WRITTEN SCHEME OF INVESTIGATION FOR AN ARCHAEOLOGICAL EVALUATION

Royal Mail Sorting Office
London Road
Twickenham

October 2012

Planning • Historic Buildings • Archaeology
Specialist & Independent Advisors to the Property Industry

Local Planning Authority:
Richmond Upon Thames Council

Site centred at:
TQ 154 279

PLANNING REF:
12/3650/FUL

SITE CODE:
TWL13

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Duncan Hawkins BA FSA MIfA

Report Status:
Planning Issue

Issue Date:
February 2013

CgMs Ref:
RM/13162

CONTENTS

LIST OF FIGURES

1.0 INTRODUCTION

1.1 It is proposed to redevelop the site of the former Royal Mail Sorting Office, London Road Twickenham. The site has the planning reference 12/3650/FUL (Figs 1 - 4).

1.2 The geological, topographical, archaeological and historical background to the site is summarised in Section 2 below, and is discussed in detail in Appendix 1. The site has an identified archaeological potential for the Late Iron Age/Roman periods and the Post Medieval period, together with a palaeoenvironmental potential.

1.3 The proposed development may potentially affect any archaeological remains which might be present. For this reason, and because of the site's perceived archaeological potential, a programme of archaeological evaluation (trial trenching and test pitting) has been deemed appropriate in this particular instance.

1.4 This document therefore forms the Written Scheme of Investigation (WSI) for the proposed evaluation. It has been prepared in accordance with all relevant guidelines, including those set down by the Institute for Archaeologists (IfA) and GLAAS, to which the evaluation exercise will adhere (see Sources Consulted).

1.5 Dependant upon the results of the evaluation, further work may be required to progress the discharge of the condition, for which additional WSI documents will be prepared.

2.0 GEOLOGICAL, TOPOGRAPHICAL, ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

2.1 The geological, topographical, archaeological and historical background to the site is discussed in detail in Appendix 1, and is summarised here below.

2.2 British Geological Survey Sheet 270 (South London: 1998) shows that the site lies in an area of Kempton Park Terrace Gravels. Geotechnical investigations undertaken on the site recorded between 0.9m and 2.5m of Made Ground across the site. Beneath the Made Ground the investigations recorded alluvium between 0.2m and 1.10m across the majority of the study site. Within parts of the site the alluvium had been removed, and the Made Ground was directly underlain by sands and gravels. A borehole towards the centre of the site contained a peat deposit was recorded at a depth of between 4.4m and 5.10m and was in turn overlain by a sequence of fine sands and silty clays.

2.3 Topographically the study site lies roughly level at c.8-9m AOD. Quantities of made ground identified in the geotechnical investigations suggest that the eastern side of the site has been artificially raised.

2.4 An archaeological potential for the Iron Age and Roman periods has been identified due to the presence of remains of agricultural activity of such date within the vicinity. The presence of peat within the centre of the site has been identified as indicative of a palaeochannel which has potential for environmental remains. Finally, documentary evidence places a brewery on the eastern part of the site from the seventeenth century until the early twentieth century.

3.0 TRIAL TRENCHING

3.1 A trial trench plan has been prepared on the basis of twelve evaluation trenches laid out across the site as shown on Figure 4:

Trench 1	30m x 1.8m
Trench 2	30m x 1.8m
Trench 3	20m x 1.8m
Trench 4	30m x 1.8m
Trench 5	30m x 1.8m
Trench 6	30m x 1.8m
Trench 7	30m x 1.8m
Trench 8	20m x 1.8m
Trench 9	30m x 1.8m
Trench 10	20m x 1.8m
Trench 11	20m x 1.8m
Trench 12	30m x 1.8m

3.2 In addition, within trenches 2, 7, 9 and 12, 1.8m square test pits will be excavated to evaluate the palaeoenvironmental potential of the site.

3.3 The fieldwork is envisaged to take up to ten working days to complete, after which the resultant report will be prepared.

