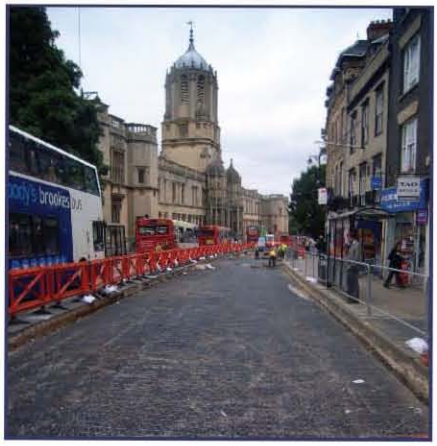
St Aldates Resurfacing
Oxford
Oxfordshire



Archaeological Watching Brief Report

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Road Resurfacing, St Aldates (A420), Oxford

ARCHAEOLOGICAL WATCHING BRIEF REPORT

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Front Cover: Resurfacing at the northern end of St Aldates

SUMMARY

Between June and September 2008 Oxford Archaeology (OA) carried out an archaeological watching brief in St Aldates, Oxford (Between NGR: SP 513 061- SP 514 056). The work was commissioned by Oxfordshire Highways, in advance of the resurfacing of the street. The watching brief revealed stratigraphy indicative of the earlier road construction and modern made ground and also the truncated base of a substantial stone wall running parallel to Christchurch College Gardens, probably the original college boundary wall. No other deposits or features of archaeological significance were observed.

1 INTRODUCTION

1.1 Scope of work

1.1.1 Between June and September 2008 Oxford Archaeology (OA) carried out an archaeological watching brief in St Aldates (A420), Oxford City (Between NGR: SP 513 061 to SP 514 056). The work was commissioned by Oxfordshire Highways, in advance of the resurfacing of the street.

1.1.2 The work was undertaken as part of the mitigation strategy agreed with Paul Smith, the County Archaeological Officer representing Oxfordshire Highways, as part of the programme of road reconstruction and repair within Oxford City (OCAS, 2007).

1.1.3 OA prepared a Written Scheme of Investigation detailing how it would meet the requirements of the brief (OA, 2007).

1.2 Location, geology and topography

1.2.1 St. Aldates runs from the Thames crossing at Grandpont in the south, northwards to Carfax junction. It is one of the oldest roads in Oxford, being an axial street of the late Saxon burgh road grid. It is the only southern exit from the city leading to the river crossing from which the city is believed to have derived its name (Oxenford). The road slopes steeply to the river crossing with a fall of 9.0 metres between the highest and lowest sections. The highest point being Carfax Corner junction where it is 65.5 m OD falling to 61.3 m OD opposite Pembroke Street. Opposite Brewer Street the road surface lies at 58.9 m OD and is 56.5 m OD at the junction with Speedwell Street. It rises slightly to 57.5 m OD at Southbridge Row as it ramps up to Folly Bridge. The underlying natural geology is alluvium over 2nd Terrace Gravel deposits (Geological Survey of Great Britain, sheet no. 236).

1.3 Archaeological and historical background

1.3.1 St. Aldates is an axial street of the original Saxon planned street grid, and formed the primary southern approach into the 10th - 11th century Saxon burgh based on the traditional route of the Thames crossing (Oxon HER monument 6132). In the 11th

century the timber crossing was replaced by a massive stone causeway (Grandpont) the remains of which survive within the core of the present Abingdon Road. The location of the late Saxon Southgate is assumed to have stood on the site of the later medieval Southgate which was located in St. Aldates next to the south-west tower of Christ Church with the City Wall running along the north side of what is now Brewer Street. The gate was partially demolished in the early 16th century and the remaining fragment fell down in 1617.

1.3.2 Few observations of the primary late Saxon metalled street surface have been made in modern times. In 1980, during drainage works, Brian Durham recorded a primary metalling composed of non-calcareous pebbles on gravel outside No.7 St. Aldates at 2.15 metres below tarmac (approx. 61 m OD), while the same operation revealed a sparse scatter of small, irregular, non-calcareous pebbles at 1.8 metres depth (approx. 59.5 m OD) opposite No. 97 St. Aldates. This again lay directly on the natural gravel (Oxon HER monument 6630). During the same drainage operations, manhole trenching near the north-west buttress of Tom Tower, Christ Church, showed no early road surface. Limestone sets over a continuous grey layer above gravel was thought to date from foundations of Wolsey's college (*c* 1524). A second manhole trench near Blue Boar Lane showed an early road surface and pits containing industrial rubbish (Oxen HER monument 6631). In his observations of old road surfaces made in 1896, Herbert Hurst noted that 'the accumulations of the old road [St. Aldates] gradually diminished in the S[outh] past the town hall.' He attributed this to erosion on the slope of the hill. The primary street surface of St. Aldates lies deepest at the Carfax junction where Hurst recorded a 'paved way' overlain by 3.5 metres of made ground.

