



# Pembroke College, Oxford: LV Distribution Upgrade Archaeological Watching Brief Report

March 2020

**Client: Pembroke College**

Issue No: 1

OA Reference No: OXPLEC19

NGR: SP 51276 05996

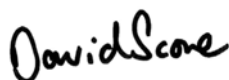




Client Name: Pembroke College  
Document Title: Pembroke College, Oxford: LV Distribution Upgrade  
Document Type: Watching Brief Report  
Grid Reference: SP 51276 05996  
Planning Reference: 19/00465/LBC  
Site Code: OXPLEC19  
Invoice Code: OXPLECWB  
Receiving Body: Oxfordshire County Museum Services  
Accession No.: OXCMS: 2019.127

OA Document File Location: X:\o\Oxford\_Pembroke\_College\_Electrical\_Works\_WB\002Reports  
OA Graphics File Location: X:\o\Oxford\_Pembroke\_College\_Electrical\_Works\_WB\010Geomatics

Issue No: 1  
Date: 2020-03-09  
Prepared by: Joakim Thomasson (Senior Project Manager)  
Checked by: Charlotte Howsam (Project Officer, Post-excavation)  
Edited by: Joakim Thomasson (Senior Project Manager)  
Approved for Issue by: David Score (Head of Fieldwork)  
Signature:



**Disclaimer:**

*This document has been prepared for the titled project or named part thereof and should not be relied upon or used for any other project without an independent check being carried out as to its suitability and prior written authority of Oxford Archaeology being obtained. Oxford Archaeology accepts no responsibility or liability for the consequences of this document being used for a purpose other than the purposes for which it was commissioned. Any person/party using or relying on the document for such other purposes agrees and will by such use or reliance be taken to confirm their agreement to indemnify Oxford Archaeology for all loss or damage resulting therefrom. Oxford Archaeology accepts no responsibility or liability for this document to any party other than the person/party by whom it was commissioned.*

**OA South**  
Janus House  
Osney Mead  
Oxford  
OX2 0ES  
  
t. +44 (0)1865 263 800

**OA East**  
15 Trafalgar Way  
Bar Hill  
Cambridge  
CB23 8SQ  
  
t. +44 (0)1223 850 500

**OA North**  
Mill 3  
Moor Lane Mills  
Moor Lane  
Lancaster  
LA1 1QD  
t. +44 (0)1524 880 250

e. [info@oxfordarch.co.uk](mailto:info@oxfordarch.co.uk)  
w. [oxfordarchaeology.com](http://oxfordarchaeology.com)

Oxford Archaeology is a registered Charity: No. 285627



Director and Chief Executive  
Gill Hey, BA PhD FSA MCIFA  
Private Limited Company, No: 1618597  
Registered Charity, No: 285627  
Registered Office: Oxford Archaeology Ltd  
Janus House, Osney Mead, Oxford OX2 0ES

## Pembroke College, Oxford: LV Distribution Upgrade

### *Archaeological Watching Brief Report*

*Written by Joakim Thomasson*

*With contributions from John Cotter and with illustrations by  
Daniel Bray and Magdalena Wachnik*

### Contents

Summary.....	vii
Acknowledgements.....	viii
<b>1 INTRODUCTION .....</b>	<b>1</b>
1.1 Scope of work.....	1
1.2 Location, topography and geology .....	1
1.3 Archaeological and historical background .....	1
<b>2 WATCHING BRIEF AIMS AND METHODOLOGY.....</b>	<b>2</b>
2.1 Aims.....	2
2.2 Methodology .....	2
<b>3 RESULTS .....</b>	<b>3</b>
3.1 Introduction and presentation of results.....	3
3.2 General soils and ground conditions .....	3
3.3 Finds summary.....	3
<b>4 DISCUSSION .....</b>	<b>4</b>
<b>APPENDIX A DESCRIPTIONS AND CONTEXT INVENTORY.....</b>	<b>5</b>
<b>APPENDIX B FINDS REPORTS .....</b>	<b>6</b>
B.2 Pottery.....	6
B.3 Clay pipe .....	6
B.4 Glass .....	6
<b>APPENDIX C BIBLIOGRAPHY .....</b>	<b>7</b>
<b>APPENDIX D SITE SUMMARY DETAILS .....</b>	<b>8</b>