3.4 The locations of the trenches will not be altered without consulting the GLAAS Archaeological Officer for the London Borough of Richmond Upon Thames, and the archaeological consultant (CgMs).

4.0 OBJECTIVES AND RATIONALE OF THE FIELD EVALUATION

4.1 To establish whether any archaeological sites exist in the area, with particular regard to any which are of sufficient importance to require preservation *in situ*.

4.2 The evaluation should aim to determine, as far as is reasonably possible, the location, form, extent, date, character, condition, significance and quality of any surviving archaeological remains, irrespective of period, liable to be threatened by the proposed redevelopment. An adequate representative sample of all areas where archaeological remains are potentially threatened should be studied, and attention should be given to sites and remains of all periods (inclusive of evidence of past environments).

4.3 The evaluation should also seek to clarify the nature and extent of existing disturbance and intrusions and hence assess the degree of archaeological survival of buried deposits and any surviving structures of archaeological significance.

4.4 Within these parameters, the evaluation of this site presents an opportunity to address the following objectives:

1) To establish the presence or otherwise of prehistoric activity at the site, particularly for the Late Iron Age.

2) To establish the presence or otherwise of Roman activity at the site.

3) To establish the presence or otherwise of Post Medieval and Modern activity, particularly the brewery known to have lain within the eastern part of the site from the eastern part of the site.

4) To establish the environmental context of prehistoric, Roman, Medieval, Post Medieval and Modern activity, including provision for geoarchaeological sampling/analysis of appropriate deposits at the site (see para. 4.5 below).

5) Evaluate the likely impact of past land use and development.

6) Provide sufficient information to construct an archaeological mitigation strategy.

4.5 In addition, the excavation of test pits within the trench locations along the east-west transect are designed to:

1) Retrieve stratigraphic data to aid understanding site formation.

2) Assess palaeoenvironmental potential within each stratigraphic layer.

4.6 Where physical preservation is likely to be considered as a mitigation option, the primary factors affecting the present state of preservation and the direct and indirect affect of the proposed development should also be considered.

4.0 FIELD EVALUATION – DETAILED SPECIFICATION

4.1 The overall objectives of this field evaluation are set out in Section 3. This section details the on site methodologies, report format and other related details.

4.2 Twelve trial trenches will be cut to evaluate the site, together with four test pits within evaluation trenches, as set out in Figure 4.

4.3 All features encountered will be located and assessed. The results of this preliminary survey will provide the basis for considering mitigation measures, although in the event that evidence is encountered which suggests nationally important remains are present further evaluation may be required.

Evaluation Techniques

1) The trenches should be opened by mechanical excavator, with removal of all undifferentiated topsoil or made ground down to the first significant horizon. The machine should remove a level spit of no more than 0.25m depth moving along the length of the trench. Successive spits may be similarly removed until the first significant archaeological horizon is reached. That level should be cleaned in plan using a wide blade, ditching bucket or similar, with no teeth. If the machine has to re-enter the trench care should be taken to ensure that it does not damage underlying remains, particularly in soft conditions. *The machine must not be used to cut arbitrary trial trenches down to natural deposits, without regard to the archaeological stratification and leaving a section record only*. All machine work must be under archaeological supervision and should cease immediately if significant evidence is revealed.

2) The test pits will be excavated across the site as shown in Figure 4. As with the evaluation trenches, the topsoil and/or made ground will be removed down to the first significant horizon, after which the machine should remove a level spit of no more than 0.25m depth across the extent of each test pit.

3) The machine used should be powerful enough for a clean job of work and able to mound spoil neatly, a safe distance from trench edges. Mini garden excavators or bulldozers are not suitable.

4) Initially examination of all archaeological deposits should be by hand with cleaning, examination and recording both in plan and section. The objective is to define remains rather than totally remove them. Full excavation should be confined to the least significant remains (e.g. dumped layers) which may allow underlying stratigraphy and features to be exposed and recorded. Within significant levels partial excavation, half-sectioning, the recovery of dating evidence, sampling and the cleaning and recording of structures is preferable to full excavation. *There is no requirement to totally excavate the evaluation trenches to natural levels.* Depending on the stratigraphy revealed sieving of fills (at the appropriate mesh level) should be undertaken to recover small flint flakes/metalwork (i.e. a control sample of artefacts).

5) Archaeological excavation may require work by pick and shovel or occasionally further use of the machine. *Such techniques are only appropriate for the removal of homogeneous or low-grade deposits which may give a 'window' into underlying levels. They must not be used on complex stratigraphy and the deposits to be removed must have been properly recorded first.* Casual "mattock testing" of features of uncertain archaeological value must not be undertaken without the prior approval of the Local Planning Authority. The depth and nature of all colluvial or other masking deposits must be established across the site.

6) Particular care should be taken not to damage any areas containing significant remains which might merit preservation in situ. Such evidence would normally include deep or complex stratification settlement evidence and structures. The Local Planning Authority and GLAAS Officer must be informed immediately if remains likely to be of national significance are encountered. Such areas should be protected and not left open to the weather, or other forms of deterioration whilst investigation will not be at the expense of any structures, features or finds which might reasonably be considered to merit preservation, it is important that a sufficient sample is studied.

7) Any human remains must also be left *in situ*, covered and protected. If removal is essential it can only take place under appropriate Home Office and environmental health regulations. Such removal must be in compliance with the Disused Burial Grounds Amendment Act 1981. Prior written notice is also to be given to the Local Planning Authority.

8) Metal detector searches should take place at all stages of the evaluation.

9) Topsoil and made ground are to be kept separate during the evaluation to allow sequential backfilling.

Access and Safety

10) Reasonable access to the site is to be arranged for representatives of the Local Planning Authority and GLAAS Officer who may wish to make site inspections to ensure that the archaeological investigations are progressing satisfactorily.

11) *All relevant health and safety regulations must be followed.* A general health and safety policy must be provided by the Archaeological Contractor and a detailed risk assessment and management strategy for this site prepared. In particular the machine should be kept away from unsupported trench edges and public access routes should be supervised and controlled. Barriers, hoardings and warning notices should be installed as appropriate. Safety helmets are to be used by all personnel as necessary. Appropriate toilet and washing facilities for site staff will be provided by the Archaeological Contractor.

12) *No personnel are to work in deep unsupported excavations.* Trenches deeper than 1.2m will have to be stepped or battered back.

13) Where there is reason to believe from previous uses that the ground may be contaminated, the Archaeological Contractor must include arrangements for pollution sampling and testing *before* any site work takes place. A search for public utility or other services will also be undertaken by the Archaeological Contractor prior to commencement.

14) The archaeological organisation must be satisfied that the applicant or developer has provided all information reasonably obtainable on contamination and the location of live services before any site work takes place.

15) All archaeological trenches should be backfilled upon completion, for safety reasons, unless CgMs has given written instructions to the contrary.

Recording Systems

16) The recording system must be fully compatible with that most widely used elsewhere in Richmond. Context sheets should include all relevant stratigraphic

relationships and for complex stratigraphy a separate matrix diagram should be employed. This matrix should be fully checked during the course of the evaluation. If there is any doubt over recording techniques the guidance of the GLAAS Officer will be sought.

17) The site archive will be so organised as to be compatible with other archaeological archives produced in the Borough. Individual descriptions of all archaeological strata and features excavated or exposed will be entered onto prepared pro-forma recording sheets. Sample recording sheets, sample registers, finds recording sheets, access catalogues, and photo record cards will also be used. This requirement for archival compatibility extends to the use of computerised database.

18) Site location plan required; general plan (e.g. OS 1:1250) showing investigation area and development site in relation to surrounding locality and street pattern.

19) This will be supplemented by trench plans at 1:500 (or 1:200), which will show the location of the areas investigated in relationship to the investigation area, OS grid and site grid (if any). The locations of the OS bench marks used and site TBMs will also be identified.

20) Archaeological plans; some record of the full extent in plan of all archaeological deposits must be made. All significant deposits that significantly affect the interpretation of the site and relate to the evaluation objectives should be formally planned in relation to the trench and OS grid and be at a scale of 1:10 or 1:20. Single context planning is required on deeply stratified sites.

21) Sections containing significant deposits, including half sections, should be drawn as appropriate. Upon completion of the trench at least one long section is to be drawn, including a profile of the top of natural deposits (extrapolated from cut features etc. if the test pit has not been fully excavated). In addition to the excavation of man made deposits some assessment of "naturally deposited" levels will be necessary, especially when these are organically preserved and laid down within archaeological timescales.

22) All archaeological plans and sections should be on drawing film at a scale of 1:10 or 1:20 and should include context numbers and OD spot heights for all principal strata and features.

23) An adequate photographic record of any significant archaeological remains is required, in both plan and section. This will include black and white prints and colour transparencies (on 35mm film), illustrating in both detail and general context the principal features and finds discovered. The photographic record will also include working shots to illustrate more generally the nature of the archaeological operation mounted. The transparencies will be mounted in suitable frames. Where appropriate a photogrammetric record will be made of complex structures, features and horizons liable to be damaged in the course of the evaluation.

24) A Harris Matrix stratification diagram will be compiled and fully checked during the course of the excavations.

Finds and Samples

25) A high priority should be given to dating any remains and so all artefacts and finds are to be retained. Consideration should also be given to the recovery of specialist samples for scientific analysis, particularly samples for absolute dating, structural materials and cultural/environmental evidence. Different sampling strategies may be employed according to established research targets and the perceived importance of the strata under investigation. Minimum levels of data acquisition should be defined according to the "information recovery levels" summarised by Carver (1987). The default data acquisition level for all pre-modern assemblages is level D. Close attention will be given to sampling for date, structure and environment.

26) The strategy for sampling archaeological and environmental deposits and structures (which can include soils timbers, animal bone and human burials) will be developed in consultation with the GLAAS Officer and the English Heritage Scientific Advisor for London. Their will be sought at the project planning stage and a visit arranged to determine the importance and sampling requirements for all deposits exposed during the investigation. Consideration will be given to bulk samples of material for C14 dating, as appropriate, and samples of any other inclusions such as wood should also be taken.

27) A high priority will be given to the sampling of river and other anaerobic deposits (such as peat) where organic materials may be preserved.

28) Organic samples will be subject to appropriate specialist analysis. There may be a requirement to submit timbers to dendrochronological analysis and to process some samples to provide C14 dating. Other forms of specialist analysis may also be appropriate.

29) The finds retrieval policies of the English Heritage archaeological guidance papers will be adopted. All identified finds and artefacts will be retained, although certain classes of building material can sometimes be discarded after recording if an appropriate sample is retained. No finds will, however, be discarded without the prior approval of GLAAS Officer.

30) All finds and samples will be treated in a proper manner and to the standards of the UK Institute of Conservators Guidelines. They will be exposed, lifted, cleaned, conserved, marked, bagged and boxed in accordance with the guidelines set out in the UK Institute for Conservation "Conservation Guideline No 2". Appropriate guidelines set out in the Museums and Galleries Commissions "Standards in the Museum Care of Archaeological Collections (1991)" will also be followed.

31) The pottery specialist employed by the archaeological contractor will be familiar with local wares with a record of publications in the region.

Reports and Archives

Summary Report

32) Within two weeks of completion of the work the archaeological contractor will produce a report, copies of which are to be provided to the Developer, the London Borough of Richmond and the GLAAS officer for Richmond.

The report is to include, as a minimum, the following:

a. a site location plan at an appropriate scale; a copy of the trench location plan at 1:1250 together with a plan of the main archaeological features at 1:100 and more detailed plans and relevant section drawings as appropriate. Particular note should be made of any variations in the depth of overburden covering any archaeological deposits revealed;

b. a descriptive summary and interpretation of the archaeology of the site;

c. a table showing, per trench, the features, classes and numbers of artefacts located and their interpretation;

d. a consideration of the methodology used, including a confidence rating;

e. A summary report to be included in the London Archaeologist annual round up.

The archaeological contractor is to allow the site records to be inspected and examined at any reasonable time, during or after the evaluation, by the Developer, the GLAAS Officer or any designated representative of the London Borough of Richmond upon Thames.

Archives and Published Reports

33) The integrity of the site archive should be maintained. The archive of all records and finds must be prepared consistent with the principles set out in the Management of Archaeological Projects (English Heritage 1991), particularly Appendix 3.1 and Appendix 4.1, together with subsequent MoRPHE guidance (see Sources Consulted).

34) The minimum acceptable standard for the archival report is defined in the "Management of Archaeological Projects" 5.4 and Appendix 3. It will include all materials recovered (or the comprehensive record of such materials) and all written, drawn and photographic records relating directly to the investigations undertaken. It will be quantified, ordered, indexed and internally consistent. It will also contain a site matrix, a site summary and brief written observations on the artefactual and environmental data.

35) United Kingdom Institute for Conservation guidelines for the preparation of excavation archives for long term storage (1990) will be followed. Arrangements for the curation of the site archive will be agreed in writing with the recipient Museum and details of such arrangements will be made by the archaeological contractor.

36) The site archive is to be deposited with the London Archaeological Archive and Research Centre (LAARC) within 3 months of the completion of work. It will then become publicly accessible.

37) Greater London Historic Environment Record (GLHER) Sheets should be completed for the site.

38) In addition, at the start of work (immediately before fieldwork commences) an OASIS online record http://ads.ahds.ac.uk/projects/oasis/ must be initiated and key fields completed on Details, Location and Creators Forms. All appropriate parts of the OASIS online form must be completed for submission to the GLHER. This should include an uploaded .pdf version of the entire report (a paper copy should also be included with the archive). The OASIS process will be completed by the appointed archaeological fieldwork contractor.

Archaeological Contractor

39) The field team deployed by the Archaeological Contractor will include only full time professional archaeological staff. All staff should be experienced on similar sites.

40) The composition of the project team must be detailed and agreed with the GLAAS Officer (this is to include any subcontractors).

41) A timetable for all stages of the project must be agreed before the first stage of work commences, including monitoring by the GLAAS Officer.

Notification of Start Date

42) The GLAAS officer will be notified in advance of the commencement of fieldwork, and will be kept informed of progress on site with a view to arranging site monitoring meetings as appropriate.

SOURCES CONSULTED

Carver *Underneath English Towns* 1987

National Guidance:

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

Department of Communities and Local Government/Department of Culture Media and Sport/English Heritage *PPS5 Planning for the Historic Environment: Historic Environment Planning Practice Guide* 2010

English Heritage *Comparison of PPS5 Policies with Historic Environment-Related Policies in the NPPF – Part 1* 5 April 2012 unpublished document

English Heritage *Comparison of PPS5 Policies with Historic Environment-Related Policies in the NPPF – Part 2* 5 April 2012 unpublished document

Institute for Archaeologists Guidelines:

http://www.archaeologists.net/sites/default/files/node-files/code_conduct.pdf
http://www.archaeologists.net/sites/default/files/node-files/ifa_code_practice.pdf

GLAAS Guidelines:

Greater London Archaeological Advisory Service *Standards for Archaeological Work* June 2009 consultation draft (unpublished document)

English Heritage Guidelines:

MAP2 Management of Archaeological Projects (Second Edition) 1991

MoRPHE Management of Research Projects in the Historic Environment The MoRPHE Project Managers' Guide 2009

MoRPHE Management of Research Projects in the Historic Environment PPN 3: Archaeological Excavation January 2008

Guidelines for archiving:

Archaeological Archives Forum (Duncan H. Brown), *Archaeological Archives: a guide to best practice in creation, completion, transfer and collection* 2007

London Archaeological Archive Resource Centre (LAARC) *Guidelines for the Preparation of Archaeological Archives*

Museum and Galleries Commission *Standards in the Museum Care of Archaeological Collections* 1992

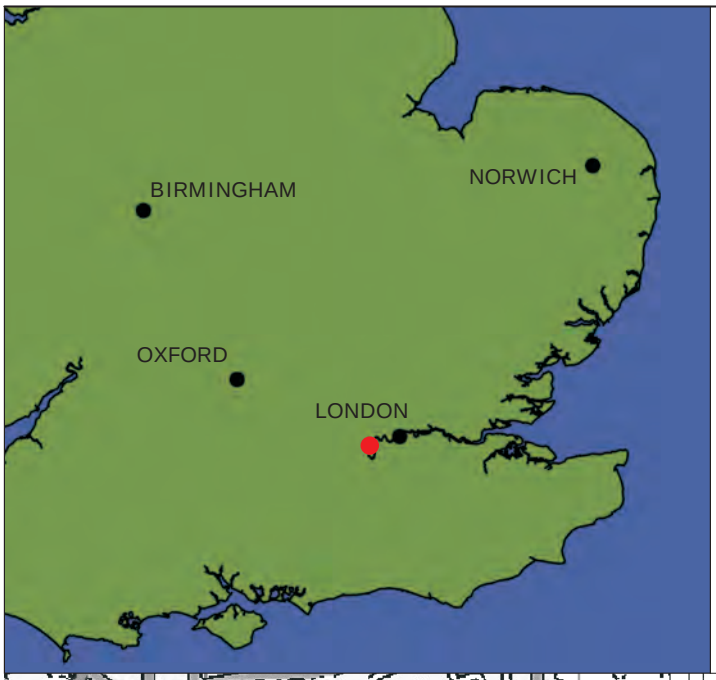
Museum of London *Standards for the Preparation of Finds to be Permanently Retained by the Museum of London*
Museum of London *A research framework for London archaeology* 2002

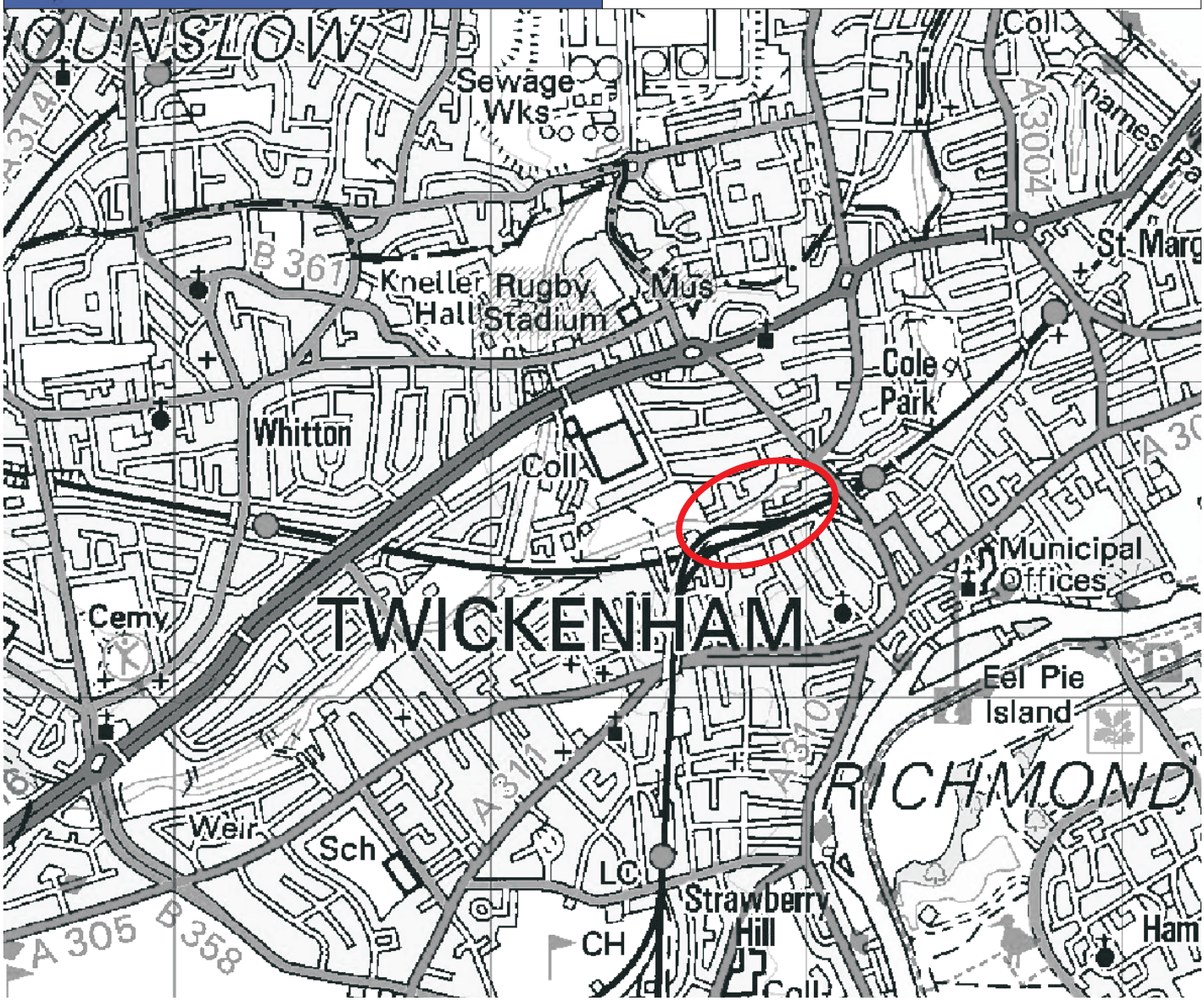
Society of Museum Archaeologists *Selection and Retention and Dispersal of Archaeological Collections* draft 1992

Society of Museum Archaeologists *Towards an Accessible Archaeological Archive. The Transfer of Archaeological Archives to Museums: Guidelines for Use in England, Northern Ireland Scotland and Wales* 1995.

Site Specific

CgMs Consulting *Archaeological Desk Based Assessment Royal Mail Sorting Office London Road Twickenham* August 2012 unpublished document





Site Location

CgMs CONSULTING
London
Cheltenham
Kettering
Newark
Birmingham
www.cgms.co.uk
Planning & Development
Archaeology & Historic Buildings

Project title: Royal Mail Sorting Office, Twickenham

Not to Scale: Illustrative Only

Date printed: 22.08.11

Drawn by: LW

Checked by: SD

Figure 1: Site Location

G:\Project Graphics\Active Jobs\13000-13999\13162 - Royal Mail Sorting Office, Twickenham\Figures\Mapping\CAD\Current*WSI Figure 2 & 4.dwg(Figure 2)**

Additional information:

Site Boundary

N

Project title:
Royal Mail Sorting Office, Twickenham

CgMs CONSULTING
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Newark
Birmingham
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Planning & Development
Archaeology & Historic Buildings

Scale at A3: 1:1000

0 20 m

Date printed:
Nov 28, 2012

Drawn by: LW

Checked by: RM

Figure 2: Site plan as existing

G:\Project Graphics\Active Jobs\13000-13999\13162 - Royal Mail Sorting Office, Twickenham

Additional information:

Site Boundary

N

Project title:

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Checked by: RM

Figure 3: Redevelopment Proposals

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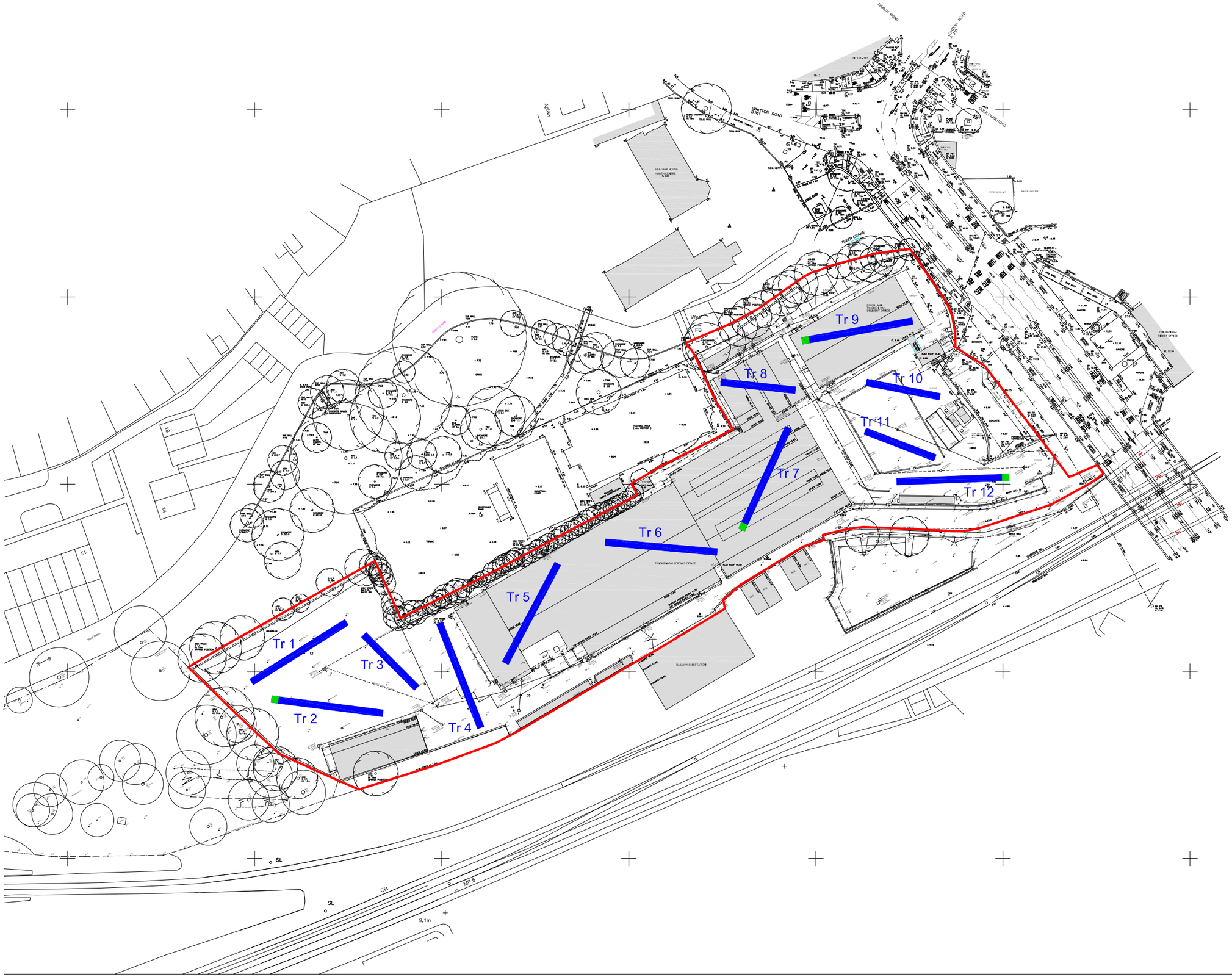

Additional information:

Site Boundary

Proposed Trench Location

Tr 1	30m x 1.8m
Tr 2	30m x 1.8m
Tr 3	20m x 1.8m
Tr 4	30m x 1.8m
Tr 5	30m x 1.8m
Tr 6	30m x 1.8m
Tr 7	30m x 1.8m
Tr 8	20m x 1.8m
Tr 9	30m x 1.8m
Tr 10	20m x 1.8m
Tr 11	20m x 1.8m
Tr 12	30m x 1.8m

Proposed Geoarchaeological Test Pit Location (1.8m x 1.8m)

N

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Scale at A3: 1:1000 0 20 m

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Checked by: RM

Figure 4: Proposed Trench Location Plan

APPENDIX 1

Archaeological Desk Based Assessment

August 2012

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