

Annual Monitoring Statement for Archaeological Assets 2015



Oxford City Council, Design, Heritage and Trees Annual Monitoring Statement for Archaeological Assets 2015



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Cover photographs 1) top left the tile pavement from the cloister of the Franciscan Friary excavated at the Westgate, 2) top right the remains of 1820s housing in St Ebbe's, 3) bottom left the excavation at The Queen's College Provost's Garden and 4) bottom left the Westgate Archaeological Advisory Panel visiting the Westgate Excavation (Photographs 2 and 3 by Oxford Archaeology).

Executive summary

The following report provides a short overview of the impact of development on archaeological assets in the Oxford Local Authority Area in 2015.

This year saw the development of the extensive 4ha Westgate site which required the investigation and removal of significant remains belonging to the southern half of Oxford's Franciscan Friary and other nearby assets. Elsewhere significant late-Saxon remains were excavated prior to the construction of an underground Library at The Queen's College and further work at Magdalen College within the New Library required the excavation and removal of rare medieval street frontage remains.

Smaller projects at St Cross College and the University Science Area involved the excavation of an enigmatic 17th century burial and Civil War remains and the extensive green field development of 885 new houses at Barton Park involved the recording and removal of parts of a Roman field system of local interest and associated assets.

Assessing the impacts of development in Oxford in 2015 three distinctive trends can be identified 1) The return of pre-2008 patterns of commercial development within central Oxford 2) a continuing pattern of college and University infrastructure development and 3) the outward expansion of Oxford into its rural fringe. These trends are either already impacting, or have the potential to impact on specific asset types. The Westgate development has clearly had a substantive one-off impact on the remains of the Franciscan Friary. Elsewhere a cumulative impact on late-Saxon settlement remains, medieval settlement remains and the Royalist Civil War defences can be identified.

Elsewhere whilst infill development of various types (extensions, small scale housing sites, basement extensions) continues in suburban part of the City no other distinctive cumulative impacts on significant archaeological asset types have been identified.

This year's report also highlights the public benefit derived from developer funded archaeology in Oxford and links these investigations to the questions about our past that are being answered and refined by the availability of new data. The scope of public outreach over the year, which this year has been much extended as a consequence of the Westgate Project, and the wider dissemination of archaeological information to the general public, is also summarised.

The report highlights, once again, the strong pressure on asset sustainability resulting from development within the City Centre Archaeological Area (as defined in the Local Plan) and the need to monitor and assess the cumulative impact of these developments on significant late-Saxon and medieval asset types.

1) Introduction

The National Planning Policy Framework requires that local planning authorities should make information about the significance of the historic environment, gathered as part the development management process, publicly accessible. This theme was anticipated by the Oxford Core Strategy (2011-2026) which sets a 2015 target for the production of a Heritage Plan for Oxford. One component part of the Heritage Plan that has already been completed is a six year Archaeological Action Plan (2013-2018)* that establishes the objective of producing an annual monitoring statement for archaeological heritage assets. The aim being to capture data about the patterns of development impacts and also monitor the effectiveness of heritage management processes.

The following report provides a short overview of the scope and impact of development led archaeology in Oxford in 2015. It records the number of planning applications submitted over the calendar year and the number assessed to have likely archaeological implications. It records the types of archaeological fieldwork undertaken and summarises how development and archaeological mitigation have impacted on known archaeological heritage assets. Furthermore it relates the year's archaeological discoveries to an evolving research agenda to show how our knowledge and understanding of Oxford and its people is developing and expanding over time. The annual statement will provide a basis for monitoring the on-going cumulative impact of both development and asset management on the city's archaeological resource.

(*www.oxford.gov.uk/oap)

2) The asset base

The designated assets within the Oxford City local authority area comprise:

- Over 1,500 listed buildings (this number includes individual listings and group listings). New buildings are being added to the list yearly. The list is includes:
 - 12% grade I listed buildings (the national average is 2%)
 - 8% grade II* listed buildings (the national average is 4%)
- 18 Conservation Areas representing 20% of the city area
- 12 Scheduled Ancient Monuments
- 15 Registered Parks and Gardens

In addition to these designated assets 1,541 archaeological monuments are recorded on archaeological databases covering the city. The monument database includes extant and documented monuments (i.e. those which may no longer survive). At present two complementary archaeological data sets are maintained for Oxford: the Urban Archaeological Database (UAD) which covers the historic core of Oxford and the Historic Environment Record (HER) which covers the area outside the UAD. These two sets of data are both now maintained by the City Council and have been recently combined into the City of Oxford Urban Historic Environment Record (COUHER).

3) Planning advice and fieldwork statistics

The tables below provide data about the number of applications assessed and commented on by the City Council Archaeologist and the number of archaeological recording events undertaken by archaeological contractors in Oxford in 2015. Additional data is provided on the number of Scheduled Monument Consent notices issued by English Heritage over the course of the year.

