

**AN ARCHAEOLOGICAL WATCHING BRIEF AT STONE CASTLE, STONE,
KENT.**

Site Code: KSOC 05

National Grid Reference: TQ 5825 7425

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Pre-Construct Archaeology Limited, November 2005.**

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1 ABSTRACT

- 1.1 This report details the results of an archaeological watching brief undertaken at Stone Castle, Kent, during the excavation of a soak-away and the removal of topsoil in the castle grounds, prior to a landscape gardening project.
- 1.2 The area of ground reduction was located within the original garden of the castle, located immediately west of the building.
- 1.3 The topsoil was stripped to a maximum depth of 200mm below ground level. The soak-away was excavated to a maximum depth of 500mm below ground level.
- 1.4 The watching brief revealed 4 cut features, interpreted as post-medieval rubbish pits, a chalk wall, believed to be post-medieval or earlier, and a brick-lined drain, believed to date to the 19th century.

2 INTRODUCTION

- 2.1 An archaeological watching brief was conducted by Pre-Construct Archaeology Ltd in the grounds of Stone Castle, Kent, from 21st to 25th November 2005. The work was commissioned by Duncan Hawkins of CgMs consulting Ltd., project managed by Peter Moore and supervised on 21st November 2005 by Elliott Wragg and from 22nd to 25th November 2005 by the author.
- 2.2 The site was bounded to the north by a housing development, to the east by Stone Castle and to the south and west by open land.
- 2.3 The National Grid Reference of the site is TQ 5825 7425.
- 2.4 The site was assigned the site code KSOC 05.
- 2.5 The maximum depth of ground reduction was 200mm, with the exception of the soak-away, which was excavated to a maximum depth of 500mm.

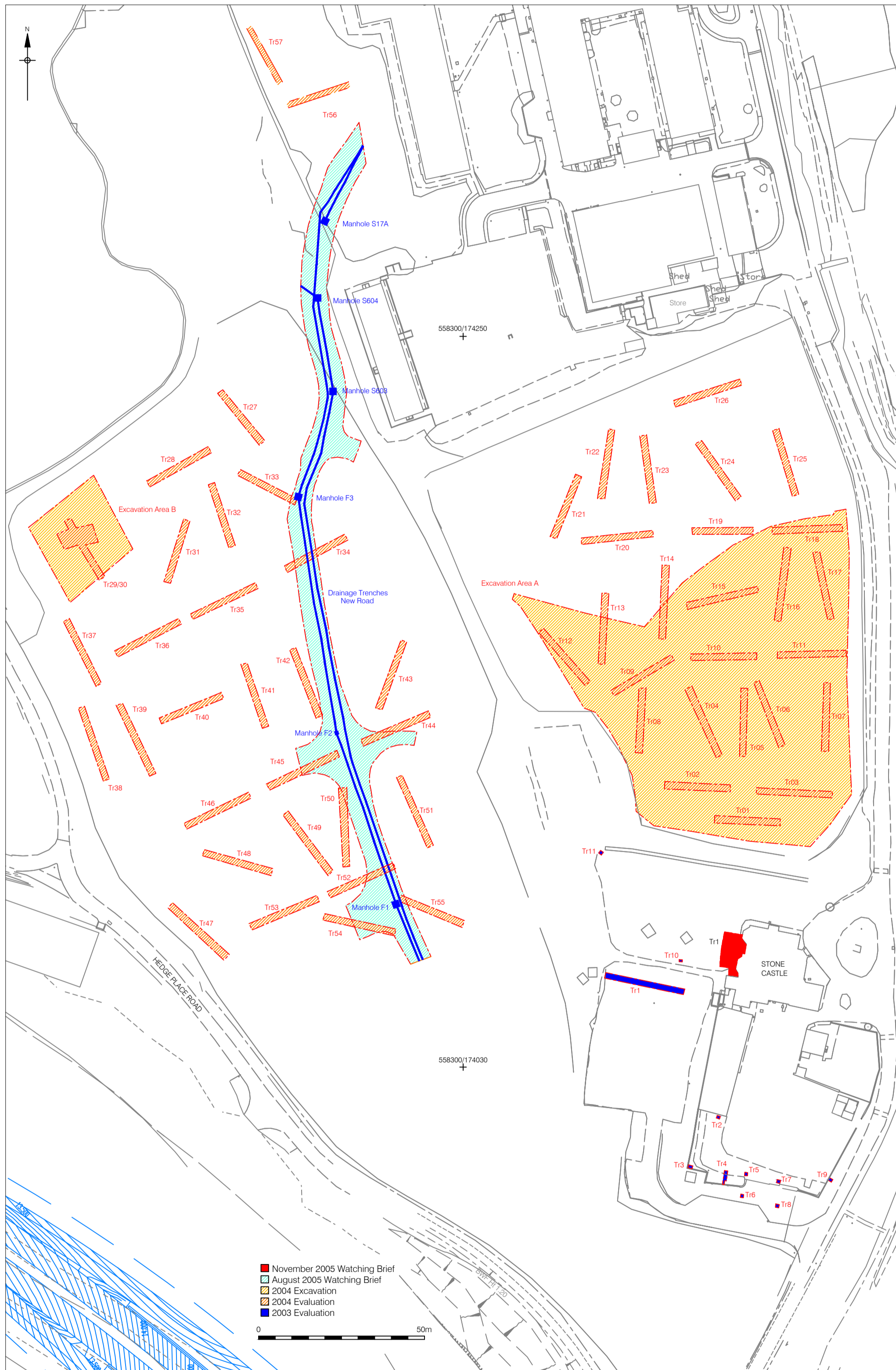


Figure 2
Trench Location
1:1000

3 PLANNING BACKGROUND

- 3.1 In November 1990 the Department of the Environment issued Planning Policy Guidance Note 16 (PPG16) "Archaeology and Planning", providing guidance for planning authorities, property owners, developers and others on the preservation and investigation of archaeological remains.
- 3.2 In considering any planning application for development, the local planning authority will be guided by the policy framework set by government guidance, in this instance PPG16, by current Structure and Local Plan policy and by other material considerations.
- 3.3 The relevant Development Plan framework is provided by the Kent Structure Plan and the Dartford Borough Council Local Plan adopted in 1995. The adopted Kent Structure Plan states:

**"POLICY ENV17
IN THE CONTROL OF DEVELOPMENT AND THROUGH POLICIES AND
PROPOSALS IN LOCAL PLANS:**

**THE ARCHAEOLOGICAL AND HISTORIC INTEGRITY OF SCHEDULED ANCIENT
MONUMENTS AND OTHER IMPORTANT LOCAL ARCHAEOLOGICAL SITES
AND HISTORIC LANDSCAPES, TOGETHER WITH THEIR SETTINGS, WILL BE
PROTECTED AND, WHERE POSSIBLE, ENHANCED. DEVELOPMENT WHICH
WOULD ADVERSELY AFFECT THEM WILL NORMALLY BE REFUSED.**

**DEVELOPMENT MAY BE PERMITTED WHERE THIS WOULD PROVIDE THE
BEST REASONABLE MEANS OF CONSERVING THE CHARACTER,
APPEARANCE, FABRIC, INTEGRITY AND SETTING OF THE ANCIENT
MONUMENT, ARCHAEOLOGICAL SITE OR HISTORIC LANDSCAPE.**

**WHERE THE CASE FOR DEVELOPMENT WHICH WOULD DAMAGE OR
DESTROY ANY ARCHAEOLOGICAL SITE IS ACCEPTED BY THE LOCAL
PLANNING AUTHORITY APPROPRIATE PROVISION FOR INVESTIGATION AND
RECORDING WILL BE REQUIRED."**

- 3.4 The Dartford Borough Local Plan states:

"POLICY B11

DEVELOPMENT PROPOSALS WHICH WOULD ADVERSELY AFFECT SCHEDULED ANCIENT MONUMENTS AND OTHER NATIONALLY IMPORTANT ARCHAEOLOGICAL SITES WILL NOT BE PERMITTED.

POLICY B12

OTHER SITES OF ARCHAEOLOGICAL SIGNIFICANCE WILL BE PROTECTED FROM DEVELOPMENT WHERE THE ARCHAEOLOGICAL INTEREST IS OF OVERRIDING IMPORTANCE. WHERE THE INTEREST IS NOT OVERRIDING, DEVELOPMENT PROPOSALS MAY BE PERMITTED WHERE IT CAN BE DEMONSTRATED THAT THE SITE CAN BE PRESERVED EITHER IN SITU (THE PREFERRED OPTION) OR BY MAKING A DETAILED RECORD OF IT FOR FUTURE ARCHAEOLOGICAL REFERENCE. APPROPRIATE CONDITIONS WILL BE ATTACHED TO ANY PLANNING PERMISSION.”

4 GEOLOGICAL BACKGROUND

- 4.1 The British Geological Survey map 271 of the area (1:50,000 series) indicates that the site is underlain by Boyn Hill Gravels and undivided, mainly Seaford Chalk.

- 4.2 The site slopes down from west to east from a highest level of 36m OD in the northwest corner to a lowest level of 33m in the northeast corner.

5 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

5.1 GENERAL OVERVIEW

The Archaeological desk based assessment¹ indicated a moderate to good potential for the Palaeolithic period, a low potential for the Mesolithic and Neolithic periods, a moderate potential for the Bronze Age period, a good potential for the Roman period and a low to moderate potential for the Anglo Saxon, early medieval and post-medieval periods.

5.2 PREHISTORIC

5.2.1 Palaeolithic flints and faunal remains were discovered *ex situ* to the north of the site. Cultural material was also recovered from several Palaeolithic landsurfaces of at Globe Pit in Greenhithe.

5.2.2 Neolithic material was found along the Greenhithe stretch of the River Thames, and a small quantity of pottery and flints were recovered from quarries in the vicinity.

5.2.3 A large assemblage of Bronze Age pottery was found to the southwest of the site, and a socketed Bronze Age spearhead was found in the castle grounds.

5.2.4 An Iron Age hut circle, an enclosure and a large pit were found in nearby quarries.

5.3 ROMAN

5.3.1 The route from London to Rochester passes to the north of the site. Excavations at a Stone Castle chalk pit to the northeast found evidence of a Romano-British settlement, including a cemetery. Other artefacts of Roman date have been recovered in the vicinity of the site. A number of burials have also been found.

5.4 MEDIEVAL

5.4.1 The Domesday Survey of 1068 records Stone as an agricultural estate, on land owned by the Bishop of Rochester. The rectangular stone tower, which still forms part of the

¹ Hawkins, D. "Specification for an Archaeological Evaluation on Land at Residential Phase II, Waterstone Park, Stone Castle, Kent". CgMs unpublished report, January 2004.

"castle" today, is thought to be the only surviving part of the original thirteenth century defended residence. Prior to the construction of this defended residence, the site was probably partially wooded and partially agrarian. Wooded areas were probably used for hunting and exploited for natural resources.

5.5 POST-MEDIEVAL

5.5.1 During the late medieval and early post medieval period the area around the buildings is likely to have formed a park or hunting estate for the manorial complex. The main building of the castle as it currently stands is a late Georgian structure. The Georgian building was rebuilt in approximately 1825. By 1869 the current boundaries of the castle's grounds had been formed, although it is thought that these re-marked those from 1825. An Ordnance Survey map of 1868 indicates a large garden to the southwest of the castle. From the late 19th century to the first half of the 20th century the surrounding area was extensively quarried for chalk.

6 ARCHAEOLOGICAL METHODOLOGY

- 6.1 The areas to be reduced were lain out by the groundwork contractors in accordance with the proposed development plan. The ground-reduction for the landscape gardening and the trench for the soak-away were all machine excavated by the contractors.
- 6.2 The attendant archaeologist monitored all ground-reduction so that any archaeological deposits could be excavated and recorded stratigraphically.
- 6.4 Individual descriptions of all archaeological strata and features excavated and / or exposed were entered onto pro-forma recording sheets. All plans and sections of archaeological deposits were recorded on polyester based drawing film, the plans being drawn at a scale of 1:20 and the sections at 1:10. The recording system used was "single context". The OD height of all principal strata were calculated and indicated on the appropriate plans and sections. A full photographic record was also prepared, including both black and white prints and colour transparencies on 35mm film.
- 6.5 Levels were taken off a spot height recorded on an architectural drawing provided by the client. This spot height had a value of 34.56m OD and was located on the southeast corner of the Castle building. The trench was surveyed in by total station and tied into the Ordnance Survey grid.

7 ARCHAEOLOGICAL PHASE DISCUSSION

7.1 PHASE 1- NATURAL

7.1.1 Layer [12], a deposit of firm, mid yellowish-brown, clayey sandy silt with occasional sub-angular gravel, was observed in the eastern end of the site. The dimensions of the layer were 7.00m north-south, 7.40m east-west and of unknown depth, the top being at a level of 33.81m OD. It was sealed by subsoil to the west, and was therefore not observed in that area of the site. The deposit was interpreted as natural brickearth.

7.2 PHASE 2- POST-MEDIEVAL

7.2.1 Truncating layer [12] was [4], a circular pit with steeply sloped, concave sides with a sharp break of slope at the top and bottom and a rounded base. The dimensions of the cut were 1.05m north-south, 1.30m east-west and 0.45m deep. The top of the feature was at a level of 33.66m OD. It was filled with a firm, mid grey-brown sandy silt, which contained very frequent fragments of peg-tile, red fabric brick, angular chalk cobbles and mortar, and rare fragments of bone and pottery. The feature was interpreted as being a post-medieval pit containing demolition debris.

7.2.2 Also truncating layer [12] was [6], a pit with steeply sloped, concave sides with a sharp break of slope at the top, a more gradual break of slope at the bottom and a rounded base. The true shape of the feature in plan remains unknown as it was still sealed by subsoil when project level was reached. It was only exposed within the trench that was excavated for the soak-away and was therefore only recorded in section (see figure 4). The dimensions of the feature were 1.32m north-south, over 0.30m east-west and 0.42m deep, the top being at a level of 33.56m OD. It was filled with [5], a firm, light yellowish-grey, sandy silt containing frequent peg tile and red brick, occasional pottery and occasional bone. The feature was interpreted as being a post-medieval pit containing demolition debris.

7.2.3 Also truncating layer [12] was [8], a pit with steeply sloped, concave sides with a sharp break of slope at the top and bottom and a rounded base. The shape of the feature in plan remains unknown as it was still sealed by subsoil when project level was reached. It was only exposed within the trench that was excavated for the soak-away and was therefore only recorded in section (see figure 4). The feature also continued beyond the limit of excavation to the south. The dimensions of the feature as exposed were over 0.55m north-south, over 0.30m east-west and 0.32m deep, the top being at a level of 33.55m OD. It contained a deposit of firm, light

yellowish-grey, sandy silt containing occasional CBM. The feature was interpreted as being a post-medieval pit containing demolition debris.

7.2.4 Also truncating layer [12] was [18], a partially exposed cut feature. The full extent of the feature remains unknown as it was still partially sealed by subsoil when project level was reached. A slot was cut into the exposed side of the feature in an attempt to acquire dating evidence. This suggested that the feature had concave sides with a sharp break of slope at the top and bottom and a flat base, which seemed to be sloping gradually towards the north. The top of the feature was at a level of 33.69m OD. It was filled with loose to firm, mid yellowish brown, silty sand with frequent inclusions of CBM, occasional inclusions of pottery, bone, charcoal, and oyster shell, and occasional sub-angular flint pebbles. The feature was interpreted as being a probable post-medieval pit containing demolition debris.

7.2.5 A chalk wall foundation, [10], was also observed in the eastern end of the site. The foundation was made from roughly hewn chalk blocks, which were between an approximate maximum size of 300mm x 400mm x 100mm and an approximate minimum size of 100mm x 100mm x 50mm. The blocks were held in place with a silty, greyish yellow mortar. Only one course was observed, but the foundation was assumed to continue below project level. The wall was "L" shaped in plan, consisting of a north-south wall, which measured 5.00m north-south and 0.50m east-west, and an east-west return, which was 0.50m north-south and 3.10m east-west. Both walls were of unknown depth. It is also possible that the north-south wall continues to the north and south and that the east-west return continues further west, below the remaining subsoil. The top of the wall was at a level of 33.69m OD, within construction cut [11]. This construction cut was "L" shaped in plan, was a maximum of 5.00m north-south, a maximum of 3.20m east-west and of unknown depth. It was backfilled with [9], a firm, mid-greyish-brown, sandy silt. The top of the cut was at a level of 33.62m OD. The wall was assumed to date to the post-medieval period or earlier, although no dating evidence was recovered during the watching brief.

7.3 PHASE 3- 19th CENTURY

7.3.1 Truncating [9] was [16], the construction cut for brick-lined drain [15]. The drain was constructed from stretcher bonded, red fabric, frogged bricks, 220mm x 100mm x 60mm in size, bonded with a friable, silty sandy grey mortar. The drain was capped with re-used peg tiles. Only one course was observed, although the drain may continue below project level. The drain was 3.90m north-south, 0.30m east-west and of unknown depth, the top being at a level of 33.74m OD. It contained a soft, dark brown, humic rich silt fill, [13], which appeared to have accumulated via natural silting. The drain was constructed within cut [16], which was 3.90m north-south, 0.30m east-west and of unknown depth, the top being at a level of 33.63m OD. It was backfilled with [14], a firm, mid brownish-grey, sandy silt. The drain probably continues to the north and south, below the remaining subsoil. It was interpreted as being 19th century in date.

7.4 PHASE 4- TOPSOIL / SUBSOIL

7.4.1 Sealing these features was [2], a layer of loose, mid greyish-brown, clayey sandy silt with occasional inclusions of sub-rounded flint pebbles. The layer was 12.50m north-south, 7.40m east-west and 0.30m deep, the top being at a level of 33.67m OD. It was interpreted as being a layer of subsoil.

7.4.2 Sealing [2] was [1], a layer of loose, dark grey-brown, humic rich sandy silt with frequent roots and occasional inclusions of sub-rounded flint pebbles. The layer was 12.50m north-south, 7.40m east-west and 0.10m deep, the top being at a level of 33.86m OD. The layer was interpreted as topsoil.

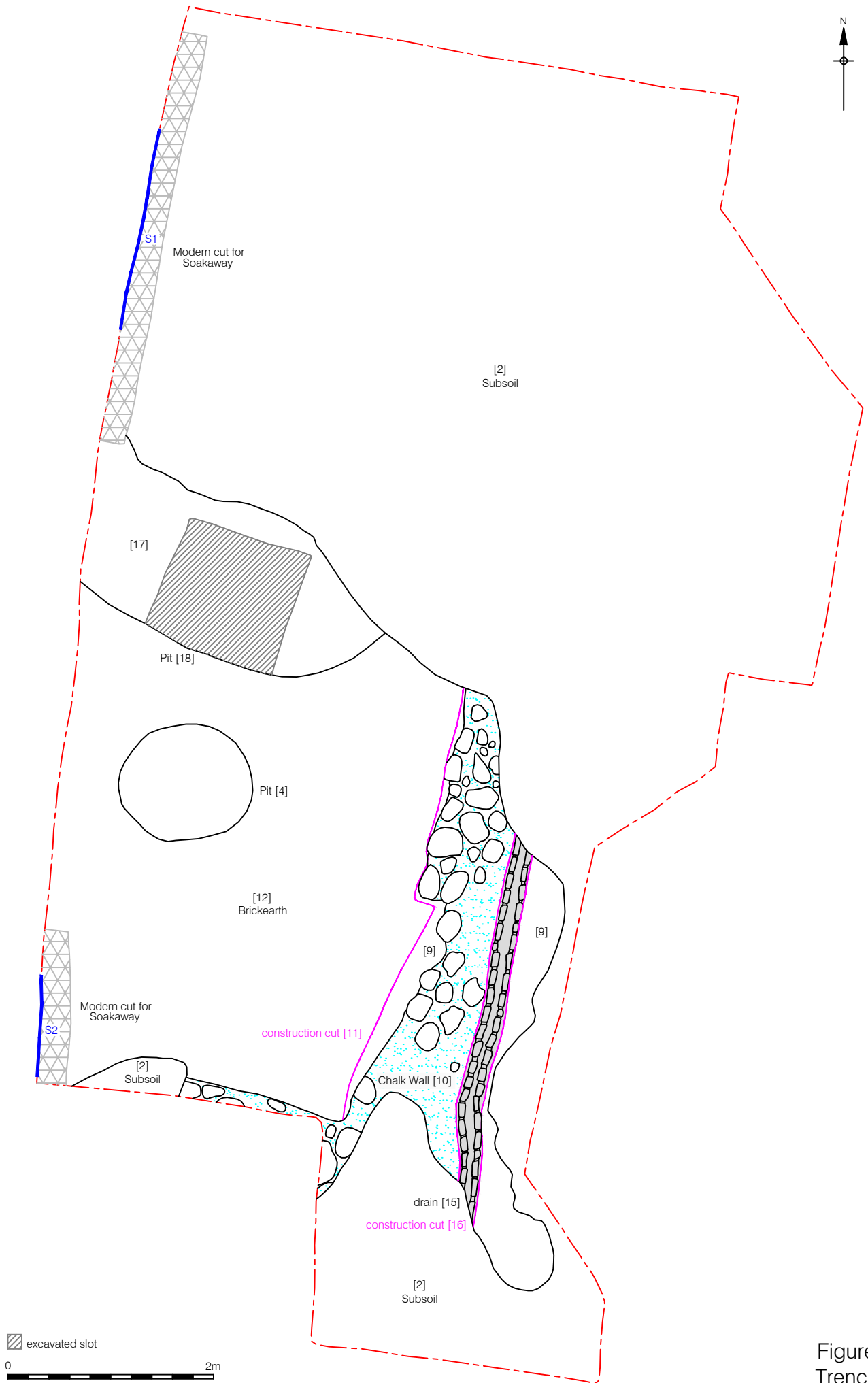


Figure 3
Trench 1
1:50

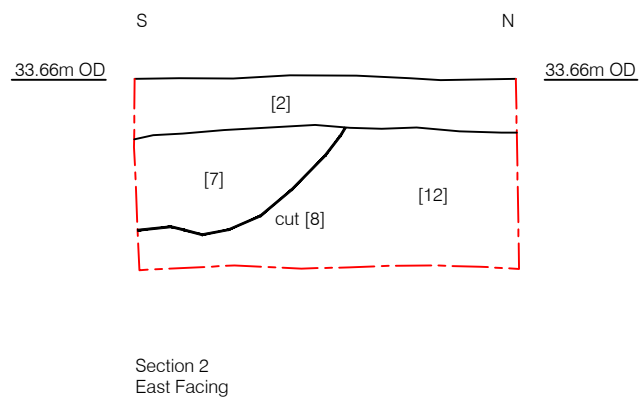
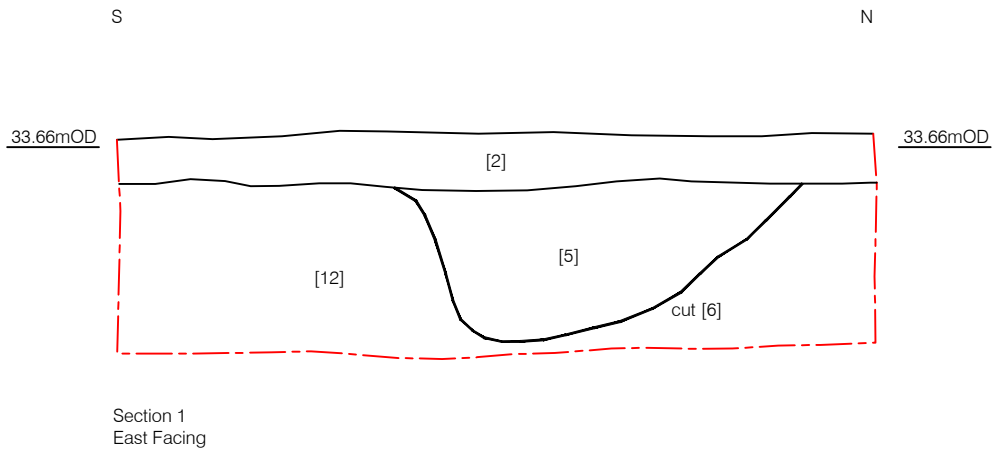


Figure 4
Sections 1 & 2
1:20

8 INTERPRETATIONS AND CONCLUSIONS

- 8.1 The watching brief was intended to identify and record archaeological material exposed by the removal of overburden as part of a landscape gardening project and the construction of a trench for a soak-away. One of the principal objectives was to determine the presence or otherwise of any significant archaeological remains from any period.
- 8.2 The earliest datable human activity on site was found to consist of four post-medieval pits, a chalk wall, presumed to be associated with the medieval or post-medieval castle building, and a later 19th century brick-lined drain.
- 8.3 The underlying natural was found to consist of clayey sandy silt brickearth.
- 8.4 The watching brief confirmed the presence of significant post-medieval activity. As much of the site was still covered with subsoil at the end of the watching brief, it seems probable that further archaeological remains may be present below the project level. These remains should be well preserved below the finished landscaped garden, as no further intrusive work is to be carried out on the site.

9 ACKNOWLEDGMENTS

- 9.1 Pre-Construct Archaeology Limited would like to thank Duncan Hawkins of CgMs Consulting Ltd for commissioning the work on behalf of Land Securities Ltd..

- 9.2 The author would like to thank Hayley Baxter for the illustrations and Peter Moore for his project management and editing. Thanks also to Alexis Haslam for his hard work and assistance with the fieldwork, Nathalie Barrett for the surveying and Lisa Lonsdale for technical support.

10 BIBLIOGRAPHY

Hawkins, D. *"Specification for an Archaeological Evaluation on Land at Residential Phase II, Waterstone Park, Stone Castle, Kent"* CgMs unpublished report, January 2004.

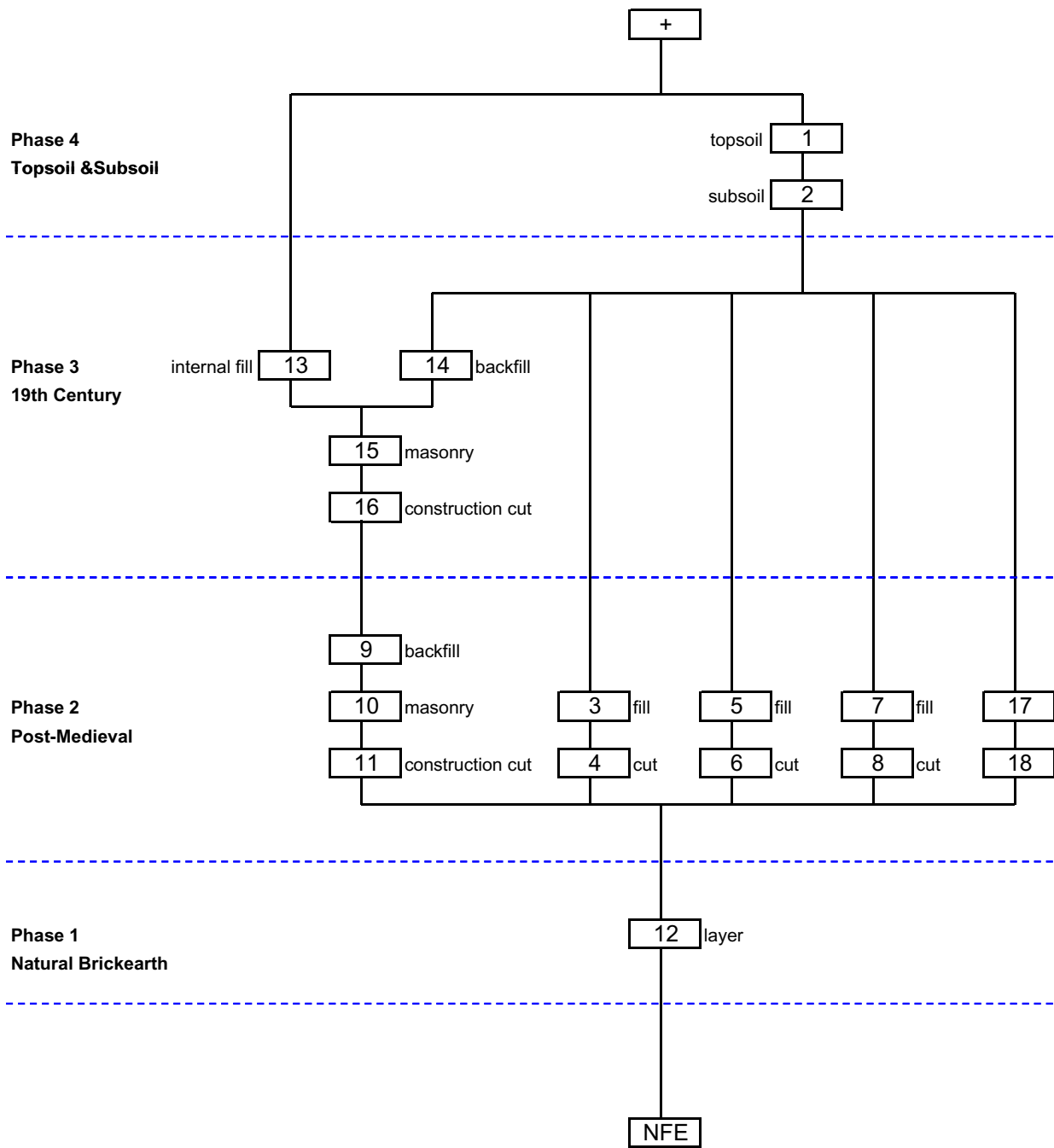
Appendix 1- Context Register

Appendix Context Index

Context	Plan No.	Section No.	Sample No.	Photo	Phase	Trench No.	Type	Description
1	*	*	*	*	4	1	Layer	Topsoil
2	1	1, 2	*	Y	4	1	Layer	Subsoil
3	*	*	*	Y	2	1	Fill	Fill of [4]
4	1	*	*	Y	2	1	Cut	Pit
5	*	1	*	Y	2	1	Fill	Fill of [6]
6	*	1	*	Y	2	1	Cut	Pit
7	*	2	*	Y	2	1	Fill	Fill of [8]
8	*	2	*	Y	2	1	Cut	Pit
9	1	*	*	Y	2	1	Fill	Backfill of constuction cut [11]
10	1	*	*	Y	2	1	Masonry	Chalk wall
11	1	*	*	Y	2	1	Cut	Construction cut for [10]
12	1	*	*	Y	1	1	Layer	Natural brickearth
13	1	*	*	Y	3	1	Fill	Backfill of constuction cut [16]
14	1	*	*	Y	3	1	Fill	Internal fill of drain [15]
15	1	*	*	Y	3	1	Masonry	Red fabric, frogged brick drain
16	1	*	*	Y	3	1	Cut	Construction cut for [15]
17	1	*	*	Y	2	1	Fill	Fill of [18]
18	1	*	*	Y	2	1	Cut	Partially exposed feature

Appendix 2- Site Matrix

Appendix 2- Site Matrix



APPENDIX 3- OASIS DATA COLLECTION FORM

[List of Projects](#) | [New project](#) | [Change your details](#) | [HER coverage](#) | [Log out](#)

1.1.1 Printable version

1.2 OASIS ID: preconst1-11707

Project details

Project name	An Archaeological Watching Brief at Stone Castle, Stone, Kent
Short description of the project	An archaeological watching brief to establish the presence or absence of archaeological remains on site during the construction of a soak-away and ground reduction (part of a landscape gardening project).
Project dates	Start: 21-11-2005 End: 25-11-2005
Previous/future work	Yes / Not known
Any associated project reference codes	KSTC03 - Sitecode
Any associated project reference codes	KSTC04 - Sitecode
Type of project	Recording project
Site status	Local Authority Designated Archaeological Area
Current Land use	Other 5 - Garden
Significant Finds	POTTERY Post Medieval
Significant Finds	CBM Post Medieval
Investigation type	'Watching Brief'
Prompt	Direction from Local Planning Authority - PPG16

Project location

Country	England
Site location	KENT DARTFORD SWANSCOMBE AND GREENHITHE Stone Castle, Stone, Kent
Postcode	DA9 9XX
Study area	700.00 Square metres

National grid reference TQ 5825 7425 Point
Height OD Min: 33.00m Max: 36.00m

Project creators

Name of Organisation Pre-Construct Archaeology Ltd
Project brief originator CgMs Consultants Ltd
Project design originator Duncan Hawkins
Project director/manager Peter Moore
Project supervisor Rebecca Lythe
Sponsor or funding body Land Securities

Project bibliography 1

Publication type Grey literature (unpublished document/manuscript)
Title An Archaeological Watching Brief at Stone Castle, Stone, Kent
Author(s)/Editor(s) Lythe, R. S.
Date 2005
Issuer or publisher Pre-Construct Archaeology
Place of issue or publication Brockley, London
Description Unpublished report, A4 ringbound document with blue cover sheet.

Entered by Rebecca Lythe (rlythe@pre-construct.com)
Entered on 29 November 2005

2 OASIS:

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