1.3.3 Unlike the High Street, which has produced considerable, detailed evidence of the later medieval and post-medieval road levels and associated drainage systems, there is less information for St. Aldates. However, during the Trill Mill Stream excavation in 1982-5 at 89-91 St. Aldates, a salvage trench placed across the road for the insertion of a service produced what the site foreman described as "very hard stonework below the modern road which had a face on the west side." This could be a similar structure to the Grandpont causeway and possibly of similar date. The channel of Trill Mill Stream would have had to be bridged at this time. The 19th century? brick culvert constraining the Trill Mill Stream also crossed under the road at this point (Oxon HER Event EOX 1662).

1.3.4 Towards the southern end of St. Aldates, Brian Durham recorded a section of the Grandpont causeway in the excavations at 33 St. Aldates in 1979. This was the first complete section to be observed, and shows the characteristics that were to be confirmed on a much larger scale during the Abingdon Road archaeological investigations carried out between 2002 and 2004 where the surface of the causeway was directly beneath the sub-base of the existing road. At 33 St. Aldates, the 4 metre wide stone causeway lay immediately under the modern road sub-base at about 56.8 m OD. The earliest dated evidence for a constructed ford was a corrallian ragstone

construction up to 7 m wide discovered during excavations at 65 St. Aldates in 1981 (Oxon HER monument 6500/Event EOX 1664). This was laid directly on the gravel riverbed and its surface was situated at just under 54 m OD. A radiocarbon date obtained from loose wattles retrieved from the stonework suggested a construction dating to before AD 1000. The 1991 BT Tunnel at the junction of Thames Street and St. Aldates revealed the foundations of Grandpont at about 3 m below modern ground level.

1.3.5 Evidence for a timber crossing north of Folly Bridge (Grandpont) was also discovered during excavations at 33 St. Aldates and in the BT Tunnel. The latter investigation produced timbers that have been interpreted as bridge trestles and these produced a radiocarbon dating of cal AD 660-900. The timber piles discovered at 33 St. Aldates suggest a similar construction to the north.

1.3.6 In 1962/63, an archaeological excavation was undertaken on behalf of the Oxford Excavation Committee outside Christ Church College between a staircase of Tom Quad and St. Aldates. This revealed a massive rubble footing-wall 2.43 m thick, found at a depth of 1.52 m and interpreted as the west wall of Wolsey's projected Great Chapel. Natural Gravel was encountered at 2.74 m. All early superficial levels appeared to have been removed in 1526 (Oxon HER monument 6453).

1.3.7 In *c* 1890 during excavations for a drain opposite the great gateway of Christ Church, a gold ring, reported as Anglo-Saxon, was found in a coffin (Oxon HER find spot 3565).

1.3.8 A watching brief conducted by OA during the renewal of the gas mains in St Aldates prior to resurfacing only encountered deposits of post-medieval made ground, although excavations in the area of Brewers Street produced demolition debris comprising of dressed stone blocks suggesting a probable earlier stone structure in that area (OA, 2008).

1.3.9 The main implication for this programme of road works appears to be that, while most significant deposits at the northern end of St. Aldates are likely to be deeper than all impacts other than new drainage trenches, archaeological levels become progressively shallower moving southwards, with for example, the surface of Grandpont causeway lying immediately under the existing road sub-base in some parts.

2 PROJECT AIMS AND METHODOLOGY

2.1 Aims

2.1.1 To identify and record the presence or absence, extent, condition, quality and date of archaeological remains in the areas affected by the development.

2.1.2 To preserve by record any archaeological deposits or features that may be disturbed or destroyed during the course of the work.

2.1.3 To make available the results of the archaeological investigation.

2.2 Methodology

2.2.1 The work was carried out using a mixture of tarmac cutters, hydraulic breakers and 9 tonne tracked excavators fitted with 1 m and 1.8 m wide toothless buckets. The watching brief was conducted as a series of site visits during and immediately after reduction of the site. The work was conducted as a series of discrete sections each backfilled and resurfaced before the next section was started.

2.2.2 A plan showing the extent of the excavations was maintained at a scale of 1:500 (Fig. 2) and any sections recorded were drawn at a scale of 1:20. All excavations were photographed using digital photography, colour slide and black and white print film. A general photographic record of the work was also made. Recording followed procedures detailed in the *OA Field Manual* (ed D Wilkinson, 1992).

3 RESULTS

3.1 Description of deposits

3.1.1 The work was undertaken in a series of phases, replacing the road surface in discrete lengths throughout the whole of St Aldates in order to minimise traffic disruption.

Phase 1 (Cornmarket to Pembroke Street)

3.1.2 The road surface was reduced by an average of 0.6 m depth within this section.

3.1.3 At the northern end of St Aldates, at the junction with the High Street and Cornmarket Street, a compact layer of light reddish brown crushed stone (3) was encountered at a depth of 0.35 m below the original road level (Fig. 3, Section 1). This material was very clean and represents a layer of imported material used to provide a firm base for the road. This was overlaid by a 0.18 m deep layer of pulverised tarmac (2), which also contained occasional small stone fragments. Sealing this was a 0.15 m deep layer of tarmac (1), the original road surface. The depth of excavation within this phase of work was such that no earlier deposits were exposed, and only the tops of modern service trenches were encountered.

3.1.4 Approximately halfway down this section, opposite the Post Office, a continuation of the reddish brown crushed stone (3) was encountered at a depth of 0.5 m below the original road level (Fig. 3, Section 2). Overlying this was a 0.3 m deep layer of grey-brown clay sandy silt (4) which contained many small to medium stone fragments suggesting that this may be a demolition layer. This was overlaid by a 0.12 m deep layer of grey-brown crushed stone (5), the base for the original tarmac road surface (1).

Phase 2 (Pembroke Street to Brewer Street)

3.1.5 The depth of material removed within this section was similar to the first phase measuring between 0.5 m and 0.6 m in depth.

3.1.6 Immediately south of Pembroke Street a layer of red-brown clay silt (7) was encountered at a depth of 0.25 m below the original road level (Fig. 3, Section 3). This deposit contained gravel and many brick and stone fragments and probably represents a layer of made ground containing demolition debris. This was sealed below a 0.13 m thick concrete slab (6), the base for the tarmac road surface 1.

3.1.7 At the southern edge of the Christchurch main building a layer of grey-brown silt clay (8) containing fragments of stone building material was encountered at a depth of 0.3 m below the original road level (Fig. 3, Section 4). This deposit represents a layer of made ground but probably also includes demolition debris from the immediate area.

3.1.8 Overlying this was a layer of crushed stone (2) 0.12 m deep forming the hardcore base for the current tarmac road surface (1).

Phase 3 (Brewer Street to Speedwell Street)

3.1.9 The road level was reduced by 0.6 m in this area before resurfacing.

3.1.10 The base of the reduction encountered a layer of dark red-brown clay silt (11) containing gravel, brick and stone fragments, at a depth of 0.5 m below the original ground level (Fig. 3, Section 5). This represents a layer of made ground, probably containing demolition debris from the surrounding area.

3.1.11 Visible in the surface of this deposit was a the top of a truncated stone wall (12), running roughly parallel to the edge of the road, 2 m west of the kerb (Fig. 4 and Plate.1). This measured 0.85 m wide and was constructed using roughly dressed stone blocks for the external faces and a rubble core, bonded with lime mortar.

3.1.12 The northern extent of the wall started approximately level with the south-west corner of the Christchurch main building and ran 74 m southwards before turning eastwards and running towards the entrance into Christchurch College gardens.

3.1.13 This structure appears to respect the college boundary and probably is the truncated remains of the precinct wall, possibly reduced to allow the road to be widened. A void was visible in the wall at its northern end, however it was felt that this was due to the removal of a modern intrusion rather than part of its original construction.

3.1.14 Overlying the wall and layer 11 was a 0.25 m deep layer of red-brown clay silt (10) containing a high percentage of gravel and small to medium stone fragments indicative of demolition debris.

3.1.15 This was sealed by a 0.2 m thick concrete slab (9), forming the base for the 0.12 m thick tarmac road surface (1).

3.2 Finds

3.2.1 The only dating evidence encountered during the course of the watching brief was post-medieval in date and included both hand-moulded and machine-made brick fragments. The presence of these finds was noted but they were not retained. No earlier dating evidence was recovered.

3.3 Palaeo-environmental remains

3.3.1 No deposits suitable for palaeo-environmental sampling were observed during the course of the watching brief.

4 DISCUSSION AND CONCLUSIONS

4.1.1 The watching brief observed successive layers of made ground below St Aldates, similar to those encountered during the renewal of the gas main prior to the road resurfacing (OA, 2008). The few pieces of dating evidence observed suggest that this material had been deposited during the 19th and 20th centuries and comprised of a mixture of terrace gravel (probably from cellar excavations) and demolition debris from the Georgian and Victorian redevelopment of the city centre.

4.1.2 The truncated base of the stone wall 12 marks the original boundary wall of Christchurch. No evidence was observed to establish a relationship between this wall, the Saxon town wall in Brewers Street and the Saxon/medieval Southgate.

4.1.3 The scarcity of earlier archaeological deposits may by explained by the limited depth of excavation, typically 0.6 m, whereas archaeologically significant layers were encountered at 3.5 m below the current ground level at the junction between St Aldates and the High Street (Hurst, 1896) rising to 1.8 m below the current ground level adjacent to No. 97 St Aldates (Brian Durham, 1980), substantially below the depth of impact of this phase of works.

APPENDICES

APPENDIX 1 ARCHAEOLOGICAL CONTEXT INVENTORY

Context	*Type*	*Depth*	*Comments*	*Finds*	*Date*
1	Layer	0.12 m	Modern tarmac road surface	-	C20th
2	Layer	0.18 m	Compacted pulverised tarmac	-	C20th
3	Layer	> 0.15 m	Crushed stone hardcore base	-	C20th
4	Layer	0.3 m	Made ground	Stone	C19th/ C20th
5	Layer	0.12 m	Crushed stone hardcore base	-	C20th
6	Layer	0.13 m	Concrete slab, base for road	-	C20th
7	Layer	> 0.3 m	Made ground	Brick, stone	C19th
8	Layer	> 0.3 m	Made ground	Stone, brick	C19th/ C20th
9	Layer	0.55 m	Made ground	Stone, brick	C19th/ C20th
10	Layer	0.25 m	Made ground	Stone, brick	C19th/ C20th
11	Layer	> 012 m	Made ground	Stone, brick	C19th
12	Structure	-	Linear stone wall. original college boundary wall	-	C16th ?

APPENDIX 2 BIBLIOGRAPHY AND REFERENCES

IFA, 2001 *Standard and Guidance for Archaeological Watching Briefs*

OA, 2000 OA Environmental Guidelines for sampling

OA, 2007 St Aldates (A420) Road Works, Oxford City: Written Scheme of Investigation for an Archaeological watching Brief

OA, 2008 Gas Main Replacement Works, St Aldates (A420), Oxford City: Archaeological Watching Brief Report

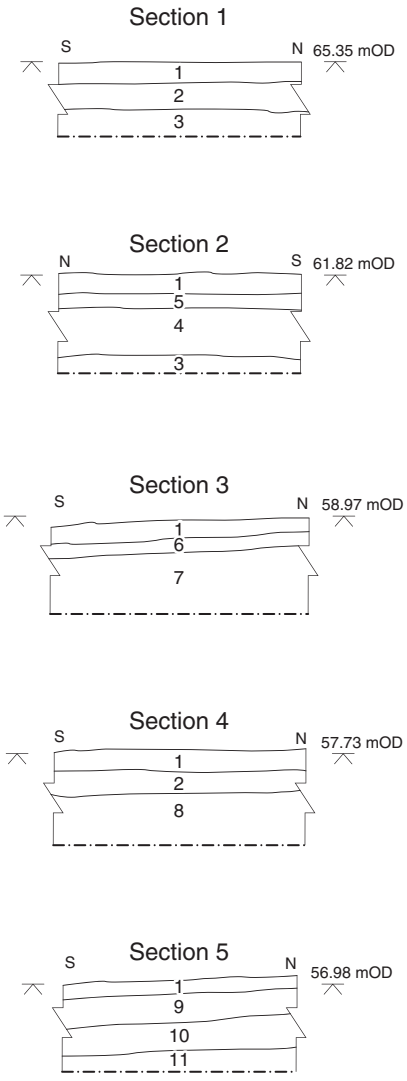
OAU, 1992 *Field Manual (ed. Wilkinson D)*

OCAS, 2007 Design Brief for Archaeological Watching Brief - St. Aldates (A420) Road Works, Oxford City

APPENDIX 3 SUMMARY OF SITE DETAILS

Site name: Resurfacing Works, St Aldates (A420), Oxford City
Site code: OXSARE 07
Grid reference: SP 513 061 - SP 514 056
Type of watching brief: Machine reduction of road level prior to resurfacing.
Date and duration of project: Between June and September 2008, 9 site visits
Area of site: Total area monitored, *c* 2400 m^2
Summary of results: The watching brief observed deposits of post-medieval made ground below the current road surface and the truncated base of the original Christchurch College boundary wall. No other archaeologically significant deposits were observed.
Location of archive: The archive is currently held at OA, Janus House, Osney Mead, Oxford, OX2 0ES, and will be deposited with Oxfordshire county Museum Service in due course.

Figure 1: Site location



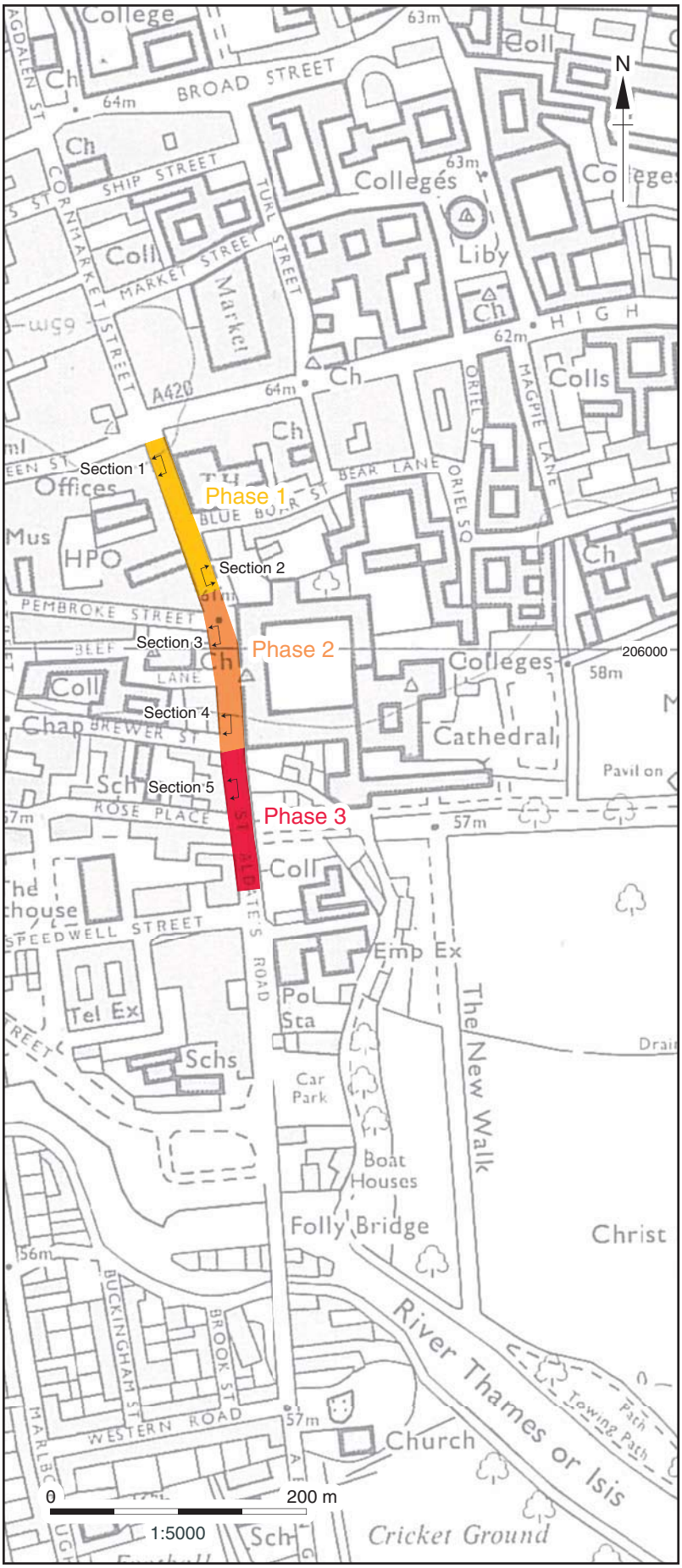


Figure 2: Site plan and location of sections

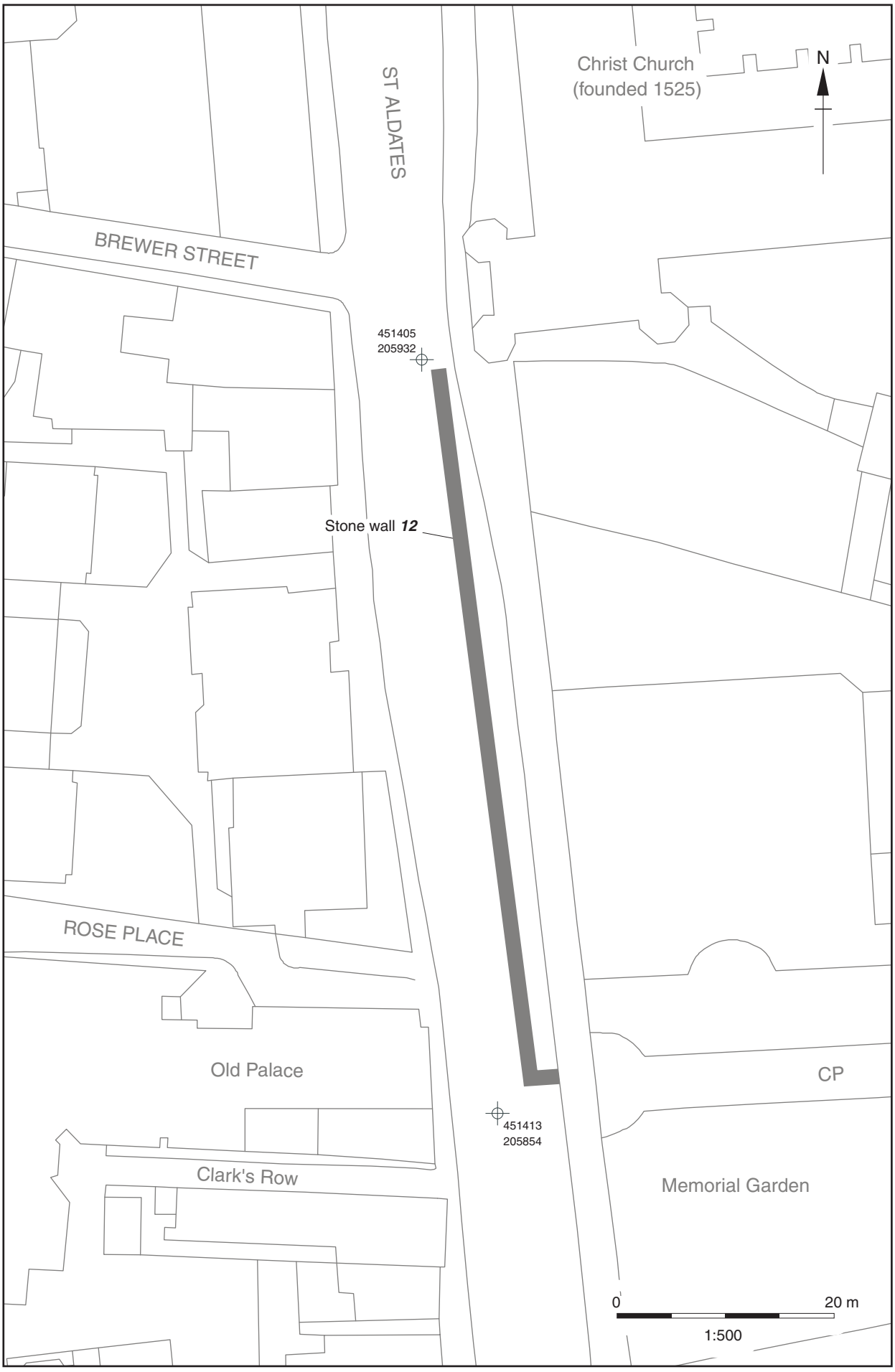


Figure 3: Plan of Wall 12

Plate 1: Truncated base of Wall 12 as exposed

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