## List of Figures

- Figure 1 Site location  
Figure 2 Location of service trenches in St Ebbes Street and the Chapel Quad  
Figure 3 Location of service trenches in the Old Quad

## List of Plates

- Plate 1 The trench in St Ebbes Road, looking north.  
Plate 2 The trench in the north side of the Chapel Quad, looking east  
Plate 3 The trench in the south-west corner of Old Quad, looking south-east  
Plate 4 The College perimeter wall, looking east  
Plate 5 The soakaway in the north-eastern corner of the Chapel Quad, looking south  
Plate 6 A course of possible reused worked stones in the north-west corner of the Old Quad, looking north



## Summary

Oxford Archaeology carried out an archaeological watching brief at Pembroke College, Oxford, between October and December 2019. The work was commissioned by Pembroke College and involved the monitoring of the groundworks associated with upgrading the electrical supply.

The 0.5m to 0.6m wide and c 0.5m deep trenches had an accumulated length of approximately 230m. They extended from St Ebbes Street in the west, via Fellows Garden and the Chapel Quad to the Old Quad in the east.

All the trenches were cut into the modern backfill of previous underground service trenches. The monitoring of the groundworks revealed a general stratigraphic sequence of paving stones overlying bedding sand overlying a garden soil of dark greyish brown sandy clay.

No archaeological deposits of pre-modern date were observed. Residual finds of post-medieval and modern date, including pottery, clay tobacco pipe, glass and animal bone, were identified.

## Acknowledgements

Oxford Archaeology would like to thank Pembroke College for commissioning this project. Thanks are also extended to David Radford who monitored the work on behalf of Oxford City Council.

The project was managed for Oxford Archaeology by Joakim Thomasson. The fieldwork was directed and undertaken by Rebecca Peacock, Paul Murray and Christopher Clark. Thanks is also extended to the teams of OA staff that cleaned and packaged the finds under the management of Geraldine Crann, and prepared the archive under the management of Nicola Scott. The figures were produced by Daniel Bray and the plates by Magdalena Wachnik.



## **1 INTRODUCTION**

### **1.1 Scope of work**

- 1.1.1 Oxford Archaeology (OA) was commissioned by Ridge and Partners LLP on behalf of Pembroke College to undertake an archaeological watching brief at Pembroke College, Oxford. The watching brief comprised the monitoring of groundworks associated with upgrading the electrical supply within St Ebbes Street, the Master's Garden, Chapel Quad and the Old Quad. The site is located at National Grid Reference SP 51276 05996 and its location is shown on Figure 1.
- 1.1.2 The work was undertaken as a condition of Planning Permission (planning ref. 19/00465/LBC). A written scheme of investigation (WSI) was produced by OA detailing the Local Authority's requirements for work necessary to inform the planning process/discharge the planning condition. This document outlines how OA implemented the specified requirements.
- 1.1.3 The watching brief was undertaken during the period from 9 October to 16 December 2019.

### **1.2 Location, topography and geology**

- 1.2.1 The site is situated at Pembroke College. The college lies on the southern side of the historic core of Oxford, just inside the medieval city wall (which defines the southern boundary of the site). The college occupies a roughly rectangular block of land bounded by Pembroke Street and St Aldate's church to the north, St Aldate's to the east, the city wall and Brewer Street to the south, and St Ebbe's Street to the west (Fig. 1). Pembroke College is arranged around four principal quads: Old Quad, Chapel Quad, North Quad and The Rokos Quad. The site comprises Old Quad, Chapel Quad and the Fellow's Garden.
- 1.2.2 The underlying bedrock geology is recorded as Oxford Clay, which formed in the Jurassic period. The site lies on Northmoor sand and gravel member (BGS 2019) at the southern edge of the gravel terrace, which corresponds with the line of Brewer Street. The floodplain of the River Thames lies to the south.
- 1.2.3 The natural topography of the site is thought to slope gradually to the edge of the terrace as observed on St Aldate's, but the area of the college has been landscaped and levelled during its development. Similarly, reclamation and levelling of the adjacent part of the floodplain has diminished the distinction between the terrace and floodplain, which now forms a continuous slope rather than a clear break.

### **1.3 Archaeological and historical background**

- 1.3.1 The archaeological and historical background of the Oxford area has been described in the WSI produced for the archaeological watching brief (OA 2019) and will not be referred here.

