

**PROPOSED REDEVELOPMENT AT PLATTS ORCHARD,  
39, CHURCH STREET, SOUTHWELL, NOTTINGHAMSHIRE**

**SCHEME OF ARCHAEOLOGICAL MITIGATION  
VOL. 1: REPORT TEXT**

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## **Summary**

*A scheme of archaeological mitigation, consisting of a combined programme of strip, map and record and archaeological monitoring, was carried out in advance of a proposed residential redevelopment of land at Platts Orchard, no. 39, Church Street, in the town of Southwell in Nottinghamshire.*

*The site lies close to the known Roman villa and Saxon to early medieval cemetery on the site of the former Minster School. A previous evaluation carried out on the site had encountered a number of inhumation burials, one of which was dated to the 7<sup>th</sup> century, and recorded a range of other features, some of Roman date.*

*The programme of strip, map and record ascertained that a large part of the site was occupied by a very broad ditch or watercourse, which appeared to have originated as a natural prehistoric channel and to have been utilised and maintained by the inhabitants of the Roman villa and its environs. During this period, the 'channel' appears to have been recut several times and to have been fed by a network of drainage ditches. A stone-built kiln at the edge of the 'channel' has been interpreted as a Roman lime kiln, probably associated with the construction of the villa. Two human skeletons have also proved to be of Roman date: one was a formal burial of unusual type, being associated with the skeleton of a dog, while the other lay within the fills of the 'channel' and may have been the victim of an accident or have been clandestinely disposed of.*

*The site appears to have been little occupied after the abandonment of the Roman villa, possibly because a rise in sea level had caused marginal land to revert to wetland and the area was no longer worthwhile for occupation or cultivation. The 'channel' returned to use during the Middle Ages, but the evidence for occupation of and activities on the site remains scanty until the later medieval period, when reoccupation appears to have been more vigorous, with deep ditches and large pits, from which substantial finds assemblages and palaeoenvironmental deposits were retrieved, suggesting that the area was being more fully utilised. Wild and exotic species among the faunal remains are particularly indicative of a wealthy lifestyle being lived in the vicinity at this time, probably associated with the nearby Minster or the medieval Archbishop's Palace.*

## 1.0 Introduction

Pre-Construct Archaeological Services Ltd. (PCAS) was commissioned by Gascoines Group Ltd. to undertake a scheme of archaeological mitigation in advance of a proposed residential redevelopment of land at Platts Orchard, 39 Church Street, in the town of Southwell in the Newark and Sherwood district of Nottinghamshire. The development is to consist of three dwellings with associated garaging (fig. 2).

The site lies within an area known to contain significant archaeological remains, including a nearby Scheduled Ancient Monument (SAM No. 138) containing elements of a well-preserved Roman villa and an Anglo-Saxon cemetery. Due to the site's proximity to the SAM, the Senior Archaeological Officer for Nottinghamshire County Council advised that there was a very high potential for archaeological remains, including human burials, within the proposed redevelopment site.

The first stage of mitigation consisted of an archaeological evaluation; this report concerns the second stage, consisting of a combined programme of archaeological strip, map and record with archaeological monitoring and recording.

## 2.0 Site Location and Description (figs. 1 & 2)

The small town of Southwell lies within the Newark and Sherwood District of Nottinghamshire, approximately 11km north-east of the modern suburbs of Nottingham and 9km west of Newark-on-Trent. Development has extended in an east-west direction to include the subsidiary settlements of Westhorpe and Easthorpe so that the town now generally occupies the valleys of the Westhorpe Dumble/Potwell Dyke and the River Greet and the wooded ridge of higher ground between them (NSDC, 2011a).

The site lies to the south-east of the town centre within the Southwell/Westhorpe Conservation Area (NSDC, 2011b). It is on the north side of Church Street (the A612, formerly known as Finkle Street) within an area characterised by numerous historic buildings. On the opposite side of Church Street is the Grade II listed Old Rectory, adjacent to the site of the former Minster School, which includes part of a Roman villa complex (SAM No. 138). Immediately to the west of this are The Residence and Vicars Court with St Mary's Minster beyond. The remains of another Scheduled Ancient Monument (SAM No. 151: Archbishop's Palace) are located immediately to the south-west. West of the site are the Grade II listed South Muskham Prebendal House and a Grade II listed cottage, stable and carriage house. To the east of the site are a Grade II listed road bridge over the Potwell Dyke and two Grade II listed properties adjacent to the dyke (Nos. 43 and 45 Church Street).

The site forms a broad, inverted L shape and covers an area of c.0.35ha. The southern part of the site had a narrow access track but was otherwise occupied by fruit trees. The northern part of the site was previously occupied by a bungalow and associated garage: the buildings had been demolished some time before the archaeological works took place, and this part of the site had become derelict and overgrown.

Central National Grid Reference: SK 70446 53797.

### 3.0 Geology and Topography

The solid geology of the area is mapped as interlaminated mudstones belonging to the Radcliffe and Gunthorpe mudstone formations of the Triassic era. Much of Southwell stands on the exposed solid geology, and this was the only natural deposit encountered during the project, although the British Geological Survey mapping shows the Platts Orchard site as covered by a narrow band of drift alluvium, recorded as brown silty or sandy clay with sand and gravel lenses, laid down along the course of the Potwell Dyke (BGS, 1996).

The central area of Nottinghamshire, in which Southwell is located, is a plateau, fissured by streams. The fissures are known as dumbles and it is generally on the south facing slopes of these that settlements are located: Southwell's position is typical, being sited on the south-facing slope of Westhorpe Dumble/Potwell Dyke (NSDC, 2011b). Southwell lies on the western edge of the Trent Valley within a generally undulating landscape characterised by low hills, small streams and small, steep-sided wooded valleys. The Potwell Dyke watercourse defines the east of the site. The stream margins are designated as part of Southwell Green Wedge. The area to the north of the site, adjacent to Burgage Lane, rises steeply over the site, which is at an approximate Ordnance Datum height of 28m.

### 4.0 Planning Background

On 19<sup>th</sup> December 2005, a planning application made by MGM Building Ltd. for the demolition of an existing bungalow and construction of five attached houses was refused (Ref.: 05/02311/FUL). Conservation Area Consent was granted on the same date for the demolition of an existing bungalow (Ref. 05/02330/CAC).

On 18<sup>th</sup> April 2007, following appeal (Ref. APP/B3030/A/07/2057937/NWF), full planning permission was granted for an application made by Oak Tree Homes Ltd., for the proposed demolition of an existing bungalow and construction of three dwellings and garaging (Ref.: 07/00212/FUL). In the appeal meeting of the Planning Committee on 17<sup>th</sup> April 2007, the Archaeological Advisor for NCC advised that, *there is very high potential for archaeological remains to exist within the site, which may also contain human burials. Due to the archaeological interest of the area, I recommend that if planning permission is granted, it should be conditional on, firstly, the submission and approval, prior to commencement of development, of a scheme of archaeological mitigation, and, secondly, upon the subsequent implementation of the mitigation scheme.* A Condition attached to the planning permission required a scheme of archaeological mitigation submitted to and approved in writing by the Local Planning Authority.

On 17<sup>th</sup> November 2007, full planning permission was granted for a re-submission made by Oak Tree Homes Ltd., for the proposed demolition of an existing bungalow and construction of two dwellings and garaging (Ref.: 07/01332/FUL). This permission was granted subject to conditions: condition 11 required a scheme of archaeological mitigation, approved by the Local Planning Authority, to be implemented prior to development.

On 14<sup>th</sup> May 2010, full planning permission was refused for an application made by Gascoine Group Ltd., for the erection of four two-storey detached houses with associated garages (Ref.: 10/00325/FUL).

On 5<sup>th</sup> April 2011, a planning application was made by Gascoine Group Ltd., for the construction of three dwellings and garaging. The application was for a new planning permission to replace extant planning permission 07/00212/FUL, for the proposed demolition of an existing bungalow and construction of three dwellings and garaging, in order to extend the original 3-year time limit for implementation.