Table 1: Planning applications to Oxford City Council	
Number of applications assessed for heritage interest (excluding renewals and	1483 (full, outline and pre-applications)
amended schemes):	(including 83 Major Applications)
Number of applications with archaeological implications in 2015:	50
Number of applications with archaeological implications as a % of planning	2014 (for comparison) 5.3%
applications	2015 3.3%

Table 2: Archaeological fieldwork undertaken in 2015 by type		
	2014 (for comparison)	2015
Evaluation trenching	4	12
Trial trenching (key hole investigation secured through a planning condition, usually because of pre-existing site constraints)	6	6
Archaeological excavations	4	7
Archaeological watching briefs (observation of ground works by a qualified archaeologist)	14	23
Historic building recording	9	10
Geophysical survey	3	3
Salvage record (reactive recording of an asset either because of non-compliance with a condition or because activity is outside planning control)	0	2

Table 3 Impacts on Scheduled Monuments within the Local Authority Area		
	2014 (for	2015
	comparison)	
Number of cases requiring Scheduled Monument Consent in 2015	1	2
Number of Scheduled Monument consents for complete or partial loss of fabric or character requiring mitigation	0	0
of damage		

Number of Scheduled Monument consents for minor works without significant implications	1	2
Number of Scheduled Monument consents for repair and restoration of monuments	0	0

4) Outcomes from previous planning advice

The tables below provide data on the outcomes of development on archaeological assets and an assessment of impact based on definitions provided by the National Planning Policy Framework.

Table 4: Monitoring outcomes from previous planning advice		
	2014 (for comparison)	2015
Number of significant breaches of planning condition or damage cases recorded over the year	0	1
Non-compliance with an archaeological condition with unknown impact on asset/s	1	1
Non-compliance with archaeological condition with subsequent mitigation undertaken	0	0
Number of appeals allowed where archaeological policies are cited as a reason for refusal	0	0
Number of developments in 2015 within the City Centre Archaeological Area (defined in the Local Plan) that required a full excavation more than 25m ²	3	5
Number of developments in 2015 outside the City Centre Archaeological Area (defined in the Local Plan) that required an excavation more than 100m ²	3	1
Number of major archaeological excavations awaiting publication more than two years after the completion of fieldwork	7	7
Number of fieldwork events that did not encounter archaeologically significant assets (these may include sites where archaeological monitoring has been required to ensure that consented development does not impact on significant remains)	9	14
Number of cases in City Centre Archaeological Area (defined in the Local Plan) where design was agreed, or design changes made, to avoid or achieve significant reduction in harm to or achieve significant preservation in situ of archaeological assets	2	3
Number of cases outside City Centre Archaeological Area (defined in the Local Plan) where design was agreed, or design changes made, to avoid or achieve significant reduction in harm/significant preservation in situ to archaeological assets	1	0

Table 5: Sumi	Table 5: Summary of archaeological assets impacted by development in 2015.									
Site Name	Type of Asset	Loss of asset without mitigation	Loss of asset with mitigation	Substantial loss of asset without mitigation	Substantial loss of asset with mitigation	Less than substantial loss of asset without mitigation	Less than substantial loss of asset with mitigation	Further characterisation of asset with limited intervention	New asset identified with limited intervention	Notes
Westgate Shopping Centre	Medieval friary, Civil War defences, Holocene channel, flood plain deposits, Victorian residential suburb.									This extensive urban 4ha site involved a significant double basement that removed 1) sections of the civil war defences (a waterlogged ditch in this location), 2) sections of the Trill Mill Stream and side channels, 3) the remains of demolished 1820s-1960s housing 4) the southern part of the conventual buildings of the medieval Franciscan friary and Studium Generale including the southern precinct wall, 5) a possible wharf structure, medieval and Tudor water management systems and 6) over 2,000 timber piles, 35% of which appeared to be re-used oak building timbers. To the north of the redirected Trill Mill Stream the conventual range from the central main cloister southwards was exposed with opportunities for preservation in-situ of significant remains including waste pits associated with the kitchen, foundations and parts of the fragmented stone lined water conduit. Because of the impact of a second round of piles in the area, and having excluded the possibility of re-using existing piles after specialist advice, comprehensive excavation was required because of the overall

						fragmentation of the site.
						The Late Saxon and earlier landscape
						north of the Trill Mill diversion was not
						reached by formation and was
						mitigated in proportion to the pile
						impacts.
Former	Late Saxon					Trial trenching along the route of
Shidyerd Street	street					former Shidyerd street identified in situ
Corpus Christi	surfaces					Late Saxon and medieval street
College						surfaces and midden dumps.
Queen's	Late Saxon					An excavation was undertaken in the
College Provost	buildings					Provost's Garden at The Queen's
Quad	and street					College prior to the construction of an
5,000	surfaces,					underground library extension. The
	post-					excavation involved the removal of all
	medieval					the archaeology from the entire garden
	quarrying					except in the area where a mature tree
	quarrying					was retained. This comprised several
						late-Saxon cellar pit structures and a
						metaled surface with cart ruts. The
						later land-use appeared to most
						comprise gravel quarrying.
Magdalen	A late-					Reduction of the floor within the Old
College	Saxon ditch					Library involved the removal of
College	containing					archaeological remains down to
	burnt daub					natural.
	and					natural.
	medieval					
	floors, walls					
	and hearths					
	belonging to					
	properties					
	fronting					
	onto former					
	Bridge					
D. t. D. I	Street.					The land of the Call In the call
Barton Park	Romano-					This large residential development on
	British field					sloping pasture land north of the
	system and					Oxford ring road involved a mixture of

	a small					terracing and infill impacting on parts
	amount of					of an extensive Romano-British field
	Saxon					system and heavily denuded medieval
	metal work.					ridge and furrow earthworks.
New Physics	Royalist					This development involved the full
Building,	Civil War					removal of deposits within the building
Science Area,	ditch.					footprint and impacted on a small area
Parks Road						of the extensive Royalist Civil War
						earthworks.
Brasenose	Post-					The internal floor of the 17th century
College Old	medieval					Old Cloister was examined prior to the
Cloister	floor layers					infilling of burial voids within the floor
	above burial					and the refurbishment of the structure.
	voids.					This is recorded as an excavation,
	10.00.					however the impact on archaeological
						remains was limited.
The Stoker	Post-					A number of previously unrecorded
Room and	medieval					post-medieval wall paintings were
Second Quad,	wall					exposed in the Stocker Room (in the
Brasenose	paintings.					south-east corner of the Old
College	pantingo.					Quadrangle) during building works.
St Cross	Medieval					A medieval boundary ditch, an
College	boundary					unexpected burial of a young woman
College	ditch. 17 th					dating to the 17 th century and Victorian
	century					wall foundations were recorded prior to
	burial.					the construction of a new
	Dullai.					accommodation, lecture theatre and
						library block with small basement.
The New	Medieval					
						-
Library, St	and post- medieval					medieval/early post medieval pottery
Anne's College,						and other material were excavated
Woodstock Road	pits.					prior to the construction of a Library
Road						and Academic Centre at St Anne's
D. d. Colle	0: :114/					College (with basement).
Ruskin College,	Civil War					A large ditch, likely part of the Royalist
Walton Street	defences.					Civil War defences, was recorded
						during the extension of the existing
						basement at the former Ruskin College
						site.

Between Towns Roads	Roman pit.				•		A single Roman pit was excavated during an evaluation rear of the
							Cowley Conservative Club, 19 Between Towns Road.
Goodhart Building, High Street, University College	Post- medieval coaching Inn				•		Localised ground reduction and new foundations had a small scale impact on post-medieval remains. Remains that may relate to the former Angel Inn were identified.
The East Range, Christ Church Cathedral	East Range				•		Limited works to the East Range of Christ Church Cathedral resulted in the taking of a dendrochronology date of an exposed timber.
Summer Fields School, Mayfield Road, Summertown	Anglo Saxon burial					•	A human burial was encountered during the excavation of a service trench.
Saville House evaluation	Late Saxon bank, Civil war defences					•	Evaluation and topographical survey of the 17th century civil war defences revealed previously unknown earthwork below the extant Royalist Civil War bank. (2014 but not included last year as not in the public domain).
Nos 114-119 St. Aldate's and 4-5 Queen Street	Late Saxon and medieval tenements				•		Limited test pitting at Nos 114-119 St Aldate's and Nos 4-5 Queen Street identified significant remains directly below the modern building slab.
The Malt Barn, Church Street, Iffley	Post- medieval Malt Barn				•		Renovation works to the 16th-17th century Malt Barn revealed a stone wall in the kitchen area.
The Fell Tower, Christ Church,	Fell Tower				•		A small amount of walling was removed to create a door way. The works exposed a fireplace blocked in the 1970s on the Canonry side.
Peckwater Quad Staircases 6-8, Christ Church,	18 th century range?				•		Localised small scale works in Peckwater Quad Staircases 6-8 were subject to a photographic study.

TOTAL		0	0	0	3	1	6	15	3	
	town defences									defensive line in this location.
New College Longwall	Outer medieval							•		Evaluation trenches further clarified the presence, location and depth of outer
Naw Callaga	tenement remains									First star translation for the scale (C. 14)
Paradise Street	medieval									floors.
Callas site 15	and post									medieval and post-medieval pits and
College owned Former Cooper	town wall Medieval					•				without SMC. Small scale evaluation revealed
City Wall,	Medieval									known to be located nearby. Localised repointing undertaken
										The features may be associated with the Royalist Civil War earthworks
. ato read	23.0000									containing a 17th century clay pipe.
Building, South Parks Road	Civil War defences									feature apparently containing redeposited clay, which was cut by a pit
Tinbergen	Royalist									Evaluation trenching revealed a linear
Plantation Road	ditch								•	and two post-medieval features were observed during a watching brief.
College No 30	Iron Age									building. A small linear ditch of Iron Age date
pantries, Balliol										associated with the 1882 plan of the
Kitchen, Buttery Bar and										Balliol College. The watching brief identified a number of features
including the	hall									and external to the 19th century hall at
The Hall	19 th century									Miscellaneous ground works internal
Aldate's	medieval town house									during small scale internal works.
No 98 St	Post									A photographic record was undertaken

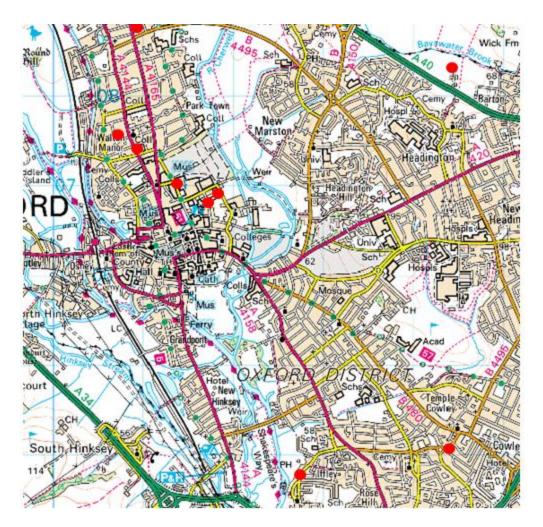
5) An overview of the patterns of archaeological fieldwork in 2015

The sites assessed in table 5 are mapped below in order to show the broad pattern of investigation.



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Fig 1. The historic core of Oxford with sites mentioned in table 5 marked in red.



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Fig 2. The wider Oxford area with sites mentioned in table 5 marked in red.

Current archaeological policy and the preservation of archaeological remains

The current Oxford Local Plan 2001-20016 states that "Archaeological remains provide valuable evidence that contributes to the understanding of important elements in the development of Oxford – a Bronze Age barrow cemetery; a Roman pottery industry; an early Christian centre; an academic community; and the capital of Royalist England in the 17th century. Such remains are a finite and non-renewable resource that requires appropriate management to ensure they survive in good condition" (Section 5.2.1).

Policy HE1 states that Planning permission will not be granted for any development that would have an unacceptable effect on a nationally important monument (whether or not it is scheduled) or its setting and Policy HE.2 states that planning applications should, where appropriate, make provision to preserve the archaeological remains in situ, so far as reasonably practicable, by sensitive layout and design (particularly foundations, drainage and hard landscaping).

Overview of 2015

This year, after a long gestation in the planning process, the extensive 4ha Westgate redevelopment was commenced, involving the demolition of a multi-storey car park and the replacement of this and nearby surface car parks with an extensive multistorey shopping complex with extensive underground car park. The development impacted on the southern half of the buried remains of Oxford's Franciscan Friary and associated remains (the northern half having largely been removed by the 1970s Westgate development). The site, although not scheduled, was assessed as nationally significant by the local planning archaeologist, this assessment was accepted by the developer who then submitted a case that the substantial harm to the remains could be justified by the exceptional public benefits of the scheme. The year has therefore seen extensive excavations and award winning outreach project (Best Archaeological Project- British Archaeological Awards) in mitigation of the development impact. The development design involved the full removal of 60m x 24m of the friary precinct at its southern end, including parts of the precinct wall and friary buildings as well as further associated water channels and stone and wooden water management features located to the south of the walled precinct.

The potential for re-using the existing multi-storey piles was examined but rejected for technical reasons and consequently a new pile grid was required over the remainder of the exposed precinct (approximately 65m x40m). The advice given to the developer was that because the two pile arrays would fragment the archaeological remains a robust and extensive excavation would be required to understand the archaeology adequately rather than leave a fragmented picture for future investigations. However once the excavation was open it was possible to identify areas where meaningful preservation in-situ was possible i.e. the waste pits west of the kitchen. Furthermore the bulk of the robbed-out walls and stone lined water conduit of the friary, all identified grave cuts associated with the friary church and also earlier remains sealed below the medieval reclamation deposits, were preserved below the new foundations in this area.

The Westgate development also involved the removal of a substantial area of foundations and waste associated with the Victorian suburb of St Ebbe's. This was subject to targeted excavation of four tenement plots and further consideration will need to be given to the scope of recording on any subsequent impacts on similar remains. Other assets impacted by this development included an enigmatic area of compacted gravel that may be anthropogenic in origin and was sealed by alluvium of Bronze Age date and also a significant length of waterlogged ditch belonging to the Royalist Civil War defences.

Over recent years we have seen a well-established trend of new college infrastructure projects, where colleges within the historic core of Oxford have sought improve dated facilities that are located within heavily constrained and historically sensitive locations. The excavation begun at Magdalen College in 2014 continued into 2015 and resulted in the excavation and removal of a small but significant area of medieval street frontage remains (floors, hearths, walls) preserved below the foundations of the 19th century school house later converted into the 'New Library'. Such street frontage deposits tend to be rare because of the amount of later cellar construction that has taken place along the main street frontages. Another significant excavation in 2015 took place within the Provost's Garden, The Queen's College. Here most of the historic college garden was excavated prior to the construction of a new underground Library. The excavation led to the removal of all archaeological remains within the basement library plot, comprising several late-Saxon structures (cellar pits) and street metaling (with cart ruts) and also post-medieval quarry and waste pits.

Other smaller college and University projects requiring archaeological excavation of basement footprints were also undertaken at St Cross College and in the University Science Area for the new Physics block. The former impacted on largely early modern remains of low value but also an enigmatic 17th century burial of a young woman. The latter was one of a number of field work projects in 2015, including the Westgate development, that impacted or encountered sections of the buried Royalist Civil War defences.

Away from the historic core, on the rural fringe of Oxford, a substantial housing development was also commenced on a Green field site at Barton Park impacting on Roman field systems of local significance. This extensive site for 885 new homes was subject to extensive evaluation trenching followed by targeted open area excavation. The site was subject to a cut and fill approach so parts of the landscape here will remain undisturbed.

Other small scale developments, extensions and building renovation projects have led to a high volume of evaluations, watching briefs and historic building recording work across the city. Whilst both broad and localised patterns can be identified in terms of the type and scale of these developments no further discernible cumulative impact on specific asset types can be identified from this year's results.

Assessing the impacts of the above developments three distinctive trends can be identified 1) The return of pre-2008 commercial development within central Oxford 2) a continuing pattern of college and University infrastructure development and 3) the outward expansion of Oxford into its rural fringe. The first two trends are either already impacting, or have the potential to impact on specific asset types. The Westgate has

clearly been a massive one-off impact on the Franciscan Friary. Elsewhere a cumulative impact on late-Saxon settlement remains, medieval tenement remains and the Royalist Civil War defences can be identified. The third trend has had less identifiable impact to date, other than removing Roman field boundaries of local significance.

National Importance Programme

In February 2015 a report was produced by Oxford Archaeology and the City Council Archaeologist entitled <u>Assessing and mapping significant heritage assets in the medieval university City of Oxford</u> as part of Historic England's <u>National Importance Programme</u>. The project looked at how to define boundaries of assets in urban contexts, in response to development pressures in the city of Oxford. It focused on identifying and locating areas of known archaeological sites and the means for finding other sites that are not yet recognised as being of national importance, and the issues that arise from development. The report concluded by highlighting a series of assets in Oxford that have the potential to be assessed as nationally important based on existing information but where pragmatic or evidential constraints have prevented them from being formally designated.

6) Public engagement with archaeological heritage

The Oxford Archaeological Action Plan 2013-2018 sets out the aspiration of the Design, Heritage and Trees Team to maintain a programme of public outreach including talks, walks and media engagement. Below a selection of outcomes related to archaeological outreach work in 2015 are highlighted:

- Public talks were undertaken by the City Council Archaeologist at the County OxPast event in June.
- All meetings of the Oxford City and County Archaeological Forum (OCCAF) were attended by the City Council Archaeologist and OCCAF City reports summarizing recent archaeological work in the town have been made available through the council website.
- An annual summary of archaeological work in Oxford has been provided to the journal of the Oxfordshire Architectural and Historical Society (Oxoniensia) and to South Midlands Archaeology by the City Council Archaeologist.
- A public open day was held at The Queen's College excavation attracting over 750 members of the public.
- An extensive program of outreach was undertaken in relation to the Westgate excavation. This involved two open days attracting over 3,500 visitors, a public viewing area of the excavation, a public display on the archaeology of the site on the hoarding, a program of public lectures made available on you tube, site visits for councilors and the archaeological advisory panel, an education program in collaboration with Cheney and Northfield Schools, a St Ebbe's walk handout, engagement with a specialist academic conference held in Oxford on the Blackfriars with site visit arranged, a series of pop-up museum displays of artefacts from the site and extensive media coverage. A further element was the production of online three dimensional models of the archaeology for public information and a dig diary and resource page on the Oxford Archaeology web site.

Further information on the results of archaeological fieldwork in the City can be found in the regularly produced Oxford City and County Archaeological Forum reports which are posted onto the archaeological page of the council website: www.oxford.gov.uk/archaeology.

7) Developing an archaeological research agenda for Oxford

In 2012 the City Council completed an English Heritage funded project to produce a synthesis of the available archaeological information for Oxford and set out a research agenda to inform future investigations. These reports formed part of the Oxford Archaeological council Plan and can be viewed on the www.oxford.gov.uk/oap. The archaeological investigations undertaken in 2015 have created a great deal of data relevant to the research agenda and table below shows that information has been produced from across the various prehistoric and historic periods. A full assessment of this contribution will be undertaken when the research agenda is subject to periodic review. Many of the larger sites investigated in 2015 have not yet been subject to a detailed post-excavation study and therefore the full results are not yet reported. However it is possible to provisionally relate a number of investigations to specific research questions identified in the research agenda.

Site	Notes	Research Question	Period
Northern Gateway evaluation for Palaeo- channel	Northern Gateway Phase 2 Evaluation trenchjng confirmed that the Wolvercote Gravel Terrace and by extension the Wolvercote Channel, did not substantially extend into the development site.	1.3.1 Further recording and scientific dating of gravel deposits during significant interventions into the Summertown-Radley and Wolvercote terraces may help further define the Lower Palaeolithic depositional sequence.	Palaeolithic
Westgate main basement area.	Extensive excavations at the Westgate development have allowed the excavation of two full transects through the Trill Mill Stream Channel and the wider floodplain. The results are still being analysed.	1.4. 8. Further investigation into the effect of fluvial activity such as erosion and sedimentation on the local environment is desirable.	Mesolithic
Physics Building at Science Area	Possible eastern extent of the Oxford henge located.	2.3.2 2. The identification and scientific dating of further Neolithic monuments on the 2nd gravel terrace would contribute to the existing data set from a wide range of earlier Neolithic funerary monuments in the region.	Neolithic
Westgate, main basement area	The Westgate excavation revealed an enigmatic compacted gravel surface of apparent anthopogenic origin sealed by alluvium dating to the Middle Bronze Age. In addition to identifying a previously unknown feature the work also suggests that the process of alluviation began in the Middle Bronze Age rather than Late Bronze Age Early Iron Age as previously thought,	2.4.5 Bearing in mind the observation of a prehistoric 'compacted clay surface' at St Aldates was there a north-south (or indeed any identifiable) prehistoric route-way across the floodplains? 2.4.2 2. Is there direct evidence for cultivation. Understanding the development and extent of early agriculture is of great interest. When do we see the introduction of agriculture in the LAA? 3.4.3. Farming and clearance may be explored through further targeted study of deposits sealed by alluvium or colluvium (see Lambrick 2010). There is also good potential for palaeo-environmental analysis to develop our understanding of grassland, scrub, woodland cover and localised cultivation patterns in the LAA.	Bronze Age

No 30 Plantation Road.	Previously unknown linear ditch of Iron Age date recorded.	3.4.6. Can we further establish the origins, character and longevity of field/enclosure systems within the LAA.	Iron Age
Barton Park Development	Further characterisation and mapping of the Late Iron Age and Roman sequences of fields in this area with additional information from field edge cremation and pyre pit.	3.4.6. Can we further establish the origins, character and longevity of field/enclosure systems within the LAA. 4.5.7. To what extent is the general regional pattern of 2nd century relocation and reorganisation of settlement patterns reflected within the LAA? There is some suggestion that Oxford was not as significantly affected as other areas. Why might this be?	Roman
Between Towns Road Conservative Club	Single pit identified	4.6. 1. What is the full character and extent of manufacturing infrastructure within the LAA?	
Summerfield School	Early Saxon inhumation recorded. The first in this area to be accurately plotted.	5.3 Of particular importance would be sites offering the opportunity to apply radio-carbon dating to unaccompanied inhumations that do not lie within known medieval cemeteries, seeking to establish whether these are of late Roman, post-Roman, or Mid-Late Saxon.	Early- Middle Saxon
		5.7. 3. Can we further establish the date, character and extent of potential early-middle Saxon cemetery areas (North Oxford; Stephens Road, Headington) and their relationship, if any, with late Roman cemeteries?	
Barton Park	A concentration of Saxon horse fittings and 7 th century weapons were recovered. Further analysis required.	5.5. 5. Can the archaeological record tell us anything about the period of Mercian control in the Oxford area?	
Magdalen College Longwall Quad	A large ditch and bunt daub were recorded associated with early plots along the later Bridge Street/High Street approaching Magdalen Bridge. Further analysis is required.	5.8. 5. Can we further explain the irregularities in the alignment of High Street and Queen Street?	Late Saxon
Westgate Main Phase	Late Saxon land divisions and waste pits recorded. Trill Mill channel investigated. Further analysis required.	5.6.8. Where and when were mill streams and mills established? Is there further evidence for a retaining southern bank along the Castle Mill Stream (the Wareham Bank) and Trill Mill Stream? The potential for the retaining banks of these channels to preserve buried land surfaces should be noted.	
		5.10.2 2. What role did the various gravel islands and reworked Thames channels south and west of the town play in terms of the defensive circuit?	
Wesley Memorial Methodist Church, New Inn Hall Street	Top of the late Saxon rampart identified.	5.10, 1. Can the date of the primary burh and its proposed eastern (and potentially western) extension be established archaeologically? Can the variously proposed defensive lines be tested? Excavations at the Castle have demonstrated the continuation of the burh defences to the west but have not definitively resolved the matter of whether these were primary or part of a westward extension of the burh that may have originated with a more conventional rectilinear pattern with the original	

		Constant Bas at all the Constant	
		western line of defence following the break of slope close to New Inn Hall Street. Interventions into this area will therefore present opportunities to resolve this matter.	
Saville House?	New rampart of field bank sealing undated post holes and pits below identified running east-west in Mansfield Road, OSL dating suggests a 9 th -11 th century origin for this feature.	5.3.2 Refining our understanding of the chronology and character of Mid-Saxon activity Oxford and subsequently the date and phasing of the Late Saxon burh and its extensions remain of great importance to our understanding of the origins and development of the town.	
Queens College Provost's Garden	Late-Saxon cellar pits and street metalling with cart ruts identified in postulated eastern extension to the burh. The alignment of the street and buildings does not correspond either with the grid of the suggested primary burh nor the curve on the High Street towards	5.5. 16. The area of the proposed eastward extension of the primary burh (or foundation of a second eastern burh) remains of particular interest for the potential to compare the character of settlement, material culture, street surfacing and defensive structures with the proposed primary burh.	
	Magdalen Bridge.	5.8. 3. Can further evidence for primary burh street surfaces be identified, particularly in the southern half of the burh where evidence is lacking? What was the extent of metalled street surfaces outside the primary burh? Can we further define the street grid in the west end? Stone metalling seems to have been removed from some earlier street surfaces and re-used, with the noticeable exception of St Frideswide's Lane under Tom Quad; how can this be explained?	
Corpus Christi Shidyerd Street	Well preserved 'damp' midden deposits and late Saxon street sequence identified. Borehole survey has also excluded the possibility of the late Saxon defences (primary burh) running north-south through the western part of Garden Quad.	5.8.3. Can further evidence for primary burh street surfaces be identified, particularly in the southern half of the burh where evidence is lacking? What was the extent of metalled street surfaces outside the primary burh? Can we further define the street grid in the west end? Stone metalling seems to have been removed from some earlier street surfaces and re-used, with the noticeable exception of St Frideswide's Lane under Tom Quad; how can this be explained?	
St Annes College Library	Further characterisation of undocumented roadside extra mural settlement along Woodstock Road including waste pits and material that suggests perhaps dwelling of some status in vicinity.	7.12.5 What can the patterning of waste disposal tell us about the wealth and specialisms of different urban and suburban areas?	Medieval
Westgate Main Phase	Extensive open area excavation of friary remains and precinct wall. Exceptional survival of water conduit and wooden sluice and other water management features perhaps related to fishponds. Well preserved kitchen/bakehouse and extensive reclamation and foundation remains providing exceptional	7.4. 5. What was impact of the medieval mills and mill leats along the Thames and Cherwell channels? To what extent did this infrastructure alter the hydrology in the medieval period? 7.4.6.6. How and where were the rivers utilised for other purposes such weirs, fishponds, dumping waste etc.? 7.5.2 The potential of cess pits, Thames channels and the Castle precinct to preserve further evidence for leatherworking, woodworking and cordwainery should be highlighted. 7.6. 7. How did kitchen spaces evolve? Did	

	information about medieval engineering including 2,000 waterlogged timber piles, 35% of which appeared to come from demolished medieval buildings. City wall and cloister tiled pavement also recorded. Large body of finds recovered. Further analysis of results required.	every dwelling have a hearth? Was cooking usually done in the house, and if not when did it move to detached buildings on the plot, and then when did it move back into the main dwelling? 7.7.1 The plan-form of a number of friaries and abbeys have been archaeologically investigated; can we learn more about the daily life within religious institutions – the diet and health, daily routine? 7.7.3. 3The is good potential for the sites of religious houses located on reclaimed land in the floodplain to preserve environmental evidence for diet, land-use and water and fish management. 7.7.4. Do the early ecclesiastical sites preserve any material culture or structural elements that can be associated with the development of learning (styli, book clasps, lamps, libraries etc)? Such features and objects would be of particular interest. 7.7. 5. Can the material culture and architecture of the friaries and abbeys tell us more about the relative wealth and functions of rival orders? 7.8. 3. Can we further identify patterns of rebuilding and repair in the extant and buried fabric of the medieval town wall and its bastions? 7.9.4 Can water management features along the Thames and Cherwell channels be further understood (water meadows, leats, mills, fishponds and fisheries; weirs, bridges, canals and revetted channels). What can these features tell us about the economy of the town? 7.9. 8. Can we further record and map the sources of building stone supply during this	
St Aldates Queen Street	Medieval floors and pits recorded. Medieval pits and floors	period? 7.12.5 What can the patterning of waste disposal tell us about the wealth and specialisms of different urban and suburban areas? 7.12.5 What can the patterning of waste disposal	
Cooper Callas site 15 Paradise Street	recorded.	tell us about the wealth and specialisms of different urban and suburban areas?	
Corpus Christi Shidyerd Street	Medieval street surfaces recorded.	7.11.1 1. How and where was the street grid amended and repaired during the medieval period?	
New College Longwall Trenches	Outer 13 th century town wall located and examined. Likely boundary ditch of 12 th	7.8. 3. Can we further identify patterns of rebuilding and repair in the extant and buried fabric of the medieval town wall and its bastions? 7.8.4. The concentric defence was an innovative form of military architecture invented on the continent and is its use in Oxford is exceptional in an English urban context. Why was a second defensive wall added in the northeastern part of the walled circuit in the later 13th century? 7.4.2 2. Can the investigation of field banks and	
College	century Beaumont Palace and later Carmelite Friary examined.	hollow way banks tell us anything about the evolution of the rural hinterland?	
The Great Lawn, St John's College,	An earth resistance survey identified linear features that may indicate traces of paths or garden beds relating mainly to the 18th century garden landscape, with	8.9.3 3 The archaeology of post medieval college gardens is an area that has been subject to only limited study. Can non-intrusive surveys within the quads and gardens contribute to our	Post- medieval

Physics	possible traces of earlier features. The magnetometer survey produced only limited findings suggesting the presence of tree holes or other minor infilled hollows. Sections of Royalist Civil	understanding of the evolution of the colleges? 8.12.1 Can the line, phasing and character of the	
Building at Science Area	War defences examined.	Royalist defences and Parliamentarian siege works be further established? Earthwork surveys of the extant defences would be of great value. Can geophysics tell us more about the Parliamentarian siege works?	
St Cross College	Inhumation burial of a 17 th century young woman identified.	8.14.1. To what extent was Dissent and Non-conformity evident in the city?	
Tinbergen Building South Parks Road	Section of the Royalist Civil War defences identified.	8.12.1 Can the line, phasing and character of the Royalist defences and Parliamentarian siege works be further established? Earthwork surveys of the extant defences would be of great value. Can geophysics tell us more about the Parliamentarian siege works?	
Iffley Malt Barn	Medieval origins and post- medieval character of structure further clarified.	8.8.1 A greater emphasis on the investigation and recording of post medieval structures within the district is required from domestic to civic to industrial structures because of the greater pressures on these structures. There is an increasing need to document in detail nationally important listed buildings as well as those structures of a more local interest.	
Christ Church Chefs Dry Store	Further information on building recovered.	8.8.1 A greater emphasis on the investigation and recording of post medieval structures within the district is required from domestic to civic to industrial structures because of the greater pressures on these structures. There is an increasing need to document in detail nationally important listed buildings as well as those structures of a more local interest.	
Christ Church Peckwater 6 to 8	Further information on building recovered.	8.8.1 A greater emphasis on the investigation and recording of post medieval structures within the district is required from domestic to civic to industrial structures because of the greater pressures on these structures. There is an increasing need to document in detail nationally important listed buildings as well as those structures of a more local interest.	
Christ Church Fell Tower Apartment	Further information on building recovered.	8.8.1 A greater emphasis on the investigation and recording of post medieval structures within the district is required from domestic to civic to industrial structures because of the greater pressures on these structures. There is an increasing need to document in detail nationally important listed buildings as well as those structures of a more local interest.	
Exeter College Ruskin Site	Section of the Royalist Civil War defences identified.	8.12.1 Can the line, phasing and character of the Royalist defences and Parliamentarian siege works be further established? Earthwork surveys of the extant defences would be of great value. Can geophysics tell us more about the Parliamentarian siege works?	
University College	Walls and pits recorded associated with the Angel	8.8.1 A greater emphasis on the investigation and recording of post medieval structures within	

Goodhart Building cont- post med?	Inn, a coaching inn, formerly located on the High Street,	the district is required from domestic to civic to industrial structures because of the greater pressures on these structures.	
Saville House.	Character of Royalist Civil War rampart further clarified.	8.12.1 Can the line, phasing and character of the Royalist defences and Parliamentarian siege works be further established? Earthwork surveys of the extant defences would be of great value. Can geophysics tell us more about the Parliamentarian siege works?	
Christ Church East Range	Further information on building recovered.	8.8. 1. A greater emphasis on the investigation and recording of post medieval structures within the district is required from domestic to civic to industrial structures because of the greater pressures on these structures. There is an increasing need to document in detail nationally important listed buildings as well as those structures of a more local interest.	
98 St Aldates	Further information on building recovered.	8.8, 1 A greater emphasis on the investigation and recording of post medieval structures within the district is required from domestic to civic to industrial structures because of the greater pressures on these structures. There is an increasing need to document in detail nationally important listed buildings as well as those structures of a more local interest.	
The President's Garden Wall and Parks Road Wall, St John's College	Further information on building recovered.	8.8, 1 A greater emphasis on the investigation and recording of post medieval structures within the district is required from domestic to civic to industrial structures because of the greater pressures on these structures. There is an increasing need to document in detail nationally important listed buildings as well as those structures of a more local interest.	
Magdalen College, SCR smoking room	Further information on building recovered. A dendrochronological survey was completed.	8.8, 1 A greater emphasis on the investigation and recording of post medieval structures within the district is required from domestic to civic to industrial structures because of the greater pressures on these structures. There is an increasing need to document in detail nationally important listed buildings as well as those structures of a more local interest.	
The Stoker Room and Second Quad, Brasenose College	Post-medieval wall paintings revealed.	8.13.6 Research into post medieval wall paintings in the city with the aim of producing a detailed database of their design, materials used, location and state of preservation would be an important contribution to build on previous studies.	
Westgate Main Phase	Four 1820s buildings plots and their gardens investigated.	9.4.1. The opportunity to examine coherent blocks of Victorian domestic housing and their wider infrastructure (drains, yards, wells etc.) archaeologically would be of interest in order to establish the character and quality of the built environment and contrast the physical evidence with surviving records.	Modern
6-8 Park Town	Further information on building recovered.	9.4. 4. Can we further map and characterise the development of housing and social status amongst communities affected by the 19th century reforms of the university and the process of industrialisation?	
1 Abbey Road,	Further information on	9. 5.2. Further work is required to catalogue	

The former Kingerlee's Building Yard	building recovered.	and map the extent of surviving industrial structures and related walls, fixtures and fittings (e.g. malthouses, breweries, wharfs, brickworks, quarry workings).	
373 Woodstock Road	Further information on building recovered.	9.4. 4. Can we further map and characterise the development of housing and social status amongst communities affected by the 19th century reforms of the university and the process of industrialisation?	

8) Other available monitoring data on the historic environment of Oxford

Additional monitoring indicators on the historic environment can be found in the Local Development Framework Annual Monitoring Report April 2013-March 2014 available on the council website: www.oxford.gov.uk/planningpolicy.

This records the following:

- The number of heritage assets at risk in the Local Authority Area as assessed by English Heritage. Target: a decrease in Heritage Assets at risk or no net increase in Heritage Assets at risk (target derived from the Oxford Core Strategy).
- The number of applications involving the total, substantial or partial demolition of a listed building. Target: 0% Listed Building Consents or planning permissions approved by the City Council (target derived from the Oxford Core Strategy).
- The number of applications involving the demolition of a building that contributes to the character and appearance of a conservation area. Target: 0% Conservation Area Consents approved by the City Council contrary to officers' and English Heritage's recommendation (target derived from the Oxford Core Strategy).
- The number of appeals allowed where conservation policies are as a reason for refusal. Target: 80% of appeals dismissed (target derived from the Oxford Core Strategy).

Glossary and definitions

Archaeological interest: There will be archaeological interest in a heritage asset if it holds, or potentially may hold, evidence of past human activity worthy of expert investigation at some point. Heritage assets with archaeological interest are the primary source of evidence about the substance and evolution of places, and of the people and cultures that made them.*

Conservation (for heritage policy): The process of maintaining and managing change to a heritage asset in a way that sustains and, where appropriate, enhances its significance.

Evaluation: Archaeological trench or trenches excavated before the determination of a planning application in order to characterise and understand any archaeological remains that may be present rather than fully record them.

Evidential value: Value deriving from the potential of a place to yield evidence about past human activity.

Geophysical survey: Non-intrusive ground-based physical sensing techniques used for archaeological imaging or mapping.

Heritage asset: A building, monument, site, place, area or landscape identified as having a degree of Significance meriting consideration in planning decisions, because of its heritage interest. Heritage asset includes designated heritage assets and assets identified by the local planning authority (including through the local heritage asset register).

Historic environment: All aspects of the environment resulting from the interaction between people and places through time, including all surviving physical remains of past human activity, whether visible, buried or submerged, and landscaped and planted or managed flora.*

Historic environment record: An information service that seeks to provide access to comprehensive and dynamic resources relating to the historic environment of a defined geographic area for public benefit and use.*

National Planning Policy Framework: The National Planning Policy Framework (NPPF) sets out the Government's planning policies for England and how these are expected to be applied. The NPPF states that Local planning authorities should recognise that heritage assets are an irreplaceable resource and conserve them in a manner appropriate to their significance.

Mitigation: An archaeological mitigation strategy is a statement of proposals for reducing the overall effect of a development on archaeological remains within the site. The strategy will normally consist of one or more of the following: Preservation in-situ, modifications to the development design proposals and archaeological recording (excavation, watching brief etc).

Research agenda: Research questions that we would like to answer by investigating archaeological remains.

Resource assessment: A summary of the information produced by previous archaeological fieldwork.

Significance (for heritage policy): The value of a heritage asset to this and future generations because of its heritage interest. That interest may be archaeological, architectural, artistic or historic. Significance derives not only from a heritage asset's physical presence, but also from its setting.

Substantial harm: The NPPF practice guidance states that what matters in assessing if a proposal causes substantial harm is the impact on the significance of the asset. Significance derives not only from a heritage asset's physical presence, but also from its setting. While the impact of total destruction is obvious, partial destruction is likely to have a considerable impact but, depending on the circumstances, it may still be less than substantial harm or conceivably not harmful at all. Similarly, works that are moderate or minor in scale are likely to cause less than substantial harm or no harm at all. However, even minor works have the potential to cause substantial harm i.e. the scale of the works is not necessarily determinative of whether any harm caused is substantial or less than substantial. A

key factor in determining whether the works constitute substantial (i.e. serious) harm is if the adverse impact goes to the heart of why the place is worthy of designation – why it is important enough to justify special protection.