## **2 WATCHING BRIEF AIMS AND METHODOLOGY**

### **2.1 Aims**

- 2.1.1 The general aim of the project was to record any archaeological remains that might be damaged or destroyed by intrusive groundworks within the site.
- 2.1.2 The specific aims and objectives of the watching brief, as stated in the WSI (OA 2019), were:
- i. To determine or confirm the general nature of any archaeological remains present;
  - ii. To determine or confirm the approximate date or date range of any remains, by means of artefactual or other evidence;
  - iii. To undertake controlled archaeological excavation, within the extent of the impact of the proposed works, of any significant archaeological remains that may be encountered;
  - iv. To publish any significant archaeological remains that may be encountered.

### **2.2 Methodology**

- 2.2.1 The scheme involved the monitoring of the installation of new LV switchboards and panel boards, new submain circuits and associated containment system and civil works. The new submain cabling was buried directly in the ground below the York stone paving slabs. Cables entered the staircases through the existing walls below ground with a twin-walled UPVC duct provided for the cable entry.
- 2.2.2 The scheme required hand excavation along the route of the new submain cabling and directly outside and inside the staircases in order to provide a route for the ducts through the stone walls (Figs 2 and 3). The service trenches were excavated across the centre of the Library Courtyard around the western, northern and southern sides of the Old Quad and around the northern, southern and eastern sides of Chapel Quad.
- 2.2.3 The trenches were excavated to a depth of c 0.5m below the current ground surface and were 0.5m to 0.6m wide. The draw pit inside the perimeter wall by St Ebbes Street was excavated to approximately 2.7m in depth.

## **3 RESULTS**

### **3.1 Introduction and presentation of results**

3.1.1 The results of the watching brief are presented below. The details of all trenches with dimensions and depths can be found in Appendix A.

### **3.2 General soils and ground conditions**

3.2.1 Hand excavation of the service trenches was undertaken cutting into the backfill of previous service trenches to a depth of c 0.5m below ground level. They were mainly opened underneath the paved quad paths (Plates 1-3). The general soil sequence underlying the paving stones comprised a c 0.25m thick layer of bedding sand, followed by a garden soil consisting of dark greyish brown sandy clay with inclusions of small stones, gravel and brick.

3.2.2 The trenches that were opened in the Chapel Quad lawn revealed a stratigraphic sequence comprising 0.45m of garden soil, followed by a 0.2m thick layer consisting of mid brown sandy silt with mortar fragments and a layer of mid brown sandy silt. The trench located in the Old Quad also contained blocks of concrete that covered pipes.

3.2.3 In the trench situated in Fellows Garden close to St Ebbes Street, the western perimeter wall of the College was exposed down to a depth of 2.7m below ground level (Plate 4). The trench was excavated through modern backfill and concrete structures supporting the perimeter wall were noted.

3.2.4 Remains of a modern brick-built soakaway were recorded in the north-eastern part of the Chapel Quad (Plate 5). It measured 1m in diameter and two courses of brick were preserved. The construction clearly cut the garden soil layer. An east-west orientated ceramic drainpipe crossed over the soakaway.

3.2.5 Large worked sandstones laid in pinkish red lime were recorded in the north-western part of the Old Quad (Plate 6). The stones appeared to have been reused as part of the underground foundation for a modern flower bed.

### **3.3 Finds summary**

3.3.1 Residual finds, such as pottery, fragments of clay pipes, copper alloy, glass and animal bones were observed within the garden soil, concentrated to the eastern and northern sides of the Chapel Quad. A few of the pre-modern finds were sampled for further analysis. They comprised a sherd of Frechen Stoneware, two pieces of clay tobacco pipe and a fragment of green bottle glass, all dating between the late 16th and the 18th century.

## 4 DISCUSSION

- 4.1.1 All the trenches were located and cut into the modern backfill of previous underground service trenches. No archaeological deposits of pre-modern date were observed. A sample of residual post-medieval finds, which were largely concentrated in the eastern and northern sides of the Chapel Quad, were recovered from the garden soil.
- 4.1.2 Archaeological deposits may be preserved underneath existing cables, c 0.6m below the present ground level. The underground water tank and the manholes noted within the Old Quad must have had a negative impact on the preservation of any archaeological remains that may have been present further below this level.
- 4.1.3 Earlier archaeological investigations in the eastern part of Chapel Quad revealed possible 12th- to 14th-century pottery that might have been suggestive of an *in situ* medieval horizon. Above this horizon was a stone structure likely a hearth and a mortar floor, both of post-medieval date and thought to have been part of the early college, which was founded in 1624 (OAU 2000). The analysed residual finds recovered during the 2019 watching brief all date to the early college period and might have been related to this phase of land use.
- 4.1.4 Given the absence of any archaeological features of pre-modern date within the observed areas of the site, it is unlikely that the groundworks had any impact upon the belowground heritage resource of this vicinity.

## APPENDIX A DESCRIPTIONS AND CONTEXT INVENTORY

<b>Pembroke Street to Chapel Quad</b>		
<b>General description</b>	<b>Orientation</b>	E-W
Trench devoid of archaeology. The College western perimeter wall was exposed to a depth of 2.7m below ground level. A concrete wall with steel reinforcement orientated at a right angle towards the perimeter wall. The trench consisted of modern made ground.	<b>Length (m)</b>	30m
	<b>Width (m)</b>	0.55-0.6
	<b>Avg. depth (m)</b>	2.7
<b>Chapel Quad</b>		
<b>General description</b>	<b>Orientation</b>	-
Trench devoid of archaeology. A modern soakaway and adjoining ceramic pipes were uncovered in the eastern side of the quad. Residual finds (late post-medieval and modern pottery, copper alloy, clay pipe fragments and animal bones) mainly visible in the eastern and northern stretches of the trench. Four pre-modern finds were sampled for analyse and are described in Appendix B. Modern pipes crossing the northern part of the trench.	<b>Length (m)</b>	125
	<b>Width (m)</b>	0.55-0.6
	<b>Avg. depth (m)</b>	0.55
<b>Old Quad</b>		
<b>General description</b>	<b>Orientation</b>	E-W
Trench devoid of archaeology. Large stone was observed in the north-western side. Two manholes present in the northern paved route and one in the southern. Crossing modern pipes especially present in the northern side.	<b>Length (m)</b>	75
	<b>Width (m)</b>	0.55-0.6
	<b>Avg. depth (m)</b>	0.55

## APPENDIX B FINDS REPORTS

B.1.1 Context 5 refers to the layer of garden soil in the eastern trench, Chapel Quad.

### B.2 Pottery

*By John Cotter*

Context	Description	Date
5	One fresh body sherd Frechen stoneware (FREC), probably from a 'Bellarmine'-type jug. 14g	1550 - 1750

### B.3 Clay pipe

*By John Cotter*

Context	Description	Date
5	Two pieces, one complete bowl and one 17th-century stem fragment. 14g	1640 - 1660

### B.4 Glass

*By John Cotter*

Context	Description	Date
5	One weathered sherd of green bottle glass, probably from a wine bottle. 4g	17th– 18th century

---

## APPENDIX C      BIBLIOGRAPHY

BGS, 2019 *Geology of Britain Viewer*, Available at: <http://mapapps.bgs.ac.uk/geologyofbritain/home.html> [last accessed December 2019]

OA, 2019 Pembroke College, Oxford: LV Distribution Upgrade: Written Scheme of Investigation, Archaeological Watching Brief, unpubl. Oxford Archaeology Doc.

OAU, 2000 Watching brief at Pembroke College, unpubl. Oxford Archaeological Unit Rep.

**APPENDIX D****SITE SUMMARY DETAILS**

<b>Site name:</b>	Pembroke College, Oxford: LV Distribution Upgrade
<b>Site code:</b>	OXPLEC19
<b>Grid Reference</b>	SP 51276 05996
<b>Type:</b>	Watching Brief
<b>Date and duration:</b>	7 October to 16 December 2019
<b>Area of Site</b>	N/A
<b>Location of archive:</b>	The archive is currently held at OA, Janus House, Osney Mead, Oxford, OX2 0ES, and will be deposited with Oxfordshire County Museum Services in due course, under the following accession number: OXCMS: 2019.127.
<b>Summary of Results:</b>	<p>Oxford Archaeology carried out an archaeological watching brief at Pembroke College, Oxford. The work was commissioned by Pembroke College and involved the monitoring of the groundworks associated with upgrading the electrical supply.</p> <p>The 0.5m to 0.6m wide and c 0.5m deep trenches had an accumulated length of approximately 230m. They extended from the perimeter wall in the west, via Chapel Quad to the Old Quad in the east.</p> <p>All the trenches were cut into the modern backfill of previous underground service trenches. No archaeological deposits of pre-modern date were observed, though a small sample of residual post-medieval finds were recovered.</p>



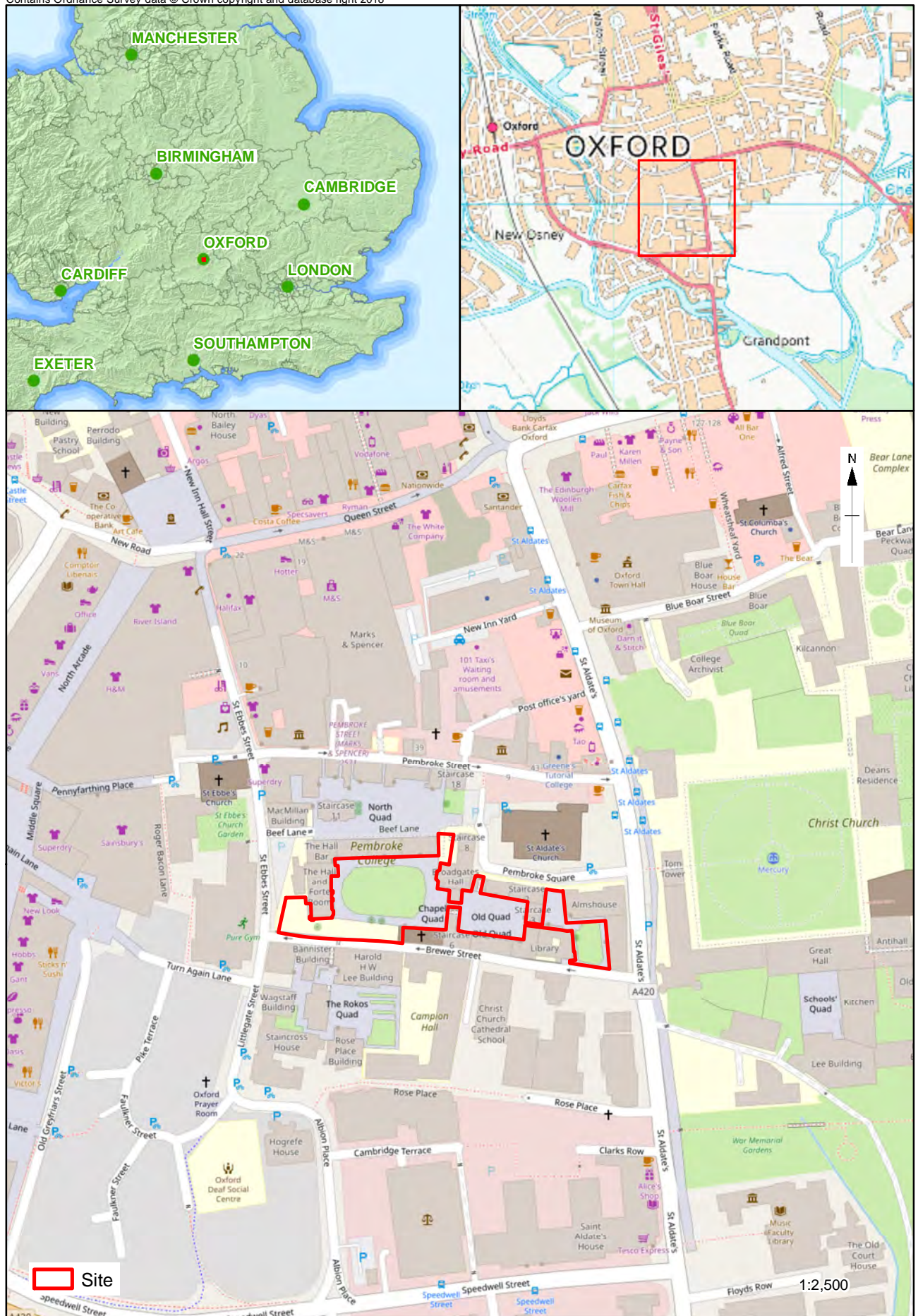


Figure 1: Site location



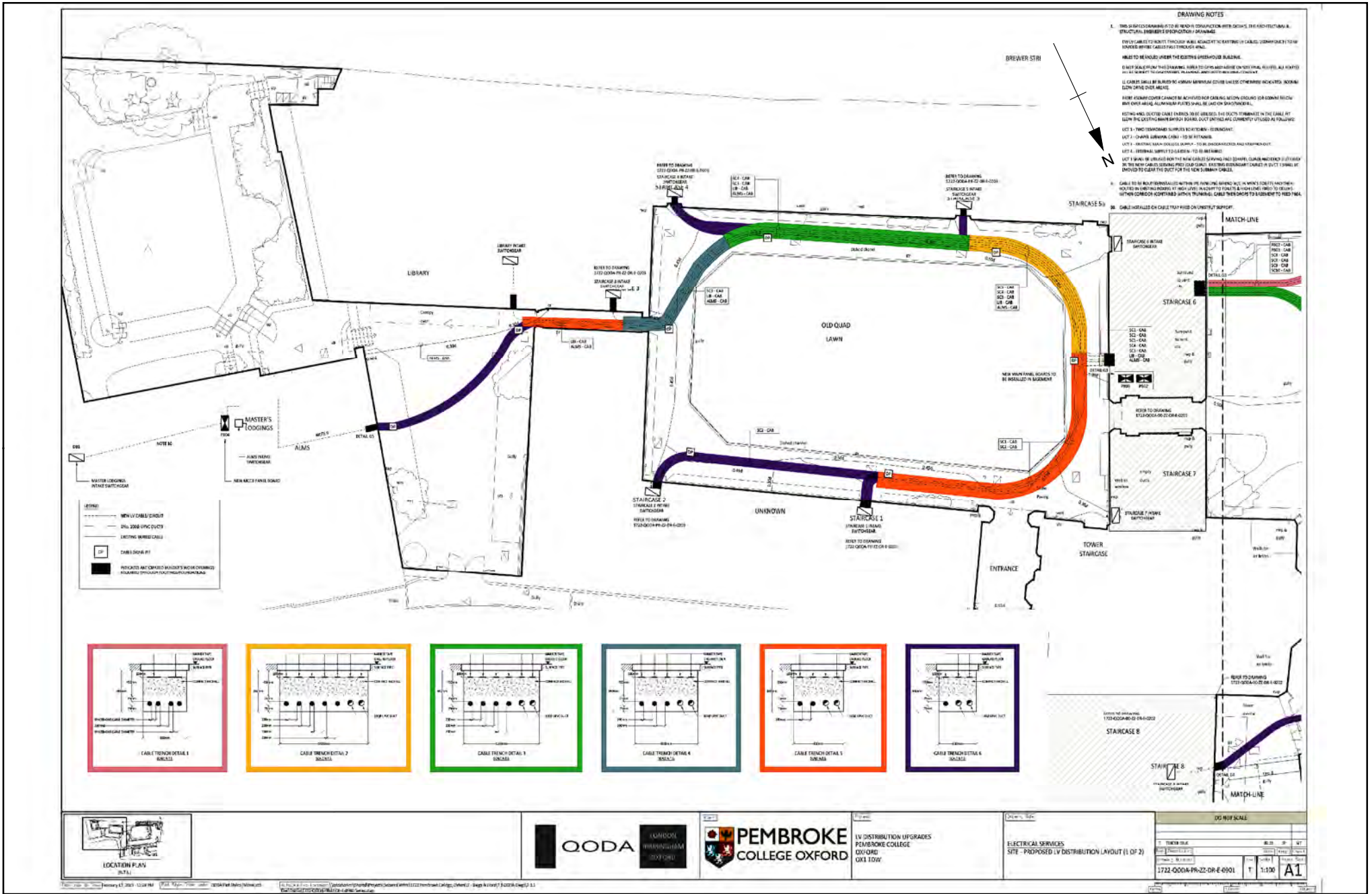


Figure 2: Location of proposed service trenches in the Library Courtyard and Old Quad

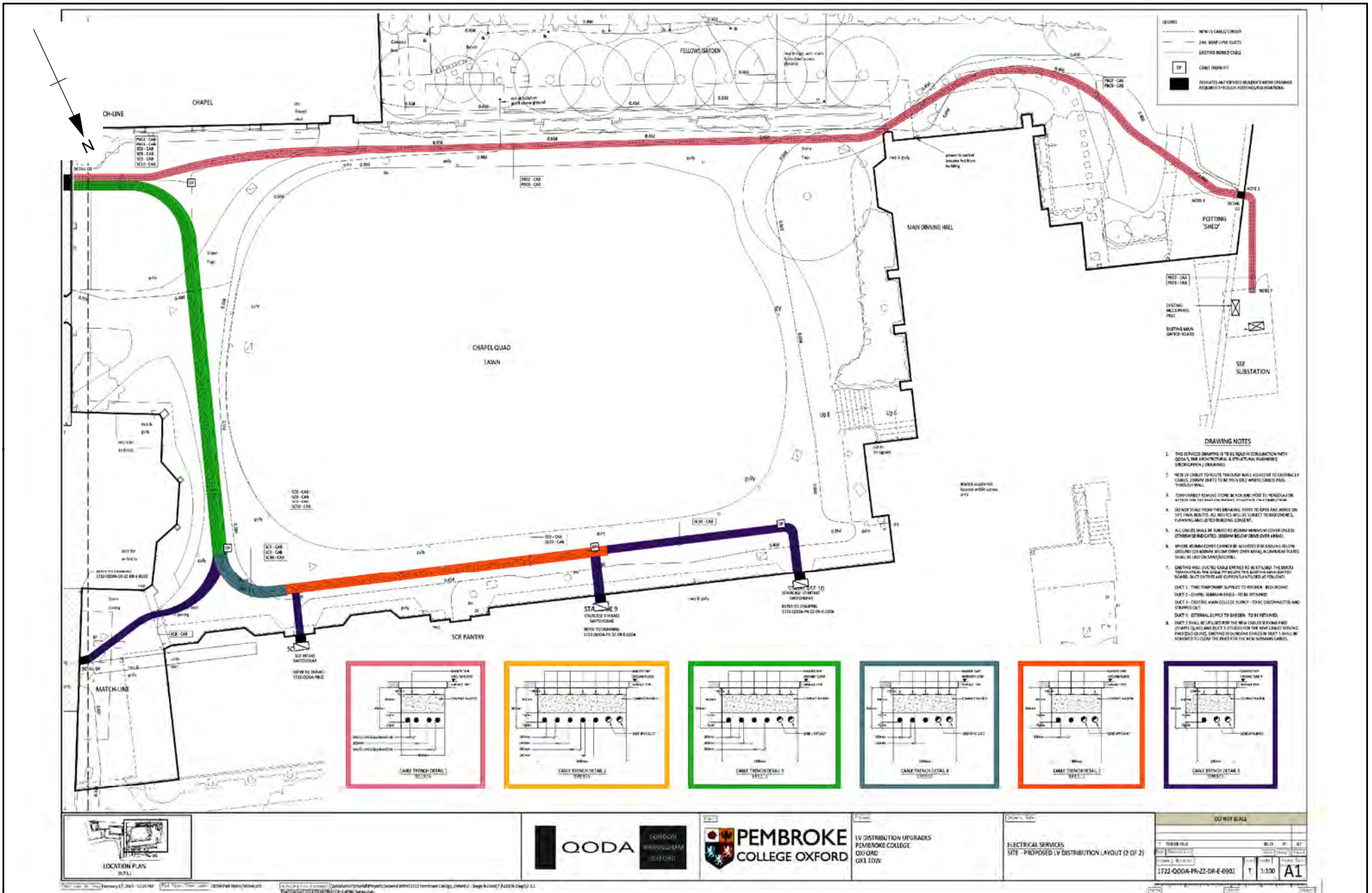


Figure 3: Location of proposed service trenches in the Chapel Quad





Plate 1: The trench in St Ebbes Road, looking north.



Plate 2: The trench in the north side of the Chapel Quad, looking east.



Plate 3: The trench in the south-west corner of Old Quad, looking south-east



Plate 4: The College perimeter wall, looking east





Plate 5: The soakaway in the north-eastern corner of the Chapel Quad, looking south

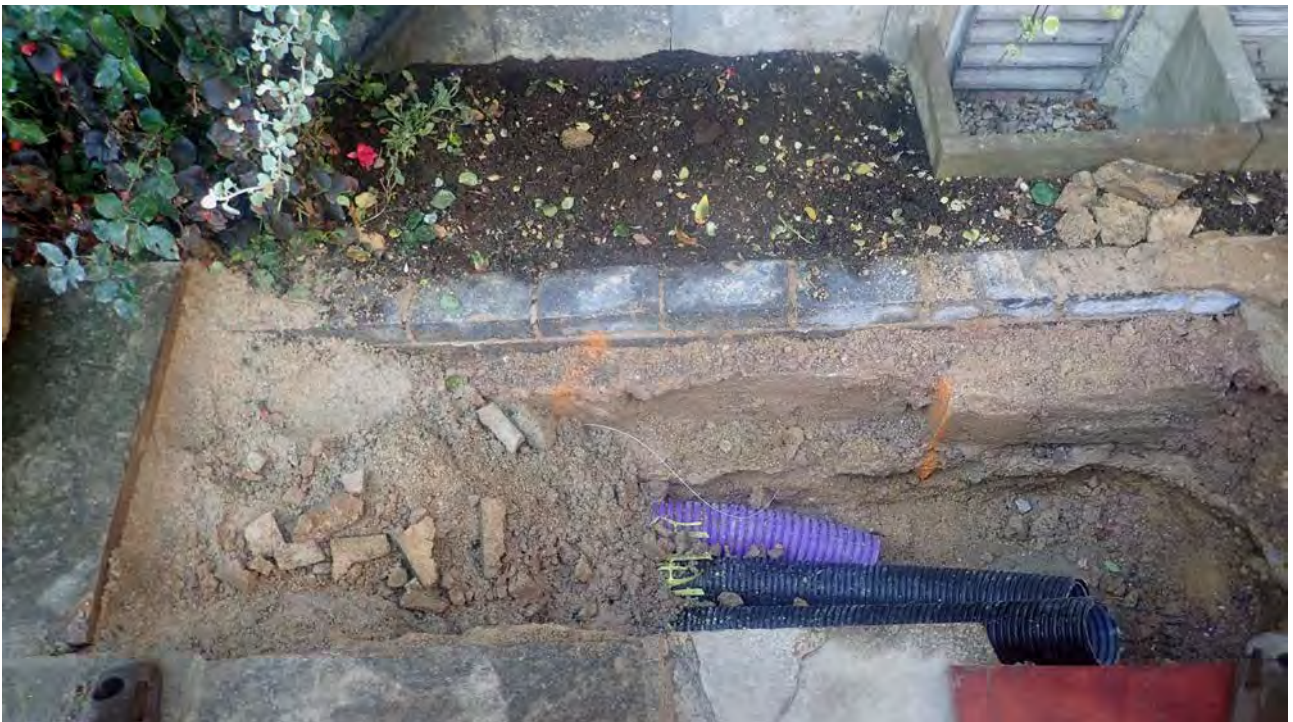


Plate 6: A course of possible reused worked stones in the north-west corner of the Old Quad, looking north



**Head Office/Registered Office/  
OA South**

Janus House  
Osney Mead  
Oxford OX2 0ES

t: +44 (0) 1865 263 800  
f: +44 (0) 1865 793 496  
e: [info@oxfordarchaeology.com](mailto:info@oxfordarchaeology.com)  
w: <http://oxfordarchaeology.com>

**OA North**

Mill 3  
Moor Lane  
Lancaster LA1 1QD

t: +44 (0) 1524 541 000  
f: +44 (0) 1524 848 606  
e: [oanorth@oxfordarchaeology.com](mailto: oanorth@oxfordarchaeology.com)  
w: <http://oxfordarchaeology.com>

**OA East**

15 Trafalgar Way  
Bar Hill  
Cambridgeshire  
CB23 8SQ

t: +44 (0) 1223 850500  
e: [oaeast@oxfordarchaeology.com](mailto: oaeast@oxfordarchaeology.com)  
w: <http://oxfordarchaeology.com>



**Director:** Gill Hey, BA PhD FSA MCifA  
*Oxford Archaeology Ltd is a  
Private Limited Company, N<sup>o</sup>: 1618597  
and a Registered Charity, N<sup>o</sup>: 285627*