## 5.0 Archaeological and Historical Background

The earliest recorded evidence for occupation and settled activity in the vicinity of the site dates from the Roman period. From the 18<sup>th</sup> century, Romano-British finds have been recorded around the nearby Minster, most significantly *in situ* remains, including a tessellated pavement, exposed during the creation of gardens around the Vicar's Court and the Residence. A programme of archaeological excavation was carried out by C. M. Daniels at two main locations on the site in 1959, in advance of the construction of a new school within the former Residence's garden. The excavation identified two ranges of an apparent winged corridor or courtyard style villa: a multi-phased east range with a large room and a cold bath, and a southern range with six rooms, at least four of which had mosaic pavements. These remains had been disturbed by the excavation of 30 inhumation graves, which had been disturbed in turn by the effects of stone robbing from the villa site and later drainage works. Ceramic material recovered during the excavation suggests that occupation commenced in the 2<sup>nd</sup> century AD, with the possibility of rebuilding before the early 3<sup>rd</sup> century. The bulk of the material recovered indicated that the 3<sup>rd</sup>-4<sup>th</sup> century was the main period of activity, with perhaps further rebuilding and embellishment during the early 4<sup>th</sup> century (Daniels, 1966). The site is now a Scheduled Ancient Monument, ref. 138.

The graves identified by Daniels were not dated but were considered to be Christian, probably part of the medieval cemetery associated with the Minster. The great size of this cemetery was apparently confirmed by the identification of a further 225 inhumation graves in 1971 during the construction of a building in the western part of the school site (Alvey, 1975). Another single inhumation and disarticulated remains were also identified to the north of Church Street at the South Muskham Prebend during excavations for a lift shaft, although these remains were not necessarily derived from the Minster cemetery (JSAC, 2003).

The first historical reference to Southwell comes from a surviving Charter, recording that King Eadwig granted the Manor of Southwell to the Archbishop of York between AD 955 and 959. The neighbouring Minster can be dated at least to the end of the Saxon period by surviving fragments of masonry and documentary evidence, and it is possible that it may already have been active by the late 9<sup>th</sup> century (Stenton, 1967).

The Domesday Survey of AD 1086 indicates that the land in Southwell was owned by the Canons, appointed by the Archbishop, in prebend (a type of ecclesiastical benefice by which the tithes and other income of a parish were assigned to a cathedral or collegiate church, to provide an income for its canons and support its religious students). The prebendaries, or secular canons, were required to reside in the parish and carry out the religious duties that would in other circumstances be performed by the rector. By the 13<sup>th</sup> century, the number of prebendaries had grown to a maximum of 16, all owning a house at Southwell as well as land in their own parishes (*ibid.*). The South Muskham prebendal house, adjacent to the present development site, is one of nine still extant.

An archaeological evaluation consisting of six trenches was carried out on the Platts Orchard development site by PCAS in June 2011. The southern part of the site was characterised by a homogeneous graveyard soil with multiple identifiable burials, one of which has recently been radiocarbon-dated to the late 7<sup>th</sup> century; the south-eastern area demonstrated a shallow overburden sealing at least one ditch dated to the Roman period, and numerous post-medieval pits. Conversely, the north-eastern part of the site identified a great depth of overburden, possibly indicating some deliberate infilling of the slope adjacent to the Potwell Dyke. In the central and north-western part of the site, three trenches identified the edge of what may be a single, or possibly several very large, deep cut features. These features are more than 2m deep and over 10m long. Their full extent was not established and nor could their function be ascertained, although clay winning was thought to be a possibility. A single Romano-British ditch and numerous post-medieval features, including a charnel pit, were also identified on this part of the site (Rowe, 2011).

In 2008-9 an archaeological evaluation was carried out on the site of the former Minster School, opposite Platts Orchard on the south side of Church Street, in advance of proposed redevelopment. Evidence of surviving substantial Roman masonry was recorded, constructed within a large cut feature, possibly a former clay-quarry working or a defensive ditch. The latter feature, over 45m long, c.13m wide and up to 2m deep, was the earliest identified on the site and pre-dated the main period of use of the villa during the 3<sup>rd</sup> and 4<sup>th</sup> centuries. Five Christian inhumation burials, post-dating the Roman occupation, were recorded. Continued use of the site during the 10<sup>th</sup>-11<sup>th</sup> centuries was also indicated (Rowe, 2010). Full excavation of the site followed in 2012, with the exception of the Roman stone structure, which was preserved *in situ* and incorporated into the Scheduled Ancient Monument. A second large, rectangular Roman stone building, of less substantial construction, was interpreted as an agricultural outbuilding of the villa, as was a post-built structure of approximately the same size, while a small, square stone building at the north-east corner of the site, adjacent to the Potwell Dyke, was also identified as Roman and was provisionally interpreted as the remains of a possible watermill. A further portion of the known cemetery was uncovered, partially overlying the remains of the larger Roman stone building: radiocarbon dating indicated that the cemetery was in use for a relatively short time, probably between the late 7<sup>th</sup> century and the beginning of the 9<sup>th</sup>. Medieval occupation was chiefly confined to the highest ground, on the west side of the site; a drainage system consisting of ditches and gullies filled with lengths of timber proved on radiocarbon-dating to be post-medieval (Savage and Sleaf, 2015).

## 6.0 Methodology (fig. 3)

The site was divided into three mitigation zones, according to the results of the previous evaluation. Area A lay within the northern part of the site, closer to Church Street, and was investigated by means of a strip, map and record exercise before construction works commenced. This area was subdivided into Areas A1 and A2, leaving a substantial baulk between them to prevent groundwater moving across the site into the drainage system during the archaeological works. Area A1 was stripped and investigated first, stockpiling excavated material in the area of Area A2 (plate 1); on completion of Area A1, it was back-filled and used to store spoil from the stripping and investigation of Area A2. Area B, in the south part of the site, had been shown during the evaluation to contain a substantial burial ground: this area is to be preserved *in situ*, and no archaeological investigation or development took place here. The third zone, Area C, took the form of a curvilinear strip following the route of existing service trenches associated with the earlier buildings on the site, which were to be extended to carry services to the new buildings. As the groundworks to be carried out in this area were limited, a scheme of intensive archaeological monitoring and recording was carried out during the development.

Machine-stripping of topsoil and subsoil to the first archaeological horizon was carried out in Areas A1 and A2 using a small 360 excavator fitted with a flat-bladed bucket (plate 2). Concrete footings remaining from the previous buildings were broken out by the contractors where necessary. Features seen were hand excavated in half-section, quarter-section or sample section as appropriate, drawn in section at scales of 1:10 or 1:20, and recorded on standard PCAS context recording sheets. Drawn sections were plotted on an overall site plan created by GPS surveying.

As some existing services remained live, a new service trench was dug in Area C. Machining was carried out using a 180 excavator using a narrow, flat-bladed bucket (plate 3). The new trench was 0.30m wide and approximately 0.75m deep. All features and deposits seen were drawn in section at scale 1:20 and recorded on standard PCAS trench recording sheets. Where no features were seen, sample sections were drawn at intervals at a scale of 1:20.

A colour slide and digital photographic record was maintained throughout the project (a selection from this is reproduced as Appendix 1) and a record of the project's progress was made on standard PCAS site diary sheets. Finds were stored in labelled bags prior to their removal to the offices of PCAS for initial processing; the washed and marked finds were then dispatched to appropriate specialists for assessment and reporting.

The mitigation programme commenced on April 2<sup>nd</sup>, 2012 and was completed on July 17<sup>th</sup>. The supervising Field Officer was Michael Rowe. Weather and ground conditions were poor throughout the majority of the project, with frequent heavy rain and constant flooding due to both rainfall and groundwater.

## 7.0 Results

### **Area A1 (fig. 4)**

#### *Phase 0: Pre-Roman*

The lowest deposit reached in Area A1 was the natural solid geology 003, consisting of laminated bands of silty clay and mudstone. No drift geology was present, and no man-made features or deposits encountered could be reliably dated as pre-dating the Roman period. A single prehistoric artefact was retrieved – a broken flint blade of uncertain date – but this was residual within a Roman ditch (Appendix 7).

A large, partially exposed feature ran approximately north-east to south-west across the site, occupying the north end of Area A1 and the majority of Area A2. It had been encountered during the evaluation in Trenches 2, 4 and 6, and recorded as features **203**, **403** and **607** respectively: finds of Roman pottery in lower deposits and medieval pottery in higher ones indicated that the feature had silted up over a very long period of time, but waterlogged conditions and the confines of the evaluation trenches halted excavation before the base of the cut was reached in any of the trenches, and it was not possible to ascertain whether three large features or portions of one extremely large one had been encountered (Rowe, 2011). Exposed in plan during the excavation, the feature appeared to have a sinuous course, and was interpreted as a watercourse or channel, probably of natural origin, although one of the sections excavated through it indicated that it had been recut more than once, suggesting that it had been maintained and possibly adapted for drainage. The small amount of pottery retrieved from its lower fills was Roman, but a tree root ball encountered in fill 231, near the base of section **223** through the 'channel', was sampled for radiocarbon dating, and gave a date in the mid-5<sup>th</sup> century BC. Due to the challenging working conditions caused by continual flooding within the 'channel' section and the need to step the sections back for safety (plates 4 and 5), the stratigraphic relationship of the tree root ball to the surrounding fills could not be ascertained with complete confidence, nor was it entirely certain that it was *in situ*, although this interpretation seemed most likely to the excavating team. The most plausible explanation seems to be that the 'channel' was originally a natural watercourse open in the later prehistoric period, and that it had been utilised as part of a drainage system during the Romano-British period, being cleaned, maintained, and possibly straightened in places, but without removing obstacles such as the root ball of a tree which had grown out of the original natural bank.

#### *Phase 1: Roman*

The largest section excavated through the 'channel' discussed above, section **223**, displayed a steep south side, c.2-3m deep, and a broad flat base, c.10m wide; only the base of the north side fell within the excavated area (figs. 5a-b and 6a; pls. 4 and 5). This section displayed a complex series of interlayered fills, and featured what appeared to be three successive recuts, **339/340**, **341/343** and **342/344**; the sequences of fills on the opposing



sides of the excavated section were markedly different from one another, although all three recuts could be traced across the section (Appendix 3). A human skeleton was encountered in fill 234, the fifth original fill from the base on the west side of the section. Skeleton 1 has been identified as a prime-aged adult woman, approximately forty years old, with some pathological changes to her skeleton indicating a life of hard physical work. The position of the skeleton was not commensurate with a formal burial: no grave cut was seen, and although the body was extended, it was prone (face down) and not on the east-to-west alignment typical of Christian burials (fig. 5c; pl. 6). The prone position could be accounted for by a shroud burial that had been carelessly carried out, but the bent left arm suggested that the body had not been shrouded at the time of deposition (Appendix 13). It may also be significant that recut **339** approached quite close to the body, suggesting that the labourers who recut the ditch were unaware of the presence of a burial. It is possible that the woman's body was concealed or summarily disposed of, rather than buried, in the partially silted ditch, although there were no skeletal indications that she had met a violent end; a death by misadventure also seems possible, as the position of the skeleton, prone with feet at the edge of the feature and head towards the middle, following the downward slope of the underlying ditch fill with the head lower than the feet, suggests that she may have fallen into the channel by accident and died where she fell, with the undiscovered body becoming covered with silt during the natural infilling of the feature. Skeleton 1 was radiocarbon-dated to 1891BP ± 37 years, placing it in the mid- to late 1<sup>st</sup> century AD (Appendix 15).

No recuts were seen in other sections excavated through the channel in Area A1, possibly because the other excavated sections did not expose as much of its profile, or possibly because section **223** preserved more of the original course of the channel, which may have been more extensively reworked in other areas, so that later recuts completely obliterated its earlier form. Section **199**, which exposed only a small portion of the channel cut (fig. 6a), demonstrated that it cut the subsoil deposit 193, which was dated by three sherds of mid-1<sup>st</sup> to 2<sup>nd</sup>-century pottery, indicating that the channel was open during the mid-Roman period; however, this does not necessarily indicate that the channel was originally mid-Roman in date, as this section may represent a later recut. Section **296** through the channel demonstrated that its earliest fill had been cut by the flue of kiln 318/327, but that its latest fill sealed the demolished kiln, indicating that the channel had silted up or been back-filled over a long period (fig. 6b; Appendix 3).

The two radiocarbon dates and the stratigraphic relationships of the channel provide the most compelling case for its position in the site phasing, as the artefactual dating evidence was both sparse and inconclusive. A single sherd of pottery that could be dated only to the Roman period, along with a chip of woodworking waste, was retrieved from the primary fill of section **223**, but this deposit lay below the prehistoric tree root ball, and the find could not be considered stratigraphically secure in the flooded working conditions. A sherd of 2<sup>nd</sup> century or later pottery came from fill 233, which sealed fill 234 in which Skeleton 1 had been deposited, appearing to confirm the interpretation that the channel had largely silted up in the mid-Roman period. The earlier two of the three apparent recuts in section **223** produced Roman and potentially Roman pottery from fills 240 and 242, while fragments of a Roman leather shoe were retrieved from fill 269 in first recut **339/340**; fragments of another shoe, likely to be of medieval manufacture, were retrieved from fill 240 in second recut **341**. The dating of the whole sequence was called into question by fragments of 18<sup>th</sup> to 20<sup>th</sup>-century brick retrieved from 232, the latest remaining fill in the original cut **223**. As fill 232 lay at the exposed surface of the silted-up ditch (fig. 5b), it is perfectly plausible that the recent material is intrusive, having been trodden into the fill at a much later date, but as a general rule, there is a high likelihood that finds from the fills of recuts are redeposited; both may actually be the case here. Late 3<sup>rd</sup> to 4<sup>th</sup>-century pottery, as well as further pottery datable only as Roman, was retrieved from fills 250 and 251 of another section through the channel, recorded as **255** (fig. 6c). The two latest fills, 247 and 248, in section **255** produced both Roman and medieval pottery, some of the medieval material being datable to the mid-12<sup>th</sup> to 13<sup>th</sup> century (Appendices 4, 5, 6 and 9).

Environmental sampling of fills within the channel demonstrated that domestic waste was being disposed of there during the late prehistoric or Roman period, as waterlogged remains of spelt wheat were identified in the lower fills; the channel also contained deposits with a range of crops more typical of the medieval and post-medieval periods, including bread wheat, oats, barley and pea, further suggesting that the feature was also in use or was re-cut during the medieval or post-medieval periods. Spelt wheat could be identified in fills 238 and 243 from original cut **223**, 240 in second recut **341/343** and 250 in additional section **255**; fill 240, which was particularly productive, also produced barley, oat, bread wheat, bread wheat-type grains and pea, while barley was also present in fill 250. The charred assemblages also contained a small number of weed seeds including docks, vetches, sedges and members of the grass family. Waterlogged plant remains also occurred in abundance in all the productive deposits, deriving from a wide variety of plant, tree and shrub species associated with arable, ruderal and wetland habitats (Appendix 17).

The most significant Roman feature encountered in Area A1 was a circular stone-built kiln near the centre of the excavated area (figs. 7-8). The kiln, recorded as 318 and 327 in different sections, occupied keyhole-shaped construction cut **322/326**, cut into natural 003 on the south bank of the large channel that ran across Areas A1 and A2. It was built of roughly-shaped limestone blocks bonded with clay, and survived to a height of six courses (fig. 7b; pl. 7). The kiln flue, separately recorded as cuts **292** and **319**, opened to the north, indicating that waste material was disposed of directly into the large channel; the flue was cut into fill 295 in channel section **296** (fig. 6b). Kiln floor 332 consisted of small limestone fragments in a cemented bonding material, and overlay a firepit, lined with heat-affected stone, in the kiln base (fig. 8a; pl. 8); this structural sequence suggested that the design, and possibly the usage, of the kiln had been changed during its working life. The structure contained numerous fills of heat-affected material: the lower deposits were identified as having accumulated during the kiln's period of use, while the later ones had accumulated after its disuse; some of these were demolition deposits incorporating fragments of the kiln structure (see Appendix 3 for matrix). Pottery recovered from three of the demolition deposits could not be identified any more accurately than Roman. The kiln was truncated from above by the octagonal cut of a modern ornamental pond, whose fill had almost completely concealed the kiln when the site was first machined (pl. 9).

All of the environmental samples from the kiln fills contained lime-rich deposits with high levels of calcium carbonate, suggesting that it may have been a lime-kiln within which calcium carbonate-rich material, such as limestone and chalk, was calcined to produce quicklime. The tufa stone observed in many contexts on the site would have been a suitable raw material, and the presence of numerous heat-affected tufa fragments adds weight to the theory that lime was being manufactured here from the local stone. The kiln deposits contained few charred plant macrofossil remains, confirming that the kiln did not have a domestic function such as an oven or grain-drier. Charcoal was noted in all of the flots and no coal or evidence of other fuel sources were identified, suggesting that wood or charcoal were the primary fuels used (Appendix 17). Although the dating evidence for this feature is slight, the presence of a substantial Roman villa close by provides circumstantial evidence, as considerable quantities of mortar and plaster would have been required during the construction of these buildings.

A small portion of a stone structure was exposed in the south-eastern corner of Area A1. Structure 215 in construction cut **219** consisted of closely packed, unworked limestone blocks with no bonding material (fig. 9a-b; pl. 10), and may have been part of a rubble footing or a revetment at the foot of the eastward slope down to the stream. A single sherd of grey ware retrieved from between the stones of structure 215 could only be identified as Roman. The structure was overlain by clay layer 214, which appeared to have accumulated naturally at the foot of the slope, and can be dated to the late 4<sup>th</sup> century by a large pottery assemblage, although intrusive early medieval and post-medieval material was also present.

Three linear features produced finds datable to the Roman period. Linear features **095/108/222**, **097/099/106/176** and **299/301** were all situated at the eastern edge of Area A1, and appeared to run on parallel north-north-east to south-south-west alignments, although not enough of **095** was exposed for this to be definitely ascertained. Features **097** and **095** ran across the south-eastern corner of the area; they had already been encountered during the previous evaluation, where they had been recorded as **E311** and **E303** respectively. Approximately 21m of the length of **097** was exposed; it was 0.86m wide and 0.46m deep in the widest excavated section, but dwindled in both width and depth towards the south-south-west, and may have terminated shortly outside the excavated area (fig. 9c-f; pls. 11-12). Late 3<sup>rd</sup> to mid-4<sup>th</sup>-century pottery, including a mortarium sherd, was retrieved from the fill of section **097**; pottery dating to the mid- to late 2<sup>nd</sup> century was retrieved from the fills of sections **099** and **106**, with a large animal bone assemblage, including sheep/goat, cattle and eel and a redeposited prehistoric struck flint also retrieved from section **106**, while section **176** produced a sherd of mid-2<sup>nd</sup> to early 3<sup>rd</sup>-century samian ware; the feature can also be stratigraphically dated, as section **176** cut the intermittently present lower subsoil 175/193, from which pottery ranging from the mid-1st to the late 2<sup>nd</sup>-century was retrieved. An environmental sample from ditch fill 098 in section **097** produced a limited assemblage of charred cereal grain, a single fragment of which could be identified as spelt wheat, two wild raspberry seeds and a piece of hazelnut shell (Appendices 4, 7, 14 and 17). Only 7m of adjacent feature **095** was exposed; this narrower, shallower feature ran approximately 2m to the south-east of **097**, and appeared to be generally parallel to it, but tapered to a terminal which curved in towards it. Three sections were excavated (fig. 9g-i), respectively producing mid-2<sup>nd</sup> century or later pottery, 3<sup>rd</sup>-century pottery and pottery that could not be more accurately identified than Roman. An environmental sample from ditch fill 096 in section **095** produced a substantial assemblage of charred remains of spelt wheat and barley, both major field crops during the Roman period (Appendices 4 and 17).

The third linear feature was situated approximately 6m to the north-west of ditch **097**. Only 4.6m length of ditch **299** was identified, between the edge of the large channel feature and the modern pond truncating the Roman kiln; this ditch was 0.74m wide and 0.22m deep in the excavated section (fig. 10a). It ran very close to the kiln flue, but had no stratigraphic relationship with it, and its relationship with the channel could not be ascertained. Its fill produced pottery identifiable only as Roman.

Post-hole **023**, near the south side of Area A1, was situated among a dense scatter of post-holes, most of which were identified as modern. This feature displayed a distinct post-pipe in the centre (fig. 10b), and was dated by a single sherd of 2<sup>nd</sup> to 3<sup>rd</sup>-century grey ware from post-pipe fill 022. Post-holes **013** and **195** were positioned side by side at the western edge of the excavated area; their relationship was difficult to ascertain, as they had separate basal fills, but these were jointly overlain by the single fill 075 (fig. 10c; pl. 13). Dating was also ambiguous, as one sherd of mid-1<sup>st</sup> to 2<sup>nd</sup>-century pottery and two small mid/late 12<sup>th</sup> to early/mid 13<sup>th</sup>-century sherds were retrieved from basal fill 012 in post-hole **013**, and three medieval sherds from the common deposit 075. However, a distinction can be made between this pair of post-holes and the numerous post-holes in the vicinity that were identified as modern, as deposit 075 could be seen in the baulk section to be sealed by the subsoil, while the adjacent modern post-hole **197** cut it. A projected line through double post-hole **013/195** and the other possible Roman post-hole **023** would run approximately perpendicular to the Roman ditches at the east side of the area.

Roman pottery formed part of a mixed collection of finds retrieved from the fill of large, shallow, crescent-shaped feature **084/111** near the centre of Area A1, cut by several modern features, which was interpreted on site as a natural hollow in which material had accumulated over time (Appendix 4).

### *Saxon to Early Medieval*

The only finds datable to this period were three sherds of pottery, probably dating from the 9<sup>th</sup> to 10<sup>th</sup> century, retrieved from the buried soil layer 216 sealing Roman stone structure 215. However, these sherds were likely to have been intrusive, as this layer also produced 41 sherds of 4<sup>th</sup>-century pottery, while a further 13 late 4<sup>th</sup>-century potsherds, along with a single intrusive post-medieval sherd, were retrieved from the portion of this layer that was excavated as context 214.

### *Medieval*

The two final fills in channel section **255** produced both Roman and medieval pottery. No recuts were identified in section **255** (fig. 6c), so it is entirely possible that this section represented a final recut that had left no remnants of earlier fills on the eastern edge (the excavated portion) of the channel, and consequently that the Roman material was residual and that the channel had continued to silt up slowly after it ceased to be maintained, with the final fills accumulating some seven or eight hundred years after the end of Roman occupation. This interpretation appears to be supported by the distribution of pottery within the two fills, which were excavated in spits and the finds from each spit bagged separately. The lowest spits of the earlier deposit 248 produced only Roman pottery, some of which could be dated to the late 3<sup>rd</sup> to 4<sup>th</sup> century, while thirteen sherds of Roman pottery and five medieval sherds, including mid-12<sup>th</sup> to mid-13<sup>th</sup>-century ware, were retrieved from a higher spit. In final fill 247, the relative quantities were reversed, with six sherds of Roman pottery and twelve of medieval, again including mid-12<sup>th</sup> to mid-13<sup>th</sup>-century ware, retrieved from the lower spit, while the upper spit, representing the very latest material in the section, produced five sherds of Roman pottery and thirty of medieval, including 13<sup>th</sup> to 14<sup>th</sup> century ware. Medieval finds, with palaeoenvironmental remains likely to date from this period, were also retrieved from deposits in the largest excavated section, **223**, but the complex multiple recuts observed here meant that little material could be considered reliably stratified. A probable medieval leather shoe was retrieved from fill 240 in second recut **341/343**, which also produced pottery that was more likely to be Roman, while although several environmental samples produced the bread wheat generally interpreted as medieval, only one did not also contain spelt wheat, normally associated with the later prehistoric and Romano-British periods: this was fill 269 in first recut **339/340**, which produced charred remains of oat, barley, bread wheat, bread wheat-type grains and pea (Appendices 4, 5, 9 and 17).

A cylindrical stone well partially exposed at the south edge of Area A1 can be provisionally dated to the medieval period. Well 093 was apparently set within a large, circular construction cut which had been back-filled behind the unbonded limestone walling of the well lining (pl. 14). The internal diameter of the well remnant was no more than 0.60m, while construction cut **092** was some 1.60m in diameter, indicating that the well had been built from at least part of the depth of the well-shaft as a free-standing structure. No finds were retrieved from construction cut fill 094, and the back-fill of the well itself was not reached, as the east side of the well and the whole of its upper fill had been removed by the cut of large pit **034**, while flooding prevented the excavation of the lower well fills, so the well could not be directly dated (fig. 10d-e). However, pit **034** could be dated to the end of the medieval period or the beginning of the post-medieval period by 15<sup>th</sup> to 16<sup>th</sup>-century pottery retrieved from both its fills, stratigraphically indicating a medieval date for the well. Post-hole **090** was cut into construction cut fill 094; both this feature and adjoining post-hole **088** contained a number of stones that appeared to represent post-packing, and it is possible that they formed part of a post-built well-head structure. However, apart from the stratigraphic relationship between **090** and the well, neither post-hole could be dated. Post-hole **208**, slightly to the north of this feature group, also had moderately-sized stone inclusions, but cannot be fitted into any obvious structural plan with **088**, **090** and the layout of the well; adjoining post-holes **210** and **212** were interpreted as modern.

Three sherds of 13<sup>th</sup> to 15<sup>th</sup>-century pottery were retrieved from the common fill 075 sealing the double post-hole **013/195**, while fill 012 in post-hole **013** produced a sherd of mid-1<sup>st</sup> to 2<sup>nd</sup>-century pottery in excavation and two small mid/late 12<sup>th</sup> to early/mid 13<sup>th</sup>-century sherds from an environmental sample, and a further fragment of Roman pottery was retrieved from an environmental sample of fill 196 in post-hole **195**. As the quantities involved were so small, it is uncertain whether the medieval material is intrusive or the Roman residual; it is unlikely that context 075 was the fill of an unrecognised later feature cutting the double post-hole, as the horizons between the fills were so diffuse that they could only be estimated during recording (fig. 10c; pl. 13). The environmental samples from both fills produced low numbers of charred cereal grains and weed seeds; traces of hammerscale were also noted in fill 196 (Appendix 17).

Five small pits or postholes across the excavation area produced medieval pottery, although the apparent dating evidence may have been residual in some cases. The possible post-hole **087**, directly to the east of composite post-hole **013/195**, survived to a depth of only 0.07m but produced a sherd of 13<sup>th</sup> to 15<sup>th</sup>-century pottery. A further sherd of 13<sup>th</sup> to 15<sup>th</sup>-century pottery was retrieved from the surface of kidney-shaped pit **017**, approximately four metres to the east of post-holes **087** and **013/195**, but this feature, like the scattering of square, rectangular and circular pits around it, was interpreted as modern and was not excavated. The larger pit **103**, near the centre of the site, was cut by post-medieval ditch **101**, suggesting that the two sherds of pottery retrieved from its lower fill and doubtfully identified as medieval may have been genuinely stratified; the lighter colour of fills 104 and 105 also suggest that this pit was not one of the ubiquitous modern garden features, as these were characterised by a very dark fill (fig. 10g; pls. 15-16). Near the eastern edge of Area A1, a sherd of 12<sup>th</sup> to 13<sup>th</sup>-century pottery was retrieved from the fill of small pit or post-hole base **205**; this feature was positioned at the edge of the channel, but its dark, silty fill and steep-sided, flat-based profile suggested that it was modern and the pottery residual. Shallow pit **165**, cutting early subsoil 193 at the eastern site edge, had vertical sides and a flat base, and was also interpreted on site as a modern garden feature, although it contained two fills (fig. 10h); lower fill 166 produced two sherds of 13<sup>th</sup> to 14<sup>th</sup>-century pottery.

Medieval pottery formed part of a mixed collection of finds retrieved from the fill of large, shallow, crescent-shaped feature **084/111** near the centre of Area A1, cut by several modern features, which was interpreted on site as a natural hollow in which material had accumulated over time. The finds assemblage from this feature also included a sherd of Roman pottery, possible late medieval to early post-medieval window glass and part of a late medieval bone-handled knife (Appendices 4, 5, 8 and 11).

Medieval pottery interpreted as residual was found in section **167** at the terminal of ditch **167/169** (see below).

#### *Post-medieval*

A probably post-medieval linear feature ran roughly north-west to south-east across the north side of Area A1, cutting the channel fills to a north-western terminal within the channel, and apparently truncated to south-east by the octagonal modern pond that overlay the Roman kiln. Two sections were excavated through this feature: section **167**, at the terminal, produced two sherds of 13<sup>th</sup> to 14<sup>th</sup>-century pottery, but section **169**, towards the centre of the feature, produced six 17<sup>th</sup> to 18<sup>th</sup>-century sherds, making a post-medieval date more likely (fig. 10i-j). The medieval material may well have been redeposited from the final fills of the channel into which the ditch terminal was cut.

Linear feature **101** extended southwards from the octagonal pond, which truncated its north end; the extended projections of **101** and **167/169** would have met within the pond area. Ditch **101** terminated to the south within the footprint of evaluation trench 3, but its line was picked up after a 2m wide break by ditch **050/173**, which continued beyond the south site

balk. A section through **101** retrieved mid- to late 18<sup>th</sup>-century pottery and glass with 19<sup>th</sup>-century clay tobacco pipe, and mid-17<sup>th</sup>- to 18<sup>th</sup> century pottery was retrieved from both sections **050** and **173**. All these linear features had very similar profiles, with regular sides at an approximate 45° angle to flat bases (figs. 9f, 10g, 10i-k): they were probably contemporary, and may very well have been parts of the same feature. The alignment of ditch **167/169** appeared to be respected by a row of small modern pits on its north-east side, suggesting that this was a visible feature when the modern garden was laid out. It has been suggested that the combined feature was a planting trench for a hedge, leaving a gap for an entrance; bearing in mind the presence of a modern pond on the line of the feature and a modern soakaway adjacent to it, it is also possible that it was dug to channel water, serving both as a drain and an ornamental feature.

At the eastern edge of Area A1, the terminal and part of the length of linear feature **202** was exposed, running on a north-west to south-east alignment roughly parallel to post-medieval linear feature **167/169** and cutting the fills of the Roman channel (fig. 6a). It was dated by a single sherd of late 17<sup>th</sup> to 18<sup>th</sup>-century pottery. The profile of linear feature **202** resembled that of the fully exposed linear feature to the west, and it seems likely to be contemporary with it and to have had the same function.

Two of the excavated pit and post-hole features produced post-medieval dating evidence. Pit **036**, partially exposed at the north-west interior angle of Area A1 produced two sherds of mid-17<sup>th</sup> to 18<sup>th</sup> century pottery and one Roman sherd; the pit was cut at the south side by possible post-hole **171**, which also produced 2 sherds of 17<sup>th</sup> to 18<sup>th</sup>-century pottery (fig. 10l). The rectangular shape, vertical sides and flat base of pit **036** indicate that it was one of the ubiquitous planting pits associated with the post-medieval and modern garden. Mid-17<sup>th</sup> to 18<sup>th</sup>-century pottery was retrieved from the fill surfaces of the large sub-oval pit **052**, near the centre of the site, but this feature was assessed as modern and not excavated.

At the south side of Area A1, the medieval stone well 093 was cut by large sub-oval pit **034** (figs. 10d-e). Flooding prevented much investigation of this feature, although it was seen to have vertical sides. 15<sup>th</sup> to 16<sup>th</sup>-century pottery was retrieved from both of the fills encountered, along with a small group of late medieval to early post-medieval flat roof tile. Upper fill 207 produced a large animal bone assemblage including sheep/goat, pig and cattle, while lower fill 033 had a smaller but more varied assemblage which also featured fish and frog/toad. An environmental sample from the lower fill contained single occurrences of barley, bread wheat-type and oat grains with a fragment of charred hazelnut shell (Appendices 4, 5, 14 and 17). The finds assemblage for this feature suggests a domestic refuse pit of the early post-medieval period.

A shallow, elongated, irregular feature in the south and centre of the site, some 12m long and nowhere more than 0.12m deep, was interpreted as being a natural hollow similar to feature **084/111**. This feature, which was recorded in two sections as **060** and **064**, was uncertainly dated by one sherd of Roman and two of 15<sup>th</sup> to 16<sup>th</sup>-century pottery from the fill of section **064**.

### *Modern*

A total of 40 features in Area A1 were assessed as modern after machining and not excavated. Features **005, 007, 009, 011, 015, 030, 032, 038, 042, 044, 054, 056, 058, 062, 066, 068, 070, 074, 077, 079, 113, 115, 123, 139, 141, 143, 145, 147, 149, 151, 153, 155, 157, 161, 163, 181, 183, 185, 187** and **191** were typified by square, rectangular or circular shapes and dark brown loamy silt fills with common charcoal flecks: they were interpreted as planting pits associated with the layout of the modern gardens. 19<sup>th</sup> to 20<sup>th</sup>-century pottery was retrieved from the surfaces of the fills of pits **077, 113** and **135**, while pit **191** was filled with late industrial-period domestic refuse, such as glass bottles, jars and plates, which were not retrieved. Although a sherd of 13<sup>th</sup> to 14<sup>th</sup>-century pottery was retrieved from the surface

of its fill, feature **017** was also abandoned as modern without excavation, as were large pit **052**, which produced mid-17<sup>th</sup> to 18<sup>th</sup>-century pottery from its surface, and small pit **159**, which produced late 18<sup>th</sup> to mid-19<sup>th</sup>-century pottery, but is clearly associated with the row of modern features along the north-east side of linear feature **167/169** by its position among them.

The most prominent of the modern garden features was the large, octagonal pit **137**, which lay across the course of the possible post-medieval water feature **101/167/169** and truncated the Roman kiln from above, completely concealing it when the site was first machined (pl. 9). This feature, which was filled with a mixture of soil and demolition material, was interpreted as a former ornamental pond. Directly to the south-west of pond **137** was square pit **125**: this feature measured 3m square, and contained Structure 126, a lining of dry-laid limestone blocks (pl. 9). The interior of Structure 126 was filled with late industrial-period refuse, consisting of bottles, jars, salt-glazed pipes, tin plate and other domestic waste within a dark loam matrix. The feature was interpreted on site as a soakaway pit, although it also seems possible that it was a formal, ornamental pond; in either case, it would have to pre-date pond **137**, as the presence of a soakaway so close to a water feature seems impractical.

Other excavated features proved to be modern were pits **019, 021, 040, 046, 048, 081, 083, 117, 121, 129, 131, 133, 135, 179, 210** and **212**. Pit **165**, at the eastern site edge directly adjacent to modern pit **179**, was interpreted as modern from its form, although medieval finds were retrieved during excavation.

The structural remains of the former bungalow – modern brick footing 190 in construction trench **189** – were also encountered at the northern edge of the excavation area.

#### **Area A2 (fig. 4)**

##### *Phase 0: Pre-Roman*

The lowest deposit reached in Area A2 was the natural solid geology 403, which was identical to that seen in Area A1, consisting of laminated bands of silty clay and mudstone. No drift geology was present, and no features or deposits encountered could be identified as pre-dating the Roman period. A single prehistoric flint flake was retrieved from ditch **470** (Appendix 7), but must have been redeposited there, as ditch fill 471 also contained Roman pottery, and the ditch itself cut the earlier fills of the 'channel'.

##### *Roman*

The extremely large, possibly natural feature referred to on site as the 'channel' occupied the majority of Area A2, running in a curve from south-west to east-north-east into Area A1. The channel was investigated in several sections, but only one exposed its full width and depth (plate 17). The first cut or original channel **474** proved to be approx. 9.8m wide and 1.8m deep: only three fills were recorded in the partial sections initially excavated, but eight were eventually distinguished when the section was extended to full width (figs. 12a-c; Appendix 3). Fill 481, which lay in the base of the channel cut but overlay two small primary fills from which no finds were retrieved, produced pottery dating from the late 2<sup>nd</sup> century AD or later, with a small assemblage of animal bone including a butchered cattle bone and a gnawed bone identified as possible fallow deer, a rare occurrence in Romano-British contexts. Mid- to late 2<sup>nd</sup>-century pottery was also retrieved from later fill 484. Pottery from the two uppermost fills, 475 and 476 could only be identified as generically Roman, while pottery from fill 483 was too heavily burnt to identify it any more accurately than as possibly Roman, and was accompanied by a single human finger bone. Environmental samples from basal fill 480, second fill 481 and fourth fill 483 produced abundant waterlogged plant remains, with remains of spelt wheat, a typical Romano-British crop, in fill 481 (Appendices 4, 15 and 17). An additional section at the north bank of the 'channel' recorded the original cut as **439**: three

fills were identified, but little further dating evidence was retrieved (fig. 13a). A section excavated to investigate the relationship between the channel and feature **449** did not expose the channel cut, but recorded a sequence of five fills (fig. 13b), four of which produced Roman pottery while three also produced Roman tile; a single fragment of post-medieval window glass retrieved from 465, the third fill down in the sequence, is likely to be intrusive (Appendices 4, 6 and 11).

As in Area A1, the portion of the channel in Area A2 seems to have largely silted up in the mid-Roman period. An apparent recut, cutting Roman fill 476 and extending to about half the channel's original depth, was seen in the full section across cut **474** and recorded as **485** (fig. 12a). No dating evidence was retrieved from any of the five fills attributed to this recut; it probably corresponds to one of the channel recuts recorded in section **223** in Area A1, perhaps to the earliest recut there, **339/340**.

It was not certain whether ditch **477**, which was seen only in the full section across cut **474** (fig. 12a-c), was a second recut of the channel or a later feature, as it could not be traced on the surface outside the section and its course can only be projected. As this feature ran at a very oblique angle across the excavated section, apparently on an approximate north-north-east to south-south-west alignment, its width could only be estimated, but it seems likely to have been about 3m wide; when the section was first excavated, **477** was recorded as up to 1.20m deep with two fills, but it became increasingly difficult to trace as the section was repeatedly extended. Possible primary fill 478, which could not be identified in the final extension of the excavated section, produced late 3<sup>rd</sup> to 4<sup>th</sup>-century pottery (Appendix 4), although fill 479 appeared to be of high medieval date. The northern edge of **477** intersected redeposited natural 492, which produced no dating evidence: it was unclear whether this was the fill of a final, shallow recut, not identified on site, truncating the very edge of **477** or whether it was the final fill of earlier recut **485**, and **477** cut it (fig. 12a).

The main body of the channel appears to have been abandoned after the silting-up of recut 485, and a narrower ditch excavated along its north side (fig. 13a and b). This ditch was recorded in three sections as **425**, **443** and **493**: it could not confidently be connected to any feature recorded in Area A1, although its alignment indicated that it must run through the area, and it is likely that it corresponds to one of the channel recuts recorded in section **223**. All the sections had multiple fills, but very little dating evidence was retrieved: three sherds of Roman pottery from the second fill of section **493**, one identifiable as 2<sup>nd</sup>-century, represented the entire finds corpus from this feature, and it cannot be ruled out that this material was redeposited from the fills of the larger channel.

Directly to the east of excavated section **474**, the south side of the channel was cut by a narrow, north to south-aligned ditch, 0.60m wide and 0.40m deep at its south end, which was truncated by the modern bungalow footings, and becoming shallower towards the north (figs. 13c and d). The course of ditch **470** could be traced some 7.5m into the channel fills, about half-way across the original Roman channel, but no further: it seems most likely that this feature was a drain falling into a later recut of the channel. Three sherds of Roman pottery retrieved from the ditch fill were dated to the 2<sup>nd</sup> century or later; a residual prehistoric flint flake was also present. The dating evidence is, however, called into question by the spatial relationship between ditch **470** and feature **477**: as **470** was visible in plan running across the projected course of **477**, which produced late Roman finds from its lower fill and 12<sup>th</sup>-century material from its upper, it seems likely that **470** is the later feature, and could not have been dug until **477** had completely silted up.

A second inhumation burial was encountered in Area A2. Grave **413** lay at the southern edge of the channel: it was aligned east to west, parallel to the stretch of the channel bank in the immediate vicinity suggesting that the grave and the channel were contemporary with the east end truncated by the modern bungalow footings. The grave was occupied by Skeleton 2, an adult most likely to have been male, although this is a tentative interpretation based on



the size and robustness of the bones, as the elements required for determination of sex were absent; the age of the individual at death could also not be accurately assessed (Appendix 13). The skeleton was extended, with the head to the east, and was accompanied by the skeleton of an adult male dog of indeterminate breed and age, which had been placed in the grave lying on its side, with its legs extended and its head at the human skeleton's feet; the man's left hand lay on the dog's rump (fig. 14a; plates 20 and 21). Both skeletons had been disturbed by the excavation of undated post-hole **416** through the grave. Radiocarbon dating of both the human and canine bone gave a date range around the mid-2<sup>nd</sup> century AD, with the human being dated to 1806 BP ± 37 years and the dog to 1783 ± 37 years (Appendix 15). Dating evidence was otherwise confined to a fragment of Roman ceramic building material retrieved from the grave fill, although the inclusion of the dog, which had presumably been killed and buried with its master so that it might accompany his spirit on its journey to the afterlife, suggests that the burial was not Christian.

Post-hole **416** was one of three post-holes at the southern edge of the channel, in the area between ditches **470** and **449**. Post-holes **416** and **468**, which were sited 2.5m apart and both at roughly 0.5m from the channel edge, were very similar to one another, being approximately the same size (0.30m wide and 0.25m deep) and sub-square in plan, with vertical sides and fills containing large post-packing stones (fig. 14 b and c). **416** was undated, but a single sherd of mid-1<sup>st</sup> to 2<sup>nd</sup>-century pottery was retrieved from the fill of **468**. While it seems very likely that **416** and **468** were part of the same structure, it is less certain that post-hole **472** is related to them. **472** was sited at the edge of the channel, slightly too far to the east to form a right-angle with the other two post-holes, and while it was of much the same width, it was only 0.05m deep; if it had ever contained post-packing stones, none survived (fig. 14d). A rectangular post-structure could be proposed, with a fourth post-hole having gone unseen among the multiple channel fills, but this interpretation is very speculative.

A sherd of Roman pottery was retrieved from post-hole **437**, one of a group of five post-holes on the northern edge of the area; it was cut by post-medieval pit **404/433**. The dating evidence here is uncertain, as if **437** had a relationship to the other four post-holes in the vicinity, two of which were cut into the upper fill of probable late Roman ditch **443**, the Roman sherd is likely to have been redeposited.

### *Saxon to Early Medieval*

No features in Area A2 could be ascribed to the Saxon or early medieval periods.

### *Medieval*

As in Area A1, the final phase of use of the channel through Area A2 appeared to have continued into the medieval period. The first recut, **485**, produced no dating evidence, and what little dating evidence was retrieved from the first of the northern-edge recuts, **425/443/493**, was Roman, but a possible final recut or re-routing of the channel, running along the northern edge of the excavation area and recorded in two excavated sections as **407** and **430**, displayed fills that appeared to have been deposited in the late medieval to post-medieval period. Medieval material was also retrieved from the upper fill of possible channel recut **477**: fill 479 produced 12<sup>th</sup>-century pottery and an assemblage of domestic animal bone including sheep/goat, pig and cattle (Appendices 5 and 14). The relationship of the north-east end of this feature to the later recuts of the channel was never ascertained, as the stratigraphic relationships were too slight to be confidently identified. It is possible that it was part of a drain emptying into one of the recuts, as ditch **470** is believed to have been.

To the east of grave **413**, the southern edge of the channel was cut by the terminal of a substantial north-north-east to south-south-west aligned ditch, recorded in three sections as **449**, **452** and **461**. This feature extended outside the excavated area to south-south-west,

and ran for approximately 3m to a terminal cutting the upper fills of the channel (fig. 14f). It was cut just before the terminal by the foundations of the modern bungalow. Section **461**, excavated at the terminal, recorded a single fill, which resembled the lower fill of the two encountered in the other two sections, **450** and **453** (plate 21). An assemblage of 16 sherds of 13<sup>th</sup>-14<sup>th</sup> century pottery were recovered from the upper fill in both these sections, with animal bone including sheep/goat, pig, cattle and fowl (Appendices 5 and 14). A bulk sample from the lower fill in section **449** produced abundant environmental remains, with charred grains including barley, bread wheat and oats, charred weed seeds and a trace of hammerscale; two fragments of pottery were also retrieved from the sample. Spelt wheat was not present, confirming the post-Roman date for this feature (Appendix 17). As the dating evidence recovered from the upper fills of the channel suggests that it had finally silted up or been back-filled in the 11<sup>th</sup>-12<sup>th</sup> century, it seems likely that this feature post-dates the channel, rather than forming part of its feeder drainage network.

A group of five post-holes on the northern edge of the area could speculatively be assigned to the medieval period. Dating evidence was sparse and highly ambiguous, consisting of a sherd of Roman pottery from post-hole **437** and a sherd of 18<sup>th</sup> to 20<sup>th</sup>-century pottery from post-hole **457**, but some stratigraphic dating was possible. Two of the post-holes **447** and **457** were cut into the upper fill of probable late Roman ditch **443**, while post-holes **437**, **447**, **457** and **459** were all cut by post-medieval pit **404/433**, suggesting that, if there was a relationship between these features, then the date of the structure they represented would have to have lain between the late Roman period and the 16<sup>th</sup> century (and consequently that the Roman sherd is likely to have been redeposited, while the modern one would have to be intrusive).

#### *Post-Medieval*

The latest phase of use of the channel may have been represented by a partially exposed ditch at the northern edge of Area A2, extensively disturbed by modern brick footings. This ditch, recorded in two excavated sections as **407** and **430**, lay on an approximate east-west alignment, and was cut into the upper fill of uncertainly dated channel recut **425**, truncating its northern edge (figs. 13a and 14e). Three distinct fills were identified in the section excavated through **407**; from the lower fill 408, pottery ranged in date from the early 13<sup>th</sup> century Nottingham coarse sandyware to the brown glazed earthenware in use in from the 16<sup>th</sup> to early 19<sup>th</sup> century, the collection indicating a probable date of the 17<sup>th</sup>-18<sup>th</sup> century for the deposition of this fill. Separated by an undated tip line of mudstone 409, pottery from the later fill 410 is predominantly slightly earlier, dating from the 12<sup>th</sup>-16<sup>th</sup> century (Appendix 5). The upper fill also produced a mixed assemblage of ceramic building material, including Roman tile, a hand-made post-medieval brick and late to post-medieval flat roof tile, and post-medieval window glass (Appendices 6 and 11). The animal bone corpus was substantial, but confined to the common domestic species cattle, sheep/goat, pig, goose and dog some with indications of butchery or canine gnawing (Appendix 14). This overall range of dates is supported by the finds recovered from the single fill encountered in ditch section **430**, with pottery dating from the 12<sup>th</sup> to the 17<sup>th</sup> century being recovered. The wide date range of the finds recovered, with the presence of a considerable quantity of domestic animal bone, suggests that the ditch had been backfilled with redeposited, imported material including refuse from domestic middens.

A large, sub-oval pit was also cut into the fills of the channel recut **443** at the northern edge of Area A2. Pit **404/433** was 4.65m long and 0.84m deep, lying roughly parallel to the edge of the feature into which it was cut, and truncated four of the group of five post-holes in this area (fig. 14g; plate 18). The original purpose of the pit is uncertain, but it appears to have been back-filled with quantities of post-medieval domestic refuse. The combined pottery assemblage from sections **404** and **433** totalled 83 vessels, four of which cross-joined between the two sections, with sherds from the same vessels being found in both: the vessels were chiefly cups, jugs and jars of Cistercian ware and Midlands Purple ware, likely

to have been produced in Derbyshire. A small amount of more locally produced pottery included two sherds from a circular chicken-feeder. This pit also produced the only sherd of imported German stoneware found on the site, from a Frechen-type drinking jug of 16<sup>th</sup> to 17<sup>th</sup>-century date. A single sherd from a black-glazed jar, found in the lower fill of section **433**, is significantly later than the rest of the assemblage; it may be intrusive, or may indicate that the pit was back-filled later in the 17<sup>th</sup> century (Appendix 5). A large animal bone assemblage appeared to derive from both food and butchery discard, with sheep/goat predominant and cattle and pig also well represented: deer (some specifically identifiable as red, fallow and roe deer), dog, cat, equid, goose, fish (including herring, eel and Gadidae (cod family)), fowl, rabbit and some bones that could only be identified as avian were also present. A cetacean (whale family) vertebra was a particularly unusual element in this assemblage (Appendix 14). The pit also contained late medieval to post-medieval brick and flat roof tile, fragments of window glass and a bracelet of copper alloy wire of a mid- to late Roman type (Appendices 6, 8 and 11). Three of its fills were sampled, producing both charred and waterlogged remains. The combined charred plant assemblage included barley, oats, rye and bread wheat, with weeds of cultivated ground, while the waterlogged remains derived from a wide variety of species of arable, ruderal, tree/shrub, aquatic and wet ground habitats, with fruit stones of edible plants such as fig, bramble, bullace/damson and elder (Appendix 17).

The isolated pit **411** lay in the south-west corner of Area A2. Its east side had already been intercepted by evaluation trench 6 and recorded as feature 612: disarticulated human bone, with Romano-British, medieval and post-medieval pottery and clay tobacco pipe had been retrieved from its single fill. The evaluation report noted that much of the human bone had been damaged, and concluded that the pit had been dug to re-inter human remains disturbed during later works in the Area B cemetery (Rowe, 2010). Fully exposed, the pit proved to measure 1.4m x 0.75m, and, as observed during the evaluation, to be irregular in plan; it had been cut through subsoil 402, and so survived after machining to a depth of no more than 0.25m. Further disarticulated human bone, derived from a minimum of four adults, was retrieved from single fill 412, as well as 17<sup>th</sup> to 18<sup>th</sup>-century pottery, post-medieval CBM and window glass, a fragment of 17<sup>th</sup>-century clay tobacco pipe and bones from domestic animals: cattle, sheep/goat, pig and equid (Appendices 5, 6, 11, 13 and 14)

### *Modern*

Area A2 displayed none of the modern features interpreted as planting pits and other ornamental garden features that had been recorded in Area A1. Apart from a sherd of 18<sup>th</sup> to 20<sup>th</sup>-century pottery retrieved from post-hole **459** and believed to be intrusive, the modern period is represented here only by the bungalow footings overlying and truncating the earlier features.

### **Area C (fig. 16)**

The new service trench in Area C exposed and cut a short way into natural 503, the local solid geology of interlaminated silty clay and mudstone. A single feature was seen cutting natural 503. Feature **504** appeared to be a narrow linear feature running east to west, perpendicular to the service trench, but it lay close to the limit of excavation and little of it could be seen in section (fig. 17 a-b). No dating evidence was retrieved from the fill of this feature, but it produced a small assemblage of human bone, identified as deriving from an infant approximately 2-3 years old (Appendix 13). The human bone was probably associated with the middle Saxon cemetery in Area B: it could not be ascertained on site whether feature **504** was an east to west-aligned grave or whether the bone was residual in a later feature, but the bones – skull, cervical vertebrae, ribs and part of a humerus – all came from broadly the same part of the body, suggesting that they had been articulated when found.

Overlying the natural and the single linear feature were subsoil 502, varying in depth from 0.17m to 0.40m, and up to 0.57m depth of garden topsoil 501 (fig. 17c-e). Mid-17<sup>th</sup> to 18<sup>th</sup>-

century pottery was found during the machining of the trench, but was retrieved from the spoil and could not be ascribed to a specific context.

## 8.0 Discussion and Conclusions

The majority of the archaeological remains on the site consisted of, or were likely to be associated with, the very large, apparently curvilinear feature referred to in the site recording as The Channel. The origins of the channel seem most likely to be a natural watercourse of the late prehistoric period, an interpretation supported by a radiocarbon date in the mid-5<sup>th</sup> century BC for a tree root ball encountered near its base. The line of the channel, extended outside the site to the east, seems likely to intersect the modern course of the Potwell Dyke at a point where it turns sharply eastward (fig. 2), suggesting that the channel may be the course of a former tributary of the Potwell Dyke; it is also possible that it represents an earlier course of the dyke itself, although no corresponding feature was encountered during archaeological work on the Minster School site on the opposite side of Church Street (Savage and Sleaf, 2015). The channel then appears to have been adapted as part of a drainage system during the Roman period, being cleaned, maintained, and possibly straightened in places. A number of Roman linear features within Areas A1 and A2 ran approximately perpendicular to the course of the channel, suggesting a network of minor drains leading into it; of these, the ditch fragment **299** appeared to intersect the channel at its edge, while **470** and **477** cut its earlier fills, but could not be traced past its centre, suggesting that they emptied into one of its later recuts. (An interpretation of the channel as an exceptionally large borrow-pit for clay extraction, similar to, although larger than, features interpreted as clay extraction pits on the nearby Minster School site (Savage and Sleaf, 2015), was also suggested on site, but seems unlikely.) Dating evidence for the channel fills was sparse and cannot be considered secure, as finds in large, multiply recut features are likely to have been redeposited, possibly more than once: the most reliable date is probably the radiocarbon date on a human skeleton found within the partially silted channel in Area 1, which could be assigned to the mid-to late 1<sup>st</sup> century AD (Appendix 15). The channel appears to have silted up for the first time in the mid-Roman period, and to have been recut, possibly more than once, during the later Roman period; while the stratigraphy was rarely clear, due to the difficulties of working within the deep, continually flooding sections, and individual finds cannot be relied on, the general dating sequence of the finds, as well as the environmental evidence, suggested that the channel had remained in use through a series of siltings, recuts and possible episodes of straightening or re-routing through the medieval period. The ditch **407/430**, partially exposed at the edge of Area A2, may have represented a final recut that did not wholly go out of use until the 17<sup>th</sup> century, although the west end of this feature appeared to be deviating from the alignment of the rest of the channel, and it is possible that this was an unrelated feature, coincidentally intersecting the final fills of the disused channel. The only historical period that is notably unrepresented among the finds assemblages from the channel fills is the Saxon/Scandinