

ARCHAEOLOGICAL INVESTIGATION

AT

31 COWLEY ROAD, LITTLEMORE, OXFORD

LECR 16

OXFORDSHIRESHIRE

NGR SP 538876 02970

On behalf of Ms C Shelenko

JANUARY 2018

REPORT FOR	Ms C Shelenko Hunters Gate Manor Road Brackley NN13 6AJ
PREPARED BY	Edwin Pearson
ILLUSTRATION BY	Autumn Robson
EDITED BY	John Moore
AUTHORISED BY	John Moore
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Summary

John Moore Heritage Services carried out an archaeological investigation at 31 Cowley Rd, Littlemore, Oxford (NGR SP 538876 02970). An earlier evaluation had been carried out (JMHS 2011). Groundworks consisted of the excavation for the footings of a 1 x 3-bed dwelling house (Use Class C3), and provision of car parking and amenity space. All archaeological activity on the site was derived from the Postmedieval period. A total of three pits were discovered in this stage of investigation. An open well and associated floor surface belonging to a former coach house was also discovered with subsequent robber trenches.

1 INTRODUCTION

1.1 Site Location (Figure 1)

The site located in the grounds of 31 Cowley Road, Littlemore, Oxford (NGR SP 538876 02970) comprised an area of approximately 0.05 hectares that occupied a gentle slope that descended from its western boundary towards Cowley Road. Considerable made ground existed across the site, which was likely created from the recent renovation works at number 31, adjacent during the car park extension. The site lay approximately at 72m OD and the underlying solid geology of the study site was identified as Sandstone of the Beckley Sand Member (British Geological Survey, Sheet 237).

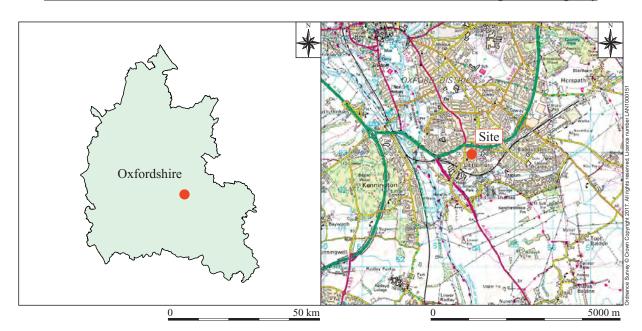
1.2 Planning Background

Oxford City Council granted planning permission for the erection of 1 x 3-bed dwelling house (Use Class C3), provision of car parking and amenity space. Oxford City Council Design, Heritage and Trees (OCCDHaT) had produced a *Brief for an Archaeological Recording*.

Due to the archaeological and historical importance of the surrounding area a condition was attached to the permission requiring a recording action to be maintained during the course of building operations or construction works on the site. This was in line with NPPF and Local Planning policies.

1.3 Archaeological Background

The archaeological background was identified in a Desk Based Assessment (CgMs 2011). The following archaeological background summary has been taken from the Desk Based Assessment. In brief, the HER/NMR holds no records of any heritage assets from the prehistoric period, although residual flints and metalwork have been found within a wider study area. The HER/NMR holds no records from the Iron Age or Roman periods but again the wider study area has produced evidence of settlement and occupation. In the Roman period, the area to the south-east of Oxford, within which the study site is located, is known as a major and significant centre for pottery production throughout the 1st to 4th Centuries AD. This industry is thought to have extended as far north as Noke and as far south as Dorchester with major centres noted at Rose Hill, Cowley, Littlemore and at Lower Farm in Nuneham Courtenay (Booth and Edgeley-Long 2003).



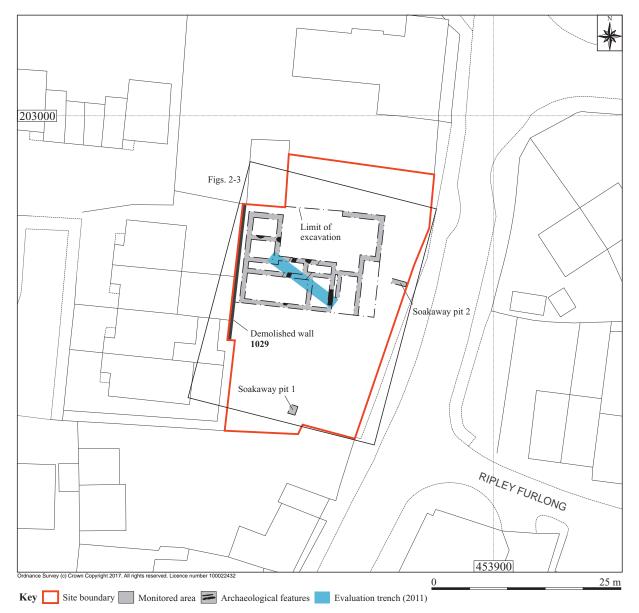


Figure 1: Site location

Excavations conducted at the Oxford Academy, 350m east of the study site, revealed a Saxon sunken feature building containing pottery, glass and bone (HER12767). An evaluation at Littlemore Hospital, 500m southwest of the study site found residual St. Neots ware pottery, indicating some form of Saxon presence in the vicinity. Further afield, within the Oxford Science Park (HER 16299), situated *c*.1.5km to the southwest of the study site, excavation recorded the remains of an Anglo-Saxon settlement, dating to the 6th-7th century AD, represented by approximately ten sunken featured buildings with associated pits (Moore 2001). In the wider area, documentary and place-name evidence would suggest a late Saxon origin (*c*.9th to 11th century AD) for settlements at Sandford, Iffley and Cowley.

It is known from the Post medieval period that St George's, the Grade II listed structure located immediately to the north of the study site was constructed, possibly in 1611. It is clear from the Enclosure map of 1819 that the study site is contained within this property's estate. It is shown to contain two other structures, a larger one to the southeast, along the Cowley Road, and smaller one a little further to the west, both which would be at least partially contained within the study area.

The larger structure may have been a malthouse and the smaller a coach house (CgMs 2011). The potential malthouse is shown as surviving until the 1937 OS map, by which point it was presumably demolished. The potential coach house is shown as a larger structure in the 1819 Enclosure Map than in subsequent maps. By the 1955 OS map, this is shown as a 'ruin'.

The desk-based assessment confirmed that two undesignated assets, remnants of a potential former coach house and a malthouse, still survive within the site and as these are associated with the Grade II listed building situated adjacent, they have the potential to shed light on a nationally important heritage asset.

An archaeological evaluation was undertaken by John Moore Heritage Services (JMHS 2011). Structural remains were discovered believed to be the surviving floors of the coach house with a robber trench marking the line of the removed coach house wall. An open well was also discovered at the south east end of the trench associated with a curving kerb line and stone floor, perhaps functioning as the hardstanding on which a wooden structure over the well may have stood.

2 AIMS OF THE INVESTIGATION

The aims of the investigation as laid out in the Written Scheme of Investigation were as follows:

• To record any significant archaeological remains revealed by the ground works.

In particular:

• To seek to establish, as far as is practical, the chronology and plan form of the coach house and record any significant features associated with it, bearing in mind the potential for a pre-early 19th century antecedent.

3 STRATEGY

3.1 Research Design

John Moore Heritage Services carried out the work to a Written Scheme of Investigation agreed with OCCDHaT). The recording was carried out in accordance with the standards specified by the Chartered Institute for Archaeologists (2014).

3.2 Methodology

Groundworks had begun with the levelling of the site and reduction of general ground level of the construction area, which was originally around 1.5m higher than the level of Cowley Road.

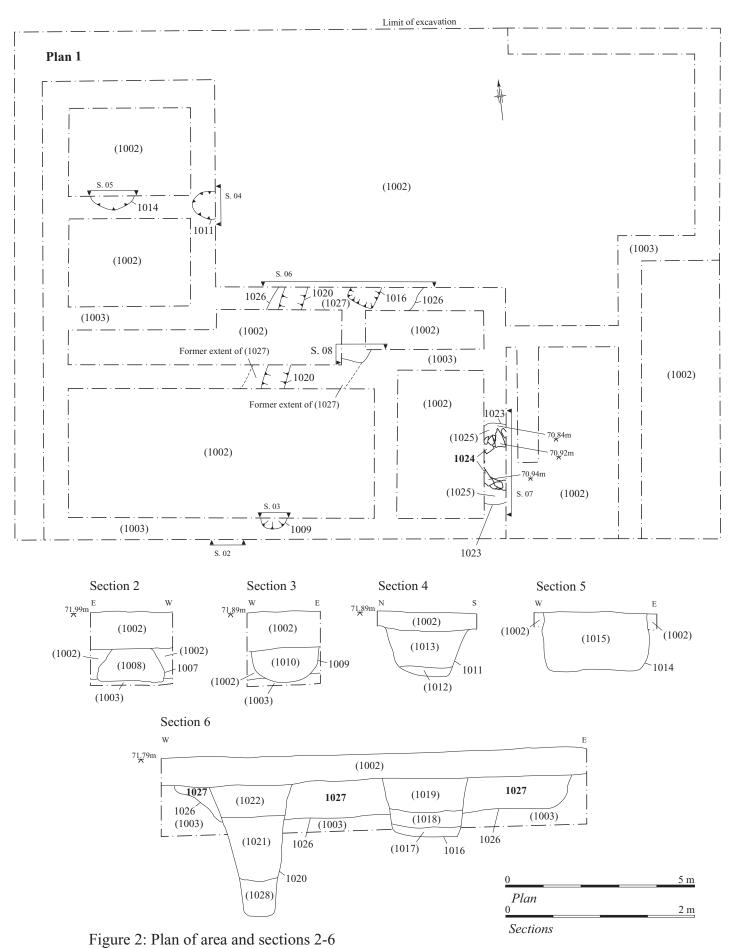


Plate 1: North facing view of the levelled site from the south end

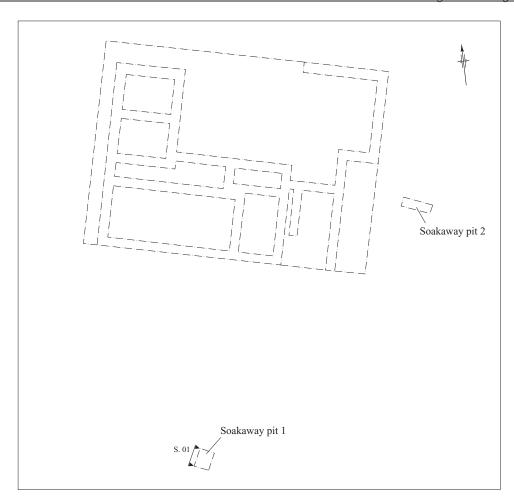


Plate 2: West facing view of the reduced construction area

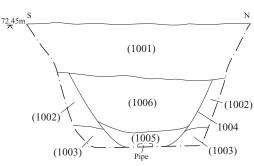
The fieldwork began with reduction of the building footprint with a 5T mechanical tracked excavator with a toothless grading bucket, under archaeological supervision

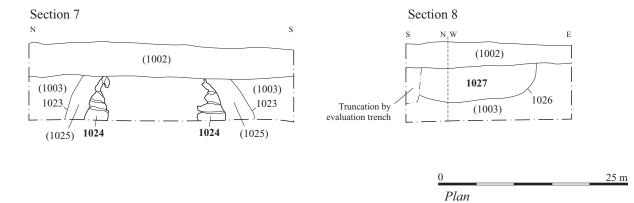






Section 1





0

Sections

2 m

Figure 3: Sections 1, 7 and 8



Plate 3: North-West facing view of initial trenching



Plate 4: North-West facing view of site

(Plates 1-3). The development foundation trenches were excavated to a depth of around 0.40m from the reduced area (Plate 4).

Where archaeological horizons were encountered they were cleaned by hand and excavated appropriately. Standard John Moore Heritage Services techniques were employed throughout, involving the completion of a written record for each deposit encountered, with scale plans and section drawings compiled where appropriate. A photographic record was also produced.

The resultant spoil from the works was visually scanned, especially for finds relating to Post-medieval and earlier periods.

One rectangular soakaway pit was excavated, situated south of the footings measuring 1m wide, 2.25m long and 1.25m deep. A rectangular cable duct was also excavated west of the footings along the eastern wall measuring 0.60m wide, 2m long and deep.

Channel trenches linking these to the footings were only cut into the upper made ground layer.



Plate 5: East facing section of south soakaway pit



Plate 6: West facing section of cable duct

4 **RESULTS**

All deposits and features were assigned individual context numbers. Context numbers without brackets indicate features i.e. pit cuts, numbers in show feature fills or deposits of material, while numbers in bold indicate structural features.

The dating evidence indicates that archaeological activity on site is derived solely from the Post-medieval period.

General deposits

The natural geology (1003) remained consistent throughout the site and comprised a light brown/yellow silty sand with areas of limestone brash. The natural was overlain by made ground deposit (1002) of a dark brown yellowish grey silt which was present across the entire investigation area measuring between 0.20m and 0.40m. This was in turn overlain by made ground layer (1001) of a dark brown/grey silt with a varying thickness of 0.45m - 0.60m. Made ground layer (1001) contained considerable modern material and was completely removed by machine from the construction area of the house (Figure 3, section 1).

Considerable root disturbance was present throughout the site cutting into the made ground deposits and natural sand. Around four tree boles were present in the footings. The fills of tree boles all appeared consistent with the overlying made ground deposits in terms of their composition and root content. Tree bole 1007 was located in the most southern face of the footings and recorded in section as an example. Its fill (1008) was of a dark greyish brown silt. It measured >0.70m in diameter and 0.34m deep. Its profile was irregular and its sides were undermining.

4.1 Phase 1 Post-medieval

Pits (Throughout the footings)

Two pits were recorded in the northwest area of the footings (See Figure 2). They were cut into the natural silty sand (1003) and overlain by made ground deposit (1002). Pit 1011, situated on the western side of this area, was >0.60m wide, 0.96m long and 0.64m deep (Plate 7). It was flat bottomed with broadly straight sides at a gradual angle. Pit 1014, situated east of pit 1011 measured >0.60m wide, 1.10m long and 0.62m deep (Plate 8). Pit 1009 was located in the south facing section of the southern stretch of footings. It measured 0.37m wide, 0.71m long and 0.27m deep and its profile was U shaped (Plate 9). Each of these pits contained similar disuse fills (1008, 1013, 1015) of loose dark brown/grey silt. Pit 1011 contained a base fill of redeposited natural stony silt measuring 0.5m thick. It also contained Post-medieval pottery, brick, metal and glass in its upper fill (1013). Butchered fragmentary animal bone of sus, oyster shell and charcoal was also present in this fill.



Plate 7: East facing section of pit 1011



Plate 8: South facing section of pit 1014

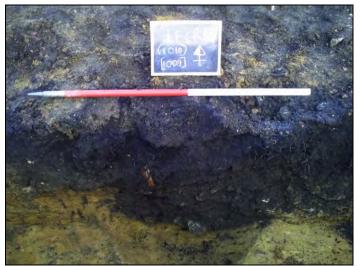


Plate 9: North facing section of pit 1009

Open well (SE of footings)

Formerly recorded (JMHS 2011) open well **1024** was re-exposed to a greater extent, located in the north-south oriented footings of the south eastern portion of the house construction. It was excavated by hand and machine in cross-section through its north-south axis to the depth and width of the footings trench and thus recorded in profile and plan within these limits (Plates 10-13). It was constructed of rectangular blocks which varied in size from 0.10 - 0.40m with a bonding agent of clay. The well had a total depth of >6m down to the level at which it was silted up (1m of standing water) and measured 1.60m in diameter. It was barrel shaped, with concave sides, and therefore likely did not extend a significant amount beyond its measurable depth. The well was built in a circular construction cut 1023 that measured 2.10m in diameter. Within this cut, and filled around well **1024**, was a firm dark brown/grey silty sand (1025) that contained two large stems of Post-medieval clay pipe and a tile fragment of the same date. This fill represents a deliberate cavity backfill.



Plate 10: Plan view of well 1024

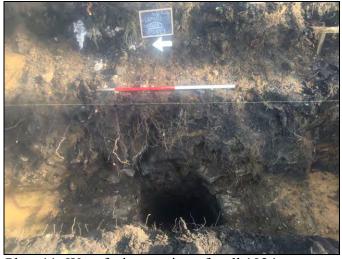


Plate 11: West facing section of well 1024



Plate 12: Interior view of well. North East facing



Plate 13: General view of well. North West facing

Floor surface (Centre of footing)

Within the centre of the northern stretch of the footings metaled floor surface **1027** was constructed of roughly shaped limestone, tile fragments and irregular small pebbles (40mm - 0.60mm) set in a lime mortar. It was constructed in a random patterning style with most stones laid flat (Plates 16-18). The floor measured 4.2m wide and 0.40, deep. It did not extend beyond 3.8m to the south west due to its partial excavation in the previous investigation (JHMS 2011) from which the evaluation trench was visible in the footings (See section 8). Cut 1026 was proposed for the floor surface.

Robber trench (Centre of footings)

Robber trench 1020 and south west terminus of robber trench 1016 both ran generally parallel to each other from south west to north east. They were very straight sided with flat bottoms. Robber trench 1061 was a squared off terminus measuring 0.61m wide, 0.63m long (as exposed) and 0.62m deep. It contained a 0.10m thick basal fill (1017) of irregular large limestones stones (>250mm) which was overlain by a dark greyish sandy silt (1018). This contained Post-medieval pottery and was sealed by upper fill (1019) of a dark brown/grey silt which also contained Post-medieval pottery and butchered sus (pig) bone.

Robber trench (1020) was 0.62m wide, 0.62m deep and greater than 2.90m long (Plates 14-15, & 19). This represents the robber trench formerly recorded in the evaluation stage (JMHS 2011). This feature contained a 0.40m thick redeposited natural (1028) of a light brown/yellow silty sand in its base. This was overlain by 0.70m thick fill (1021) of a very firm dark brown/grey silt and contained clay pipe, tile, pottery fragments, glass and metal all dated to the 19th century AD. Fill (1021) also contained some butchered sus bone fragments and was in turn sealed by 0.36m of mid-brown clay rich silt.



Plate 14: South facing section of robber trench 1020



Plate 15: South facing section of robber trench terminus 1016



Plate 16: Plan view of floor surface **1027**



Plate 17: North West facing view of floor surface 1027



Plate 18: South facing sections (background & foreground) of floor **1027**



Plate 19: North facing section of robber trench 1020 trench in evaluation location (JMHS 2011)

4.2 Undated Features

Dry stone wall **1029** was dismantled in order to restore it in its same location during construction works. It was located along the eastern boundary and measured 0.40m wide, 1.20 metres tall and 16m long. It was constructed of rectangular limestones varying in size from 0.10m - 0.40m long, >0.20m thick and >0.20m wide. No bonding agent was present, however significant silt build-up and degraded limestone was present between the stones which secured them and contained to dating evidence.



Plate 20: West facing view of wall 1029

5 FINDS

5.1 Pottery by Paul Blinkhorn

The pottery assemblage comprised 21 sherds with a total weight of 344g. It was entirely post-medieval, and mostly modern, and was recorded using the conventions of the Oxfordshire County type-series (Mellor 1984; 1994), as follows:

OXDR:	Red Earthenwares, 1550+. 5 sherds, 173g.
OXEST:	London Stoneware, 1680 +. 2 sherds, 45g.
OXFM:	Staffordshire White Salt-glazed Stoneware, 1720–1800. 1 sherd, 6g.
OXREWSL:	Polychrome Slipware , 17 th century. 2 sherds, 19g
WHEW:	Mass-produced White Earthenwares, 19th-20th century. 10 sherds,
95g.	

The pottery occurrence by number and weight of sherds per context by fabric type is shown in Table 1. Each date should be regarded as a *terminus post quem*. The range of fabric types is typical of sites in the region. The sherds of OXFM and OXREWSL are the only ones which pre-date the 19th century, as the glaze and fabric of the OXDR sherds suggest that they are all probably of 19th century date. The sherds of OXREWSL are from a bowl, a typical product of the tradition.

Table 1: Pottery occurrence by number and weight (in g) of sherds per context by fabric type

	OX	DR	OXRI	EWSL	OXI	EST	OXI	FM	WH	EW	
Cntxt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	Date
1013	3	135							3	39	19thC
1018									1	2	19thC
1019	2	12	2	19			1	6	4	32	19thC
1021	1	32			2	45			2	22	19thC
Total	6	179	2	19	2	45	1	6	10	95	

5.2 Building Materials by Simona Denis

Ceramic Building Material

A group of 65 ceramic building material fragments, weighing 1240.5g in total, were found in five different contexts. The material, dating to the post-medieval period, was found in a fair state of preservation although extremely fragmentary.

Conte	Туре	No. of	Weight (g)	Comments	Date range
xt		items			
1013	Roof	5	92.5		Post-
	tile	2	67	Grey core	Medieval
	CBM	3	8.5		
1018	Roof	9	97.2	Grey core	
	tile	2	39.1		
	?Brick	1	8.7		
	CBM	8	22.5		
1019	Roof	5	100.9	Grey core	
	tile	3	113.2	1 complete corner	
				preserved	
		2	63		
	CBM	7	80.5		
1021	Roof	4	224.1	Grey core	
	tile	4	135.5		
	?Brick	1	19.1		
	CBM	5	55		
1025	Roof	1	31.5		
	tile				
	Ridge	1	42.5	Curved	
	tile				
	?Brick	1	32.1		
	CBM	1	7.6		

Table 2: Ceramic building material occurrence by context and type

None of the fragments preserved diagnostic features; however, the observation of the general aspect of the objects allowed the identification of the type for 89% of the assemblage.

• Roof Tile

37 of the items were identified as roof tiles, representing over 58% of the assemblage. Although no evidence of circular peg holes or nibs was recorded, prevented from a positive identification of the type. The single curved fragment collected from context (1025) was positively identified as ridge tile.

Clay plain tiles were developed in the 13th century to replace shingles and thatch in the roofing of domestic buildings. Handmade peg tiles were commonly used until the 19th century, when machine-made tiles became popular, with little variation in the manufacturing technique. Also, good quality roof tiles were reused over long period of times; therefore, the potential for dating evidence of plain roof tiles remains limited. However the absence of pre post-medieval material on the site indicates a post-medieval date.

• Brick

Three of the recovered items were tentatively identified as bricks, representing less than 5% of the collection. The preserved thickness of the fragments, although incomplete, was found to be greater that the average tile, suggesting a possible identification as brick.

It is not recommended to retain undiagnostic ceramic building material fragments, due to their very limited potential for further analysis.

Slate

A single fragment of slate, weighing 4.4g and measuring 42x14mm, was recovered from context (1019). Although the item did not preserve any diagnostic feature, it is likely to be a fragment of a roof tile.

The slate fragment is not recommended for retention due to its extremely limited potential for further analysis.

5.3 Floral and Faunal Remains

Oyster Shell by Simona Denis

Five oyster shell fragments, weighing 44.9g in total, were recovered from context (1013).

Two of the items were positively identified as right valves, while one was found to be a left valve (Winder 2011). The two remaining fragments were too small to be positively identified.

Context	Туре	No. of Items	Weight (g)	Context Date
				Range
1013	Left valve	1	16.4	19 th C
	Right valve	2	27.8	
	Unidentified	2	0.7	
	fragment			

 Table 3: Oyster shell occurrence by context and type

It is not recommended to retain the oyster shell fragments due to their very limited potential for further analysis.

Charcoal by Simona Denis

Nine fragments of charcoal, originally belonging to a single item, was hand-recovered from context (1013). The charcoal, weighing 29.8g, was hand-recovered from context (1013); it was preserved to a maximum length of 60mm, and had a sub-rectangular section. The item could have originally been worked.

Animal Bone by Roxanne Blanks

An assemblage of animal remains were recovered during the excavation. The small assemblage consists of 14 Sus (pig) and unidentified mammal fragments, recovered from three contexts (table 4). The assemblage displays taphonomic alterations within the expected range and is generally well preserved. Some of the fragments within the assemblage demonstrated evidence of periosteal new bone formation (28.57% of the total assemblage) despite this the assemblage appears to be in relative good health.

Table 4:	The	animal	bone	assembla	age
----------	-----	--------	------	----------	-----

Con text	Identification	Skeletal element	Number of fragments	Weight (g)	Comments
					Juvenile individual
					(Posterior epiphysis in
					unfused). Taphonomic
		Calcaneus	1	11	breakage to the talar articular surface.
		Calcalleus	1	11	1 axial fine slice mark
					between the articular
					surfaces. 1 axial chop
					mark through the body of
					the rib. 1 taphonomic
					break to the articular end
	Sus	Rib	1	9	of the rib
					3 axial blade insertion
					marks on the inferior
					surface, and one axial
					chop mark through the mid-corpus. Taphonomic
					breakage to the articular
					surface. Patch of
	Unidentified				periosteal new bone on
1013	mammal	Rib	1	2	the inferior surface.
					Left rib. Patch of
					periosteal new bone on
1010					the medial surface. 1
1019	Sus	Rib	1	4	axial blade insertion

Ĩ					mark and 1 axial fine
					slice mark on the
					superior surface at the
					articular end.
					Taphonomic breakage to
					the articular end. 1 axial
					slice mark through the
					anterior-most surface of
					the fragment.
					Femoral diaphysis
					fragment. Increased
					porosity with possible
					periosteal reaction on the
					posterior surface (unable
					to ascertain fully due to
					breakage of fragment). 4
					blade insertion marks on
					the anterior surface (3
					axially oriented and 1
		Femur	1	12	transversely oriented).
					Taphonomic break of the
					superior metatarsal. 1
					scoop mark and 6 axially
					oriented fine slice marks
					on the anterior surface. 1
					transverse blade insertion
					mark on the lateral
					surface. 2 transverse
					blade insertion marks on
					the medial surface. 2 fine
					slice marks on the
					superior posterior surface
					(one axial, one
					transverse). Root etching
		Metatarsal	1	33	on the distal posterior surface.
		ivicialal Sal	1	55	One axial cut through the
					posterior surface.
		Innominat			Fragment of the
		e	1	5	acetabulum.
		Unidentifi	-		
	Unidentified	ed			
	mammal	diaphysis	2	1	
					Distal right humerus.
					Taphonomic damage to
					the posterior lateral
					epicondyle.2 fine slice
					marks (transverse) on the
					medial epicondyle. 1 fine
1021	Sus	Humerus	1	19	slice mark (transverse)

				on the lateral diaphysis. 1 axially oriented chop mark through the diaphysis (from marrow splitting) with a radiating fracture on the medial diaphysis.
				Left scapula fragment (glenoid cavity and partial superior border). Patch of periosteal new home on the pasterior
				bone on the posterior acromial process. 1 axial
	Scapula	1	9	chop mark through the superior scapula border.
	Rib	2	2	Both have taphonomic breaks on both the anterior and posterior surfaces.
				Axially spilt fragment as
	Unidentifi			a result of marrow splitting. 1 scoop mark
Unidentified	ed diamhania	1	4	on the outer surface of
mammal	diaphysis	1	4	the fragment.

A large proportion of the assemblage 9/14 fragments (64.29% of the total assemblage) displays one or more butchery mark and it is highly likely that this assemblage constitutes butchery waste (table 5). Butchery marks have been identified in accordance with definitions laid out by Seetah (2007). A variety of butchery marks have been identified on the assemblage these include fine slice marks, chop marks, scoop marks, and marrow splitting (table 6).

	Number of fragments with butchery marks	Total % with butchery marks
Assemblage	14	64.29
Sus	7	87.5
Unidentified mammal	2	33.33

Table 6: Analysis of butcher	v across the assemblage	by cut mark typology

	Number of	Total number of	% of total
	fragments with mark	marks	number of
			butchery
			marks
Fine slice	4	14	43.75
Chop	5	5	15.63
Scoop	2	2	6.25
Axial breaks	2	1	3.12
from marrow			

splitting			
Blade	4	10	31.25
insertion			

In general the assemblage is well preserved and has been subject to little taphonomic modification. Several taphonomic breaks have been observed however, this is not outside of the norm expected when analysing an archaeological assemblage. The Sus metatarsal from context (1019) displayed root etching on the distal posterior surface.

A small amount of pathology was recorded within the assemblage (4/14 fragments, 28.57% of total assemblage; table 4). The pathological lesions recorded were all periosteal new bone. Periosteal new bone occurs as a result on an inflammatory process which may be the result of infection or trauma (Waldron, 2009).

In summation it is likely that the assemblage recovered from 31 Cowley Road, Littlemore, Oxford, Oxfordshire represents butchery waste. The assemblage is generally in good health and is well preserved with levels of taphonomic modifications within the normal range. It is recommended that this assemblage is retained for potential future analyses.

5.4 Miscellaneous by Simona Denis

Clay Tobacco Pipe

A small assemblage of seven clay tobacco pipe fragments, of a combined weight of 17g, was recovered from three individual contexts.

The material is extremely incomplete, although in a good state of preservation, and limited to undiagnostic stem fragments. No decorations or marks were observed; also, the fragmentary state of the items precludes any attempt to reconstruct the original overall length or attempt a dating.

Context	Туре	No. of Items	Weight (g)	Date Range
1019	Stem	3	4.1	Post-Medieval
1021	Stem	2	1.6	
1025	Stem	2	11.3	Post-Medieval

Table 7: Clay Tobacco Pipe occurrence by context

The stem fragments were not retained due to their extremely limited potential for further analysis.

Glass

17 fragments of glass, of a combined weight of 75.2g, were recovered during the excavation. The state of preservation of the items is generally fair, although extremely fragmentary. However, three of the fragments were found to be severely affected by iridescence, preventing the observation of the original colour.

The most represented type is the wine or liquor bottle, constituting 64.7% of the collection (11 fragments); the three examples found in context (1021) were found to

be of finer quality glass, and tentatively identified as belonging to perfume bottles. The remaining items (3 fragments, or 17.6 of the assemblage) were identified as window glass.

Context	Туре	Colour	No. of	Weight	Comments	Date
			Items	(g)		Range
1013	Window	Clear	2	5.7	Flat glass	Post-
						medieval
						to
						modern
	Bottle	Olive green	1	7.5		19 th C
1018	Bottle	Aqua	1	2.6	Case bottle	19 th –
						20 th C.
1019	Window	Clear	1	4	Flat glass	Post-
						medieval
						to
						modern
	Bottle	Olive green	3	19.8	Wine bottle	19 th C
		Undetermined	4	21.2	Extensive	?19 th C
					iridescence.	
					?Wine	
					bottle	
1021	Vessel	Clear	1	2.8	Fine	Post-
					?perfume	medieval
					bottle	to
						modern
		Purple	1	9.1	Fine	?19 th C
					?perfume	
					bottle	
	?Vessel	Clear	1	2.5	Fine vessel	Post-
					?handle	medieval
						to
						modern

 Table 8: Glass occurrence by context and type

The glass fragments are not recommended for retention due to their very limited potential for further analysis.

5.5 **Metalwork** *by Simona Denis*

Iron

A small assemblage of 8 iron objects, weighing 12.7g combined, was recovered from two individual contexts. The entirety of the group showed advanced oxidation and a severe built-up of iron oxide, affecting the observation and the quantification of the weight of the objects.

Context	Туре	No. of	Weight	Dimensions	Comments	Date
		Items	(g)	(mm)		Range

1013	Nail	1	7.5	L: 70	Round cross-	?1800+
					section,	
					?Flat disc	
					head,	
		-			Sharp point	
	Spur	1	51.6	L:95		Post-
				W:70		medieval
	Hinge	1	30	L:40		
	side			W:22		
	plate					
1021	Nail	1	7.4	L:52	Rectangular	?1800-
					cross-	1880
					section,	
					?Flat point	
		1	3.7	L:38	Rectangular	
					cross-	
					section,	
					Sharp point	
	Nail	1	9.4	L:55	Rectangular	
	shaft				cross-	
					section	
		1	3.9	L:28	?Square	?Pre-
					cross-	1800
					section	
	Flat	1	10.2	L:46		Post-
	strip			W:20		medieval

 Table 9: Iron objects occurrence by context and type

The majority (62%) of the assemblage was composed of post-medieval iron nails; the remaining objects being a flat strip of unidentified function, one hinge side plate and a spur.

The spur collected from context (1013) had one complete yoke with a circular nail hole at one end, and a possible knob end. The object was tentatively dated to the post-medieval period.

It is not recommended to retain the iron object due to their extremely unstable condition and the very limited potential for further analysis.

6 **DISCUSSION**

Dating evidence from the archaeological features investigated is derived from the 19th century AD. Backfill (1025) would have occurred during the construction of well **1024** and therefore provides well secured dating for its installation. The well is located inside or within the peripheral zone of the north western stretch of the structure along the eastern boundary shown in 19th century OS maps and could have served as a viable water source for its function as a coach house.

Finds in pit 1011 are sealed in undisturbed fill (1013) and provide secure dating to post-medieval period. Although the two other pits 1009 and 1014 contain no dating evidence, their fills (1010, 1015) are of a very similar nature to (1013) in terms of composition and preservation and therefore are presumed to be of the same date.

Floor surface **1028** is aligned along the same orientation as an extension shown projecting north west from the northwest corner of the potential coach house shown on the OS maps. The robber trenches are also aligned along this path which would have been created in removing stones from internal walling of building segmentation or a fireplace. The fact that the deeper robber trench 1020 does not contain large blocks of limestone as seen in the much shallower trench 1016 sheds light on their purpose for removal of stone. Dating material within the robber trenches indicate that building material had been removed during the demolition of the coach house by the 1930s and, furthermore, implies this as a relatively short lived structure during the 19th century AD as opposed to one built contemporary with St George's 15th century house. The coach house, together with the pits recorded in both stages of investigation (JMHS 2011), provides evidence for increased activity in the post-medieval period and imply that made ground layer 1002 is likely the result of demolition works in the early modern period.

7 ARCHIVE

Archive Contents

The archive consists of the following:

<u>Paper record</u> The project brief Written scheme of investigation The project report The primary site record Physical record Finds

The archive currently is maintained by John Moore Heritage Services and will be transferred to the Oxfordshire County Museum Service with accession number OXCMS: 2016.181

8 **BIBLIOGRAPHY**

- Aultman, J., Grillo, K., Sawyer, J., Galle, J., (2014) DAACS Cataloging Manual: Glass Vessels (<u>http://www.daacs.org/wp-content/uploads/2014/07/glass.pdf</u>, accessed 03/07/2015)
- CgMs Consulting, 2011 Archaeological Desk Based Assessment. 31 Cowley Road, Littlemore, Oxford. Unpublished client report
- Chartered Institute for Archaeologists, 2014 Standard and Guidance for Archaeological Watching Briefs
- Chervenka M, Nails as Clues to age (http://www.realorrepro.com/article/Nails-asclues-to-age accessed 10/07/2015)

- John Moore Heritage Services, 2011 An Archaeological Evaluation on Land at 31 Cowley Road, Littlemore, Oxfordshire. Unpulished client report
- Lindsey, B., Historic Glass Bottle Identification & Information Website (http://www.sha.org/bottle/index.htm, accessed 03/07/2015)
- Mellor, M, 1984 A summary of the key assemblages. A study of pottery, clay pipes, glass and other finds from fourteen pits, dating from the 16th to the 19th century in TG Hassall et al, Excavations at St Ebbe's *Oxoniensia* 49, 181-219.
- Mellor, M, 1994 Oxford Pottery: A Synthesis of middle and late Saxon, medieval and early post-medieval pottery in the Oxford Region Oxoniensia 59, 17-217
- Nelson, L. H. (1968) Nail Chronology as an aid to dating old buildings. American Association for State and local history technical leaflet 48. *History News* 24
- Weiland, J 2009 A Comparison and Review of Window Glass Analysis Approaches in Historical Archaeology. Technical Briefs in Historical Archaeology 4
- Winder, J. M. (2011), Oyster shells from archaeological sites: a brief illustrated guide to basic processing
- (https://oystersetcetera.files.wordpress.com/2011/03/oystershellmethodsmanualversio n11.pdf accessed 17/07/2015)