	8
84	3	66	17thC ragstone and tile wall.	3.2	2.7	Masonry	8

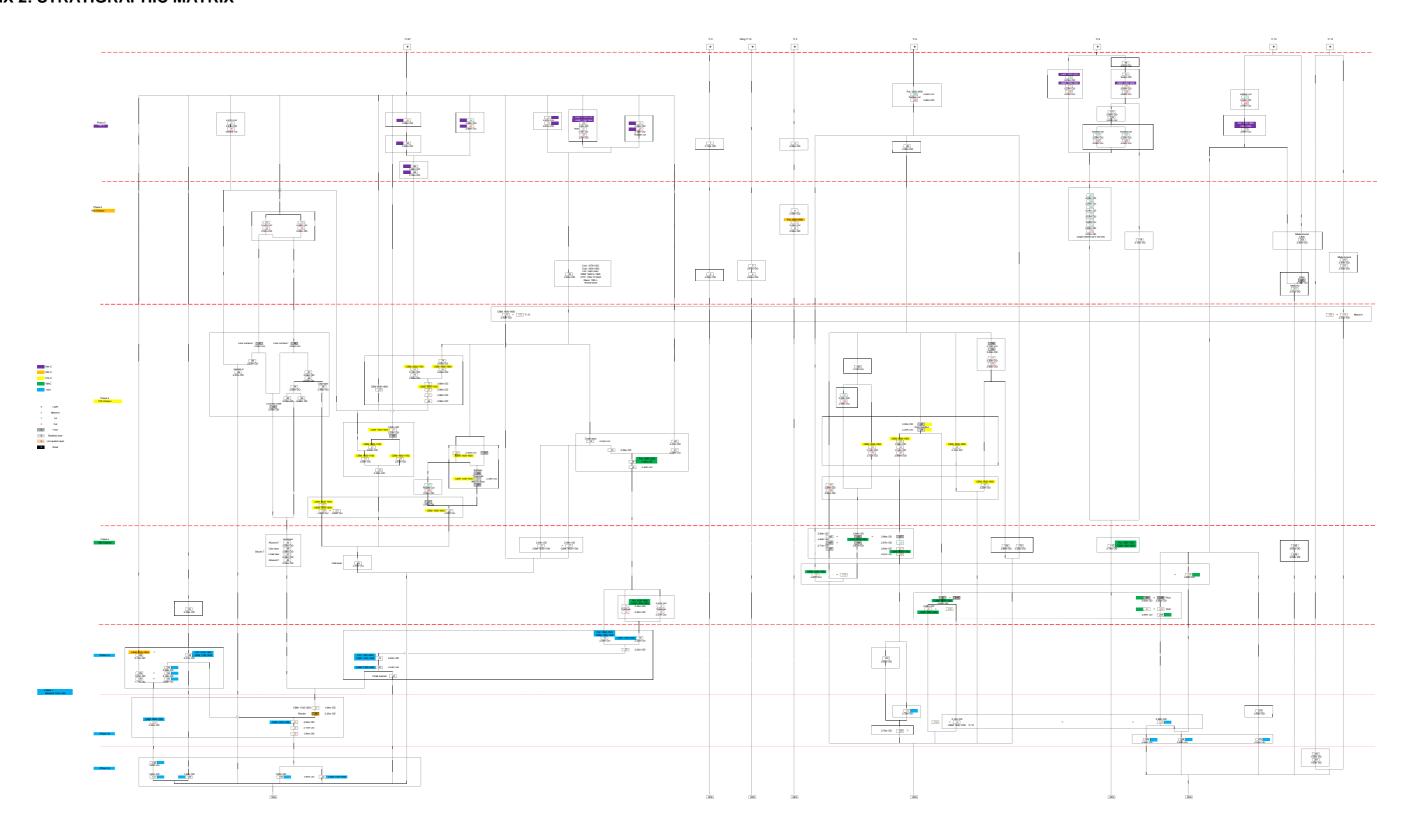
Context	Phase	Group	Interpretation	Highest Level	Lowest Level	Туре	Trench
85	3	34	17thC ragstone and brick, internal wall	3.12		Masonry	8
86	5	56	Demolition layer	3.56	3.31	Layer	8
87	3	34	Compacted clay surface, possible floor	3.3	3.1	Layer	8
88	3	24	Compacted chalk surface	2.61		Layer	6/7
89	3	24	17thC occupation layer	2.57		Layer	6/7
90	5	47	18thC robber cut of 17thC wall [42]	2.61	2.53	Cut	6/7
91	5	47	Backfill of 18thC robber cut [90]	2.61		Fill	6/7
92	5	48	18thC ragstone and chalk wall	2.96		Masonry	6/7
93	5	49	18thC made ground	2.9	2.83	Layer	6/7
94	3	34	Bedding for 17thC floor [87]	3.24	3.18	Layer	8
95	3	34	Backfill of construction [96] for 17thC wall [82]	2.98		Layer	8
96	3	34	Construction cut for 17thC wall [82]	2.98	2.87	Cut	8
97	2	17	16thC Beaten clay floor layer	2.99	2.95	Layer	8
98	5	62	19thC layer of cess	3.81	3.71	Layer	9
99	5	61	Backfill of 19thC brick soakaway [100]	3.64		Fill	9
100	5	61	19thC brick soakaway	3.64		Masonry	9
101	5	60	18thC dump layer	3.64		Layer	9
102	5	60	18thC dump layer	3.4	3.31	Layer	9
103	5	59	Backfill of 18thC pit [104]	3.29	3.23	Fill	9
104	5	59	Cut of 18thC rubbish pit	3.29	2.94	Cut	9
105	5	59	backfill of 18thC rubbish pit [106]	3.22		Fill	9
106	5	59	Cut of 18thC rubbish pit	3.22	3	Cut	9
107	4	42	Fill of large late 17thC - early 18thC pit [113]	3.29		Fill	9
108	4	42	Fill of large 17thC rubbish pit [113]	3	2.87	Fill	9
109	4	42	Fill of large 17thC rubbish pit [113] 3.01 2.66 Fill		9		
110	4	42	Fill of large 17thC rubbish pit [113]	large 17thC rubbish pit [113] 3.01 2.37 Fill		9	
111	4	42	Fill of large 17thC rubbish pit [113]	of large 17thC rubbish pit [113] 3.22 2.68 Fill		9	
112	3	42	Primary fill of rubbish pit [113]	nary fill of rubbish pit [113] 2.82 2.48 Fill		9	
113	4	42	Large 17thC rubbish pit 3.22 2.35 Cut		9		
114	4	43	Post-med dump layer	3.12	3.1	Layer	9

Context	Phase	Group	Interpretation	Highest	Lowest	Туре	Trench
				Level	Level		
115	2	19	Early post-med dump layer	2.74	2.5	Layer	9
116	5	61	Construction cut for soak away [100]	3.64	2.66	Cut	9
117	5	58	Late post-med well	3.23	3.22	Masonry	9
118	5	58	Construction cut for well [117]	3.23	2.45	Cut	9
119	5	58	Costriction cut backfill of well [117]	3.23		Fill	9
120	2	17	Backfill of construction cut [121]	2.87	2.8	Fill	8
121	2	17	Post-med internal wall	2.93		Masonry	8
122	2	17	Construction cut for masonry [121]	2.87	2.62	Cut	8
123	1	11	Medieval leveling layer	2.83	2.79	Layer	8
124	1	5	Possible medieval consolidation layer	2.7	2.68	Layer	8
125	1	4	Internal late med foundation	2.7		Masonry	8
126			Void				
127	1	3	Med N-S stone foundation and wall	2.22	1.83	Masonry	7
128	1	9	18thC made ground	2.15	2.14	Layer	7
129	1	9	Medieval made ground	1.87	1.85	Layer	7
130	1	9	Medieval levelling	1.77	1.76	Layer	7
131	2	12	Post-med made ground	2.38	2.32	Layer	7
132	1	9	Medieval made ground	2.21	2.08	Layer	7
133	1	9	Medieval made ground	2.38	2.04	Layer	7
134	1	9	Possible alluvial flood deposit	2.16	1.83	Layer	7
135	1	9	Occupation dump deposit	1.94	1.86	Layer	7
136	1	1	Medieval made ground/possible road	1.94	1.83	Layer	7
137	1	1	Alluvial flood deposit	1.83		Layer	7
138	1	1	Alluvial flood deposit	1.85		Layer	7
139	1	1	Alluvial flood deposit	1.85		Layer	7
140	3	31	Floor bedding	3.14	3.09	Layer	8
141	3	32	Fill of possible robber cut	3	2.92	Fill	8
142	3	32	Robber cut filled by [141] 2.9		2.62	Cut	8
143	2	17	16thC floor layer		2.97	Layer	8
144	2	17	Clay floor (possible repair) 2.87 2.83 Layer		Layer	8	
145	3	34	Construction cut for masonry [83] 3.12 Cut		8		
146	2	17	16thC floor layer	2.95	2.93	Layer	8
147	2	17	16thC floor layer	2.86	2.79	Layer	8

Context	Phase	Group	Interpretation	Highest Level	Lowest Level	Туре	Trench
148	3	66	Post-medieval wall	2.89	2.82	Masonry	8
149	3	66	Construction cut for masonry [148]	2.88	2.57	Cut	8
150	2	17	Bedding layer for floor [147]	2.71	2.69	Layer	8
151	3	33	Internal post-med wall	2.92	2.83	Masonry	8
152	3	33	16thC floor layer	3.13	3.11	Layer	8
153	3	33	Beaten chalk surface	3	2.91	Layer	8
154	2	18	Post-med made ground	2.88	2.78	Layer	8
155	3	33	Construction cut for [151]	2.83	2.72	Cut	8
156	3	35	17thC floor surface	2.42	2.37	Masonry	6/7
157	3	27	Threshold step	2.58	2.52	Masonry	6/7
158	3	29	NE-SW orientated wall	2.62		Masonry	6/7
159	3	27	External surface between [156] and [42]	2.42	2.37	Layer	6/7
160	3	27	External surface	3.37		Layer	6/7
161	3	27	External surface	2.46	2.43	Layer	6/7
162	3	27	Chalk spread		•	Layer	6/7
163	3	28	Fill of robber cut [164]	2.36		Fill	6/7
164	3	28	Robber cut filled by [163]	2.36		Cut	6/7
165	3	26	17thC stone wall	2.5		Masonry	6/7
166	3	25	17thC stone wall	2.5		Masonry	6/7
167	3	29	17thC stone wall	2.7		Masonry	6/7
168	5	57	Fill of robber cut [169]	3.6	3.55	Fill	8
169	5	57	Robber cut filled by [168]	3.6	2.88	Cut	8
170	2	18	Post-med consolidation of	leposit		Layer	8
200	1	2	Late post-medieval layer	1.65	1.6	Layer	13
201	1	2	Post-medieval layer	1.6	1.45	Layer	13
202	4	44	Post-medieval stone foundation	3.31	2.94	Masonry	12
203	4	45	Post-med layer	3.3	3.14	Layer	12
204	2	21	Early post-medieval layer	2.84		Layer	12
205	1	7	Late medieval/early post-medieval layer	2.46	2.43	Layer	12
206	1	7	Late medieval/early post-medieval layer	2.44	2.43	Layer	12
207	4	44	Post-medieval floor 3.14		Layer	12	
208	2	23	Post-medieval layer 3.06			Layer	12
209	2	23	Natural silts 3			Layer	12
210	3	35	Post-medieval wall 2.5 2.37		2.37	Masonry	13
211	4	46	Post-med make-up layer 2.5			Layer	13
212	4	46	Possible post-med floor	2.45		Layer	13

Context	Phase	Group	Interpretation	Highest	Lowest	Туре	Trench
				Level	Level		
213	5	63	Post-med made ground	3.64	2.6	Layer	12
214	1	8	Possible natural silts	2.63	2.43	Layer	12
215	1	7	Possible natural chalk layer	2.43		Layer	12
216	2	21	Tudor brick floor	2.93	2.92	Masonry	12
217	5	64	Fill of post-med robber cut	3.34		Fill	12
218	2	20	Post-medieval wall	2.92	2.91	Masonry	12
219	1	6	Medieval wall	3.26	3.12	Masonry	12
220	5	64	Robber cut filled by [217]	3.34	2.74	Cut	12
221	3	29	Post-medieval wall	2.62		Masonry	13
222	2	21	16thC ragstone, flint and tile wall, probably internal	2.92		Masonry	12

# APPENDIX 2: STRATIGRAPHIC MATRIX



APPENDIX 3: POST-ROMAN POTTERY ASSESSMENT

**Chris Jarrett** 

Introduction

The pottery assemblage consists of 20 sherds, representing 17 estimated number of vessels (ENV) and weighing 528g, of which two sherds, 2 ENV, 60g are unstratified. The pottery dates to the medieval and post-medieval periods. The condition of the pottery is good and only comprises sherd material, although diagnostic parts are present, e.g. rims and bases, which allowed forms to be assigned to most fragments. None of the pottery is abraded and it was most likely that the assemblage was deposited fairly rapidly after breakage. However, a small quantity of residual pottery is present (four sherds/4 ENV/ 103g). Pottery was quantified by sherd count, estimated number of vessels (ENV) and weight. The material was recovered from nine contexts as small (30 sherds or less) sized groups. The coding of the pottery types is according to the coding system employed by the Canterbury Archaeological Trust (e.g.

Cotter 2006). The distribution of the pottery is presented as an index. The breakdown of the pottery

types by period is as follows:

Medieval: nine sherds/9 ENV/235g

Post-medieval: ten sherds/8 ENV/293g

Index

Unstratified

German Frechen stoneware (PM5), 1525-1750, 1 sherd, 1 ENV, 47g, form: jug, bartmannen Rim

sherd, cordoned, applied face, wide rimmed, late 16th-century type

Italian maiolica: Montelupo (PM8), 1575/1600-1650/75, 1 sherd, 1 ENV, 13g, form: tazza. Body sherd, internal purple outline leaves, with green shading and ochre and blue touches. ?17th

century foglia verde style

Context [7], spot date: 1650-1800

Staffordshire-type slipware (PM21), 1650–1775/1800, 1 sherd, 1 ENV, 41g, form: dish, rounded. Flat, everted rim, chevron-type feathered slip decoration. Heated surfaces

Context [11], spot date: 1550–1800

Post-medieval red earthenwares (PM1), 1550–1800, 1 sherd, 1 ENV, 44g, form: jar, medium rounded. Rim sherd, rolled and rounded. Internal 'brown' glaze and an external wash. Orange sandy fabric with sparse fine white flint

Context [13], spot date: c. 1225 –1350

Tyler Hill ware (M1), 1225–1350, 1 sherd, 1 ENV, 3g, form: jug. Small body sherd, external white slip and green glaze

North or west Kent sandy ware (M38A), 1150–1400, 1 sherd, 1 ENV, 20g, form: unidentified. Convex base, body sherd

Total: two sherds, 2 ENV, 23g

Context [19], spot date: c. 1150 -1400

North or west Kent sandy ware (M38A), 1150–1400, 1 sherd, 1 ENV, 5g, form: unidentified. Small body sherd

Context [25], spot date: c. 1580-1620

North or west Kent fine - moderate sandy ware (M38B), 1225/50–1400, 2 sherds, 1 ENV, 13g, form: unidentified. Body sherds with combed wavy line decoration

North or west Kent fine - moderate sandy ware (M38B), 1225/50–1400, 1 sherd, 1 ENV, 79g, form: jug. Body sherd with a vertical loop wide strap handle with fine point stabbing and two thumb impressions on the terminal

North or west Kent hard - fired fine sandy ware (M38C), 1325/50–1400, 1 sherd, 1 ENV, 11g, form: unidentified. Body sherd

Surrey/Hampshire border ware: green - glazed ware (PM10.1), 1550–1725, 1 sherd, 1 ENV, 10g, form: drinking jug. Vertical loop strap handle. Sandy fabric

Tin-glazed earthenware: blue painted only (PM9B), 1575–1775, 1 sherd, 1 ENV, 37g, form: charger. Anglo-Netherlands. Rim sherd, narrow rounded top, internal lid-seated edge, three blue lines on the top of the rim and a paler blue band at the top of the wall with on and below the band blue spiralling and feathery foliage. *C.* 1580–1620 dated design (Korf 1980, 49 Lead-glazed exterior)

Total: 6 sherds, 5 ENV, 150g

Context [29], spot date: c. 1360-1525

Surrey: Cheam White Ware (LM6), 1360–1525, 1 sherd, 1 ENV, 2g, form: jug. Small body sherd, high-fired fabric

Context [115], spot date: c. 1550-1700

Post-medieval red earthenwares (PM1), 1550–1800, 2 sherds, 1 ENV, 31g, form: chafing dish. Rim sherd, expanded and bevelled with a triangular rim support and a piercing on the wall. A good, glossy olive-brown-fired glaze

Context [132], spot date: c. 1225-1300

Tyler Hill ware (M1), 1225–1350, 1 sherd, 1 ENV, 102g, form: jug, spouted. Rim sherd, thickened internally with a bevel, a cut out on the neck for an applied bridge spout with pinched constrictions near the rim. Externally white slip-coated with a highly decorative period design consisting of vertical red-slip lines on the spout and converging diagonal ones on the body that terminate in a white slip blob

Context [168], spot date: c. 1550-1600

Surrey/Hampshire border ware: green-glazed (PM10.1), 1550–1725, 2 sherds, 1 ENV, 70g, form: drinking jug, rounded. Rim sherd, thickened and internally bevelled with an internal and external glaze. Base sherd and flaring wall, unglazed

Context [213], spot date: c. 1775–1900

Late post-medieval red earthenware (LPM1), 1775+, 1 sherd, 1 ENV, 177g, form: paint pot. Chamber pot shape. Bevelled, triangular section rim, external incised lines on the shoulder, vertical loop strap handle. Internal glaze stops short of the rim. Internal yellow-green paint deposit.

# Significance, potential and recommendations for further work

The pottery has some significance at a local level for demonstrating medieval and post-medieval activity on the site. The occurrence of the unstratified Montelupo tin-glazed ware charger (a relatively rare British find) and the possible Netherlands maiolica charger (context [25]) reflects the sites location on the River Medway and contact with Europe. The Frechen stoneware bartmannen is a common place post-medieval find for a south-east England coastal site. The main potential of the pottery is to date the contexts it was recovered from and inform upon site activities. The assemblage also has the potential to demonstrate which sources of pottery were supplying medieval and post-medieval Strood. There are no recommendations for further work on the material at this stage, although its importance

should be reviewed in the event of more pottery being recovered from future archaeological work on the site.

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APPENDIX 4: CERAMIC BUILDING MATERIAL ASSESSMENT

Amparo Valcarcel

Introduction and methodology

A site visit was conducted to examine the date and form of some structures of medieval and post-medieval date. Two whole brick/stone samples were taken from each structure in accordance with the Pre-Construct Archaeology Ltd building material sampling guidelines. The material was recovered in the east part of the site from Trenches 6, 7, 8, 9, 12 and 13.

The application of a 1kg masons hammer and sharp chisel to each example ensured that a small fresh fabric surface was exposed. The fabric was examined at x20 magnification using a long arm stereomicroscope or hand lens (Gowland x10). London codes were used for matched fabrics. Fabrics unique to Strood were prefixed with KSF1, thus *KSF...1* and were compared with the fabrics from Rochester Riverside, RRS04 (Hayward, 2007)

This medium sized assemblage (133 fragments, 39.54 kg) is characterised by large groups of post-medieval peg tiles and bricks and a much smaller medieval component. By form, there is a high proportion of roofing tiles (70.67% by size), followed by bricks (12.03%) and stone (6.01%). All the ceramic building material consists in bricks and roofing tiles. No floor or wall tiles were found during the excavation. The stone assemblage was varied though not exceptional.

CERAMIC BUILDING MATERIAL (125 examples, 33.41 kg)

Medieval (32 examples, 2.88 kg)

2271type: Hard, well fired fabric with fine texture, occasional coarse quartz (31 examples, 2.47 kg)

2273type: Distinct sandy fabric with abundant-frequent coarse quartz (1 example, 41 g.)

Some examples of medieval materials were collected. The small quantities of medieval tiles are made of local fabric groupings very similar as those found in London (2217type;2273type). The assemblage is largely unremarkable with only roofing tiles, suggesting an original association with medieval structures. Some of these fabrics were redeposited in later phases. Some examples of peg tiles present a splash brown glazed, with just one example in green [20]. A fragment of curved roofing tiles was found in [11].

#### Post-medieval (62 examples, 11.47 kg)

Roofing (57 examples, 7.69 kg)

2276type: hard, well fired fine texture with few visible inclusions (45 examples, 6.8 kg)

KSF1: Very fine yellow sandy fabric with iron red inclusions and red moulding sand (8 examples, 554 g.)

KSF2: A very fine red-brown silty fabric with large black iron oxide inclusions. White silty laminae and wisps with large nodules of red and black iron oxide. No quartz. (4 examples, 335 g.)

#### BRICKS (16 examples, 21.06 kg)

3039type: Moderate quartz, occasional black iron oxide, moderate yellowish white silty inclusions. Fairly soft sandy fabric with lenses of light clay giving a streaky appearance (2 examples, 4.74 kg.)

3046type: Very sandy fabric with frequent coarse quartz (11 examples, 12.76 kg.)

3065type: Extremely sandy fabric with abundant coarse quartz occasional dark red iron oxide, white flint/shell inclusions. (1 example, 381 gr.)

KSF3: Very fine yellow brick numerous fine quartz fragments (3 examples, 2.75 kg.)

Post-medieval bricks form a larger component of the ceramic building material assemblage, in comparison to the medieval period, represented only by peg tiles. Four fabrics are presented although the vast majority are made of the very fine red sandy fabric [3046type]. A small assemblage of transitional bricks was recovered, all of which were found to be made from local clays. The earliest bricks came from AD 1400/1600, but it is possible that this fabric continued to be used later. The presence of these bricks represents a phase of structural redevelopment from AD 1400/1600-1700. Some bricks are characterised by fine moulding sand and sharp edges indicating a 18<sup>th</sup> or 19<sup>th</sup> century date. There are also bricks with deep frogs indicating a 19<sup>th</sup> century date.

Peg tiles are quite numerous on the site, indicating new phases of rebuilding and repair to the roofing of buildings. New fabrics were documented: KSF1 and KSF2, manufactured locally in Kent area, and are similar with those found in Rochester Riverside excavation (RRS04). (KSF1 =RK6, KSFA2=RK2). It is likely that much of the roofing tiles and bricks used in Strood were obtained from tileries situated close by.

#### **MORTAR**

MORTAR TYPE	DESCRIPTION	CONTEXTS		
T4	Light hard lime mortar (1800-1900)	[100][117]		
Т3	Crinkly yellow/greyish loose mortar [1600-1800]	[35][41][44][55][85][156][158][166]		
T2	Yellow/brownish sandy mortar (1450-1700)	[37][40][42][43][52][78][80][82][121][127][165]		
T1	White very hard lime shelly mortar (1200-1450)	[19][33]		

### STONE (9 examples, 16.29 kg)

Chalk, flint and Kentish ragstone were used mainly in the foundations and the in the walls, using a rubble core of mortared flint, chalk and tile mixed with Kentish ragstone. Chalk and flint are materials easily available in southern Britain. Most of structures remained that were built up using chalk and flint, are mixed with bricks, pointing out that these stones are associated with post–medieval constructions.

There are also large quantities of Kentish ragstone that may have derived from the dismantling medieval buildings. Wall [33] is built by well worked ashlars and bonded with a hard shelly mortar. The fact that all the ragstone found in walls and layers have the same quality and homogeneity, indicates that the material came from the same quarry at the same time, suggesting that is reused material, and has been robber from medieval structures, and was reused in post- medieval buildings.

One fragments of York stone was reused in wall [83] but the example is so small that it is impossible to date or to assign a function for its use. However, the York stone is likely to be post-medieval in date. A granite rubble was collected from [167].

German lavastone quern is burnt and very fragmented/or broken from early Roman, medieval or early post medieval phases. This rock type was the most common quern stone material for Roman period, although the possibility exists that these may be used later, mostly to produce gin in post-medieval distilleries.

fabric code	Description	Geological Type and source	Use at KSFA18
3105	Fine hard dark grey sandy	Kent ragstone, Lower	5
	limestone	Cretaceous, Lower	examples
		Greensand Maidstone	6.12 kg, used as ashlar in [33];
		District - Kent	rubble in several structures:
			[37][41][42][43][53][78][79][82]
			[83][84][85]
3108	Fine banded light brown	Lower Cretaceous	1
	calcareous sandstone	(Wealden) Kent	example used as rubble from [83]
3116	Fine powdery white	Chalk Upper Chalk	Recorded <i>in situ</i> as rubble in
	foraminiferal limestone	(Upper Cretaceous)	:[37][40][42][43][81][84][82]
		Thames Valley	
3117	Hard dark-grey siliceous	Flint – Upper Cretaceous	Recorded <i>in situ</i> as rubble in
	cryptocrystalline sandstone	(Upper Chalk) London	:[37][41][42][43][85]
		Basin	
3123	Hard, coarse, dark-grey	Neidermendig lavastone	2
	vesicular basalt lava -	Tertiary-Andernach	examples
	with white (leucite) and	Region, NW Germany	718 g
	black		
	inclusions.		
3135	Quartz rich, acid igneous	Granite, Pre-cambrian, variety of	Used as rubble in [167], 1 example,
	rock with granular,	localities	50 g.
	porphyritic texture		

Table 1. Summary of the character, source, quantity and probable function of the main stone types from the site, including the material recorded in situ.

#### **DISTRIBUTION BY PHASE**

Figure 1 illustrates the phase distribution for this site. It can be seen that a majority of the ceramic building material (by number of fragments) comes from Phase 2. However, most of this material was in a highly fragmentary condition and the much smaller weight if Figure 1 is a more true representation of their presence. By contrast, Phase 3 has the largest amount of building material by weight because of an increase in the use of bricks.

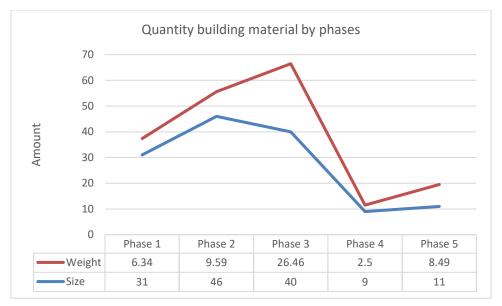


Figure 1. Building material collected from different phases by size and weight1

### Phase 1 (Medieval)

A small quantity of building material was recovered from phase 1 (31 examples, 6.34 kg), located in Trench 6 and 12. The material was collected from layers, made ground and alluvial deposits and from structures. The material is in good condition.

Peg tiles are the predominant forms, indicating the used of ceramic for roofing. Two different walls [33] [215] built up ashlars of Kentish ragstone and bonded with a shelly hard mortar shows the earlier occupation of the site. These walls probably are part canal constructed between 1200 and 1450. A ragstone wall [79] was founded in Trench 8, is poorly made and is reusing stone, probably from the medieval walls, suggesting a late medieval or early post-medieval date. It is important to point out that no medieval floor tile was found, probably indicating that the settlement was far away of this area.

# Phase 2 (16th century)

Most of the material collected (91%) from Phase 2 is represented by roofing material and less quantities of bricks, recovered from dump layers and fills of pits, made ground, dump layer and structures (46 fragments, 9.59 kg), located in the Trench 6 and 8. Medieval material is still present although post-medieval material is predominant in this phase. Medieval material only consists on roofing tiles, made of fabrics 2271.

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<sup>&</sup>lt;sup>1</sup> Material recorded on site during the visit is not included in the amount

Local sandy bricks appeared in this phase for the first time. Three different brick fabrics were identified: the mottled sandy 3039; the very sandy red 3046 and fine yellow KSF3 fabric. Early post-medieval bricks were irregular in size and shape. The largest proportion of bricks is shallow (51 mm), wide (110-111 mm) and unfrogged, and they have sunken margins which are a common characteristic of such bricks. The early post medieval structures [37] [78] [80] [81] and [121] were bonded with a yellow/brownish sandy mortar (T2).

Different structures were constructed in phase 2. From Trench 6, poorly made foundations walls [34] and [40], were constructed used mainly chalk, flint and reused bricks and Kentish ragstone. In Trench 8, two walls [78] and [81] were parallel to wall [79], and a brick floor was added to it. The walls were poorly made, constructed with chalk and reused Kentish Ragstone, with no ceramic material. Brick floor was made of early post-medieval sandy fabric 3046. Wall [121] combines peg tiles and chalk.

### Phase 3 (17th)

Phase 3 is characterised for being the phase with the highest remaining structures although it was recovered less material (40 examples, 26.46 kg), even the size is similar as phase 2. The material was collected from different made grounds and from masonry contexts, found in Trench 6, 8 and 13. Bricks material increase noticeably, although roofing material still remains high. Most of the post-medieval building material is in a very good condition due to the amount of remained structures, especially from Trench 6.

Peg tiles form numerically (35%) the most common post-medieval roofing form made of London red fabric 2276. Peg tiles normally associated with roofing was found as a levelling the course in walls. A slight increase in bricks to previous phases was noticed, mostly associated with masonry structures as fireplace [35], brick floor surfaces [52] [55], walls [82] [85] and [158]. Bricks mostly of local red sandy fabrics especially fabric 3046 were collected. Bricks (108-111mm) wide, had sunken margins and uneven surface, are typically 16<sup>th</sup> and 17<sup>th</sup> century, and were bonded crinkly yellow/greyish loose mortar (T3).

Different structures were found from this phase related to buildings confirming groups 25, 26, 35, 34 and 66. A cluster of different contexts match up with group 26, situated in the central area of Trench 6, including a possible fireplace [35]. The building was extended in the southwest corner (Trench 13). A group of walls were documented at Trench 8 and were constructed parallel to walls [78] [81] from Phase 2, conforming groups 34 and 66. All the structures excavated from this phase were constructed using bricks mixed with chalk, flint and Ragstone.

# Phase 4 (18th century)

Building material from phase 4 considerably decreases (9 examples, 2.5 kg), provided by only one context [25], (Trench 6/7) interpreted as a demolition layer. The forms found consisted in post-medieval peg tiles and bricks. No stone was collected from this phase

#### Phase 5 (19th century)

A small size of material was preserved from this phase (11 examples, 8.49 kg.). Bricks and peg tiles are the only form represented. Fabrics have not changed from previous phases, though machine and frogged bricks are introduced for the first time found in well [27] and soakaway [100].

#### **RECOMMENDATIONS**

In summary, this is a very well preserved assemblage, representing different phases of rebuilt through the years. The material came from standing structures and various demolition episodes. The building material assemblage produced a substantial quantity of post-medieval building material, and the medieval period would seem to be poorly represented. A variety of fabric types are present, suggesting that the material was obtained from a variety of local production sites. Futhermore, it seems likely that most bricks and peg tiles were made at brickyards situated much closer to Strood.

Although that is a high variety of fabrics, the forms preserved on the site only consists in bricks and roofing material (peg and curved tiles).

Wall [33] built up with Kentish ragstone, belongs to the earliest phase documented in the excavation, probably late medieval. The stone is characterised by its high quality and homogeneity, indicating that came for the same quarry. The fact that this stone is abundant from post-medieval layers and structures suggests that is robber and reused material from medieval buildings.

Most of the structures constructed by chalk and flint are mixed with bricks and peg tiles, pointed out that these stones are used just in post-medieval buildings.

Medieval – Together the peg roof tile and stone provide evidence for the presence of a late medieval/early post-medieval building.

Post-medieval – Several structures and layers indicate the massive occupation of the site in post-medieval period. There is little of intrinsic interest in the forms, but further comparative investigate work about the fabrics is recommended here too. This should involve finding parallel examples from the Strood area.

A reassessment of these materials including comparison with the Rochester fabric type series will help to clarify what these fabrics are made from and where the materials were being quarried and manufactured and try to find parallels with other sites from the Strood area. This information when combined with a reappraisal of the dating information and the stratigraphic sequence should also produce a better chronology of the different fabrics and forms used and what type of building, the ceramic building material and stone once belonged with. An excavation of the site is highly recommended to understand the multi-period occupation of the site and the function of each one of the spaces formed by the different structures.

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Context	Fabric	Form	Size	Date rar	_	Latest dat	ed material	Spot date	Spot date with mortar
0	3123	Niedermendig lava quern stone (burnt)	2	50	1800	50	1800	1450-1800	No mortar
11	2271;2276; KSF2	Medieval and post medieval peg tiles,	19	1180	1900	1400	1900	1400-1900	No mortar
13	2271	Medieval splash glazed peg tiles;	2	1180	1800	1180	1800	1180-1450	No mortar
18	2271;2276	Medieval and post-medieval peg tiles;	8	1180	1900	1180	1900	1180-1500	No mortar
19	3101M	Mortar T1	2						1200-1500
20	2271;2276	Medieval/post-medieval peg tiles	9	1180	1900	1400	1900	1180-1500	No mortar
21	2273;2276	Medieval/post-medieval peg tiles	2	1135	1900	1400	1900	1135-1500	No mortar
23	2271;2276	Medieval/post-medieval peg tiles	7	1180	1900	1180	1900	1180-1500	No mortar
25	2271;2276;KSF 1;3046; 3065	Medieval and post-medieval peg tiles and bricks	9	1180	1900	1400	1900	1600-1800	No mortar
26	3046type;3101P M	Local sandy fabric; Mortar T4	V					1750-1850	1750-1850
29	2271;2276;KSF 1:KSF2	Medieval and post-medieval peg tiles	8	1135	1900	1400	1900	1400-1900	No mortar
33	3105;3101M	Kentish ragstone ashlar; Mortar T1	V	50	1666	50	1666	1200-1450	1200-1450
35	2276type; 3046type;3101P M	Post-medieval local peg tiles and bricks; burnt; Mortar T3	6	1400	1900	1450	1900	1600-1800	1600-1800
37	3105; 3116;3117; KSF3;3046type; 3101PM	Flint nodules; chalk and Kentish ragstone; post- medieval local sandy peg tiles and bricks; Mortar T2		50	1900	1450	1900	1450-1700	1450-1700
40	2271type; 2276type; 3116;3101PM	Medieval and post-medieval peg tiles; chalk; Mortar T2	V	50	1900	1400	1900	1450-1700	1450-1700
41	3105;3117;3101 PM	Flint and Kentish ragstone (rubble); Mortar T3	V	50	1800	50	1800	1600-1700	1600-1700

Context	Fabric	Form	Size	Date rai	•	Latest dat	ted material	Spot date	Spot date with mortar
42	3105;3116;3117 ;3101PM	Flint nodules; chalk and Kentish ragstone; Mortar T2	V	50	1800	50	1800	1450-1700	1450-1700
43	3105; 3116;3117;3101 PM	Flint nodules; chalk and Kentish ragstone; Mortar T2	V	50	1800	50	1800	1450-1700	1450-1700
44	3101PM	Mortar T3							1600-1800
52	3046type;3101P M	Post-medieval local brick; Mortar T2	1	1450	1900	1450	1900	1450-1700	1450-1700
53	3105;3101PM	Kentish ragstone ashlar; Mortar T2	V	50	1666	50	1666	1450-1700	1450-1700
55	3046type; KSF3;3101PM	Post-medieval local sandy bricks; Mortar T3	1	1450	1900	1450	1900	1600-1800	1600-1800
78	3105;2676type; KSF2;3101PM	Kentish ragstone; local post- medieval peg tiles; Mortar T3	3	50	1900	1450	1900	1450-1700	1450-1750
79	3105; 3101PM	Ragstone ashlar and rubble; Mortar T2	V	50	1666	50	1666	1450-1700	1450-1700
80	3046; 3101PM	Post-medieval bricks; Mortar T2	2	1450	1900	1450	1900	1450-1700	1450-1700
81	3116;3101PM	Chalk rubble; Mortar T2	٧	50	1800	50	1800	1450-1800	1450-1800
82		Post-medieval peg tiles and sandy brick; Kentish ragstone and chalk rubble; Mortar T2/T3	V	50	1900	1450	1900	1450-1700 1600-1800	1450-1800 1600-1800
83	3105;3108;3101 PM	Kentish ragstone and York stone rubble; Mortar T3	V	50	1900	50	1900	1600-1800	1600-1800
84		Kentish ragstone and chalk rubble; post-medieval local peg tiles and bricks; Mortar T3		50	1900	1450	1900	1600-1800	1600-1800
85	3105;3117;3036 ;3101PM	Flemish brick; Kentish ragstone and chalk rubble;	V	50	1800	1600	1800	1600-1800	1600-1800
92	3101PM								Undateabl e
100	3046;3101PM	Post-medieval frogged brick; Mortar T4	1	1450	1900	1450	1900	1800-1900	1800-1900

Context	Fabric	Form	Size	Date rar		Latest dat	ted material	Spot date	Spot date with mortar
115	2271;2276;KSF 1	Medieval/post-medieval peg tiles	5	1180	1900	1450	1900	1450-1900	No mortar
117	3046;3101PM	Post-medieval sandy red brick; Mortar T4	1	1450	1900	1450	1900	1780-1900	1780-1900
119	2271;2276	Medieval/post-medieval peg and curved tiles	7	1180	1900	1400	1900	1400-1900	No mortar
121	2276;3039;3101 PM	Post-medieval peg tile and brick; Mortar T2	8	1400	1900	1450	1900	1450-1700	1450-1700
127	3101PM	Mortar T2							1200-1450
128	3039	Post-medieval brick	1	1450	1900	1450	1900	1700-1900	No mortar
132	2271	Medieval/post-medieval peg tiles	2	1180	1800	1180	1800	1180-1800	No mortar
156	3105;2276;3101 PM	Kentish ragstone rubble; medieval/post-medieval peg tiles; Mortar T3	2	50	1666	50	1666	1600-1800	1600-1800
158	3105;KSF3	Kentish ragstone rubble; local post-medieval brick; Mortar T3		50	1666	1450	1900	1600-1800	1600-1800
165	3101PM	Mortar T2							1450-1700
166	3105;3101PM	Kentish ragstone rubble; Mortar T3	1	50	1666	50	1666	1600-1800	1600-1800
167	3105;3135	Kentish ragstone and granite rubble	1	50	1666	50	1666	1200-1600	No mortar

<sup>&</sup>lt;sup>1</sup> Excluding stone and mortar

APPENDIX 5: CLAY TOBACCO PIPES ASSESSMENT

**Chris Jarrett** 

Introduction

A small sized assemblage of clay tobacco pipes was recovered from the site (less than one box). The assemblage is in a good condition and unusually consists of a higher proportion of bowls to stems. The clay tobacco pipes occur in a single context as small sized group (under 30 fragments) and the greater part of the material consists of residual bowl types and was therefore more likely to have been deposited

under both secondary and tertiary circumstances.

All the clay tobacco pipes (seven fragments, of which none are unstratified) were recorded in a database format and classified by Atkinson and Oswald's (1969) typology (AO), although the 18th-century examples are according to Oswald's (1975) general typology and have been prefixed OS. One bowl type (AO13v) has been classified according to Higgins (2016). The tobacco pipes are discussed as an

index.

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The clay tobacco pipe assemblage consists of fifteen bowls and two stems. The clay tobacco pipe bowl types have a date range of c. 1640–1740.

Context [25], spot date: c. 1700–1710/40

AO9, 1640-1660, two spurred bowls with a bulbous profile. Both of the bowls have an average finish or burnish and either half or three quarters milling of the rim.

AO10, 1640-1660, one heeled bowl with a rounded profile, an average burnish and no milling of the

rim.

AO13v, 1660-1680, three heeled bowls, all of which have a quarter milling of the rim and are variants of the usually pronounced barrel-shaped type found in London. Two examples have a rounded front and a slightly rounded back (both have an average burnish) and another example has a rounded back and a straight front and is more similar to the AO18 straight-sided type. The bowl

has a poor burnish and finish.

- AO20, 1680–1710, five heeled, angled bowls with a rounded profile and all of the bowls have an average finish or burnish and are absent of milling of the rim unless otherwise stated. One bowl is missing its rim. Three of the bowls have the marks of two different pipe makers:
- M C: two bowls and both with a crown above the initials on the sides of the heel. The probable pipe maker was Matthew Coppin, who was recorded as working at Rochester in 1701 (Boyden 2015, 278).
- T W: one bowl with a quarter milling of the rim. Possibly made by Thomas Walton, 1690–2, working at Canterbury (Cannon 2002).
- AO21, 1680–1710, two heeled, angled bowls, usually with an angled straight back and round front, although the two examples here are a variant shape with a gently rounded back profile. The bowls have a good finish and are absent of milling on the rim.
- OS10, 1700–1740, two heeled, upright bowls with a straight back and round front. One example has a short cylindrical heel with an angled underside, while the other example has unusually a bottered rim (made rounded using a button like tool with a circular groove and a feature of 17th century bowls) rather than having the typical cut rim and the norm for this type of bowl.

The two stems are either thick or medium-thin with wide bores and more likely to date to the 17th century.

#### Significance, potential and recommendation for further work

The clay tobacco pipes are of some significance at a local level and to some extent exhibit local variations in bowl shapes that deviate from the norm. Late 17th- or early 18th-century Kent master clay tobacco pipe makers are also represented in the assemblage, one of which is relatively local (Matthew Coppin of Rochester), while another is from further afield (Thomas Walton, of Canterbury). The material has the potential to date the context in which it was found and allows for a better understanding of the characteristics for the local clay tobacco pipe industry. There are no recommendations for further work upon the assemblage at this stage, although if further archaeological work occur s on the study area and new finds of clay tobacco pipes are found, then the importance of the pipes reported upon here should be reviewed.

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## APPENDIX 6: METAL AND SMALL FINDS ASSESSMENT

Märit Gaimster

In total, six objects defined as metal and small finds where recovered from the excavation: they are listed in the table below. The finds are discussed here by phase.

# Phase 1a: medieval (1200-1500)

A circular copper-alloy mount came from alluvial deposits [137] in Trench 7 (SF 9) where it was associated with pottery dating from 1225–1300. The mount is formed by a domed disc, fitted with a single separate rivet at the centre. The prolific use of mounts to decorate belt straps and girdles is a characteristic feature of the late Middle Ages (cf. Egan and Pritchard 1991, 162–243; Willemsen 2012). Besides many different decorative shapes, mounts included also simple forms like the present item (cf. Egan and Pritchard 1991, fig. 112).

# Phase 2: 16th century

Two copper-alloy objects were retrieved from this phase, both from floor layers in Trench 8. Of particular interest is a complete but corroded finger ring with an unusual double-lozenge bezel, forming a figure-of-eight in plane with the simple hoop (SF 8). One of the settings still retain a small domed circular gem, almost certainly of glass although now heavily oxidized. An identical ring was recovered from excavations of Tudor and Stuart period settlement on the S bank of the River Thames in Southwark (Egan 2005, 54 and fig. 39 no. 235). The Southwark ring, which retained no gems in the settings, was an unstratified object and was considered a 14th-century object in earlier publications (cf. Murdoch 1991, 132 no. 313). The double bezel is known from other rings of this time, such as a gold example from Bristol reported through the Portable Antiquities Scheme in 2005 (Barton and Hitchcock 2008, 117 and 353 no. 419). On the Bristol ring, however, the bezel is place perpendicular to the hoop. The discovery of the Strood finger ring may here instead support a Tudor period date of its Southwark parallel. Small domed glass gems are known from both medieval and 16<sup>th</sup>-century finger rings (cf. Egan and Pritchett 1991, fig. 215 no. 1609; Cherry 1991, fig. 10 no. 4; Egan 2005, fig. 39 no. 233).

A second object from the present excavations is presented by a small spherical object of heavily decayed copper-alloy sheeting (SF 6). This will require x-raying to aid further identification but may be the remains of either a rumble bell or a composite button. The latter would be more unusual, as composite buttons with soldered heads of copper-alloy sheet are more characteristic of the 17th and 18th centuries (cf. Egan 2005, fig. 33 no. 198; Read 2005, 70–72).

# Phase 3: 17th century

The fill of possible robber cut [142] produced the fragment of a thin cast copper-alloy vessel with a simple flanged rim (SF 5). Comparable vessels are known from the early modern period (cf. Egan 2005, fig. 85 nos 443–44).

#### Phase 5: 19th century

The only small find from a Phase 5 context came from a demolition layer in Trench 8. This is a complete but corroded circular copper-alloy buckle with a central bar and a cast copper-alloy buckle pin (SF 7). The buckle is of a form that was used throughout the late medieval and early modern periods, and is certainly residual here (cf. Whitehead 2003, 44–45). More likely a 19th-century object may be an unstratified slate pencil (SF ??); these writing implements were widely used in schools from the late 18th century onwards (Rhodes 1984).

#### Significance and recommendations for further work

Metal and small finds potentially provide key elements of domestic material culture and activities related to the investigated site. While the assemblage from the Strood Flood Protection site is small, it includes some diagnostic objects that relate to activities on or near the site in the late medieval and early modern periods. An object of particular significance is a copper-alloy finger ring with an unusual double-lozenge bezel, set with probable glass gems, with a parallel from a Tudor and Stuart period assemblage from the Thames waterfront in London. This and other relevant finds should be included in any future publication of the site. For this purpose it is recommended that the ring is cleaned by conservator and that the material of the remaining gem is established. The other four copper-alloy objects should be x-rayed to enable a full identification.

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phase	context	SF	description	spot date	recommendations
n/a	0	bulk	Slate pencil; tapering round-section with neatly finished		
			top and knife carving marks at working end; tip broken off;		
			L 65mm+; gauge 5mm		
1a	137	9	Copper-alloy mount; domed circular with remains of single	1225-1300	x-ray
			separate rivet; diam. 22mm		
2	97	6	Copper-alloy hollow spherical sheet object; heavily	n/a	x-ray
			corroded and degraded; slightly oval in shape; W 15mm;		
			L 18mm; ht. 13mm; possibly button or small rumble bell		
2	147	8	Copper-alloy finger ring; complete but heavily corroded	n/a	clean by
			with internal double-lozenge bezel; one setting of ?glass		conservator and
			gem retained; internal diam. 17mm		identify gem
					material
3	141	5	Copper-alloy cast vessel; simple flange rim fragment only;	n/a	x-ray
			W 15mm; outer diam. 160mm; vessel diam. c. 130mm		
5	86	7	Copper-alloy buckle; complete circular with D-section	n/a	x-ray
			frame and central bar; cast copper-alloy pin; diam. 35mm		

KSFA18: metal and small finds

## APPENDIX 7: COINS ASSESSMENT

Murray Andrews

A total of three post-Roman coins and one post-Roman jetton were recovered during the evaluation and watching brief at the Strood Flood Defence Scheme Phase 1 site. These are listed in the table below. All objects consist of 'single finds' deposited individually, probably resulting from accidental loss, and are discussed by category and phase below.

# Assemblage composition

The earliest coins from the site are a late medieval silver penny (SF 3) and a late medieval silver groat (SF 4); precise attributions are impeded by the extent of corrosion, although the coins can be respectively assigned broad dates of 1279-1351 and 1413-1461 on the basis of size and weight. While both coins are clearly residual inclusions within post-medieval contexts, they nonetheless provide an important indication of site-specific activity during the later medieval period, and broadly evidence the circulation of low and mid-value coinage in the Strood area as part of an increasingly monetised late medieval English economy. By contrast, a copper-alloy farthing of George III (SF 2) probably represents a primary loss within the nineteenth century context [26] and is a characteristic example of the kind of 'small change' that found mass circulation during the late eighteenth and nineteenth centuries as a means of payment for wages and small-scale purchases.

An early fifteenth century copper-alloy French jetton (SF 1) was also found at the site and, like the medieval coins, is residual in a post-medieval context. Used primarily as 'reckoning counters' for arithmetic calculation, jettons are frequently encountered on late medieval and early post-medieval archaeological sites and reflect the increasingly widespread numerical literacy developed in the course of the 'commercial revolution'. Like the coins, it therefore evidences both site-specific activity during the later medieval period, and otherwise indicates commercial activity in the town at this date.

#### Significance

The post-Roman coins and jetton from the Strood Flood Defence Scheme Phase 1 site constitute a key element of the archaeological data from the site and provide primary material evidence for commercial and economic activity in Strood during the late medieval and post-medieval periods. However, problems of residuality limit their potential to inform on aspects of context-specific dating.

# Recommendations

- All coins require cleaning to clarify dating and proposed identifications.
- Any further publication should include a standalone finds report discussing the coins from the site.

# Catalogue

Context	SF	Description	Date	
25	5 1 Copper-alloy jetton of France. c.1400-1425. 'Ave Maria		1400-1425	
		Crown type (As Mernick and Algar 2001, 228, 75).		
		Tournai mint. Obverse: [AVE M]A[RIA] GRACIA [PL],		
		Crown. Reverse: [A]V[E M], Cross in quatrefoil with		
		letters between annulets in spandrels. Die axis 90°,		
		weight 2.1g. Moderate wear. Moderate corrosion.		
25	3	Silver penny of Edward I-III. 1279-1351. Uncertain	1279-1351	
		issue. Uncertain mint. Obverse: Illegible, facing bust.		
		Reverse: Illegible, Long Cross patté with three pellets in		
		angles. Die axis uncertain, weight 1.3. Moderate wear.		
		Heavy corrosion.		
26	2	Copper-alloy farthing of George III. 1770-1775. First	1770-1775	
		Issue (Spink 3775), London mint. Obverse: [GEORGIVS		
		III REX], Laureate and cuirassed bust right. Reverse:		
		[BRITAN NIA], Britannia seated left. Die axis 180°,		
		weight 5.5g. Heavy wear. Moderate corrosion.		
144	4	Silver groat of Henry V or Henry VI (?). 1413-1461.	1413-1461	
		Uncertain issue. London mint. Obverse: Illegible, facing		
		bust. Reverse: [POSVI DEVM ADIVTOREM MEVM] /		
		CIVITAS [L]O[NDO]N, Legend in two circles. Clipped.		
		Die axis uncertain, weight 2.6g. Moderate wear. Heavy		
		corrosion.		

## **APPENDIX 8: GLASS ASSESSMENT**

## **Chris Jarrett**

A single fragment of post-medieval glass (1g) was recovered from the archaeological work and was found in context [25]. The fragment is made of clear soda glass and its actual form and date are uncertain. However, the fragment appears to be derived from the corner of a 19th-century moulded bottle, with either a rectangular-, hexagonal- or octagonal-section. The date of this item is at odds with the pottery and the clay tobacco pipes recovered from context [25] (see Jarrett Pottery and Clay tobacco pipe assessments) and may represent an **intrusive** item.

The glass has no significance as it is of a very small size and no real confidence can be assigned to its form or date. Therefore, the glass has very limited potential to date the context it was recovered from. There are no recommendations for further work on the material.

## APPENDIX 9: ANIMAL BONES ASSESSMENT

Kevin Rielly

#### Introduction

This site is situated alongside the northern/western bank of the Medway to the south and west of the High Street in Strood, Rochester. It consists of 9 evaluation trenches, of which just two provided archaeological features, namely trenches 6 and 8 located at the eastern boundary of the study area. A series of deposits dating from the medieval through the post-medieval era are associated with several walls and floor surfaces.

#### Methodology

The bone was recorded to species/taxonomic category where possible and to size class in the case of unidentifiable bones such as ribs, fragments of longbone shaft and the majority of vertebra fragments. Recording follows the established techniques whereby details of the element, species, bone portion, state of fusion, wear of the dentition, anatomical measurements and taphonomic including natural and anthropogenic modifications to the bone were registered.

### Description of faunal assemblage

The excavations provided a single bone, a sheep astragalus, this taken from a late 16<sup>th</sup>/early 17<sup>th</sup> century deposit (25) in Trench 6. This is from a rather small sheep or possibly sub-adult (2<sup>nd</sup> year). It has an abraded appearance, possibly indicative of redeposition.

#### Conclusion and recommendations for further work

While apparently well dated, the state of this bone is clearly indicative of redeposition/residuality. The limited area with archaeological remains, the state of this single item and the absence of any other bones tends to suggest a rather low potential for further recovery. Any additional excavation at this site should include an attempt to improve the efficiency of retrieval by taking bulk samples. However, on present evidence, it is unlikely that the animal bones recovered (irrespective of the retrieval methods employed) will provide more than a few cursory remarks concerning animal usage in this area.

# **APPENDIX 10: OASIS FORM**

# OASIS ID: preconst1-329268

Project details

Project name Strood Flood Defences. Phase 1 Site (Civic Centre)

Short description Evaluation at the site of former Civic Centre in Strood. Development: new

of the project flood defences scheme.

Project dates Start: 11-06-2018 End: 08-08-2018

Previous/future No / Yes

work

Any associated KSFA18 - Sitecode

project reference

codes

Type of project Field evaluation

Current Land use Vacant Land 1 - Vacant land previously developed

Monument type N/A None

Monument type N/A None

Significant Finds N/A None

Significant Finds N/A None

Methods & "Targeted Trenches", "Test Pits"

techniques

Development type Flood Defences

Prompt National Planning Policy Framework - NPPF

Position in the After full determination (eg. As a condition)

planning process

# **Project location**

Country England

Site location KENT MEDWAY ROCHESTER Strood Flood Defences, Strood, Kent.

Phase 1 Site

Postcode ME2 4AU

Study area 3.65 Hectares

Site coordinates TQ 57382 16896 50.929436816918 0.239818852434 50 55 45 N 000 14

23 E Point

Height OD / Depth Min: 3.9m Max: 4.7m

# Project creators

Name of PCA

Organisation

Project brief Ben Found

originator

Project design JBA Consulting

originator

Project Zbigniew Pozorski

director/manager

Project supervisor Guy Seddon

Type of VolkerStevin Ltd

sponsor/funding

body

# Project archives

Physical Archive Maidstone Museum

recipient

Physical Contents "Ceramics", "Glass", "Metal"

Digital Archive Maidstone Museum

recipient

Digital Contents "Ceramics", "Glass", "Metal", "Stratigraphic", "Survey"

Digital Media "Database", "Survey", "Text"

available

Paper Archive Maidstone Museum

recipient

Paper Contents "Ceramics", "Glass", "Metal", "Stratigraphic", "Survey"

Paper Media "Context

available sheet","Drawing","Map","Photograph","Plan","Report","Section","Survey

","Unpublished Text"

# Project

bibliography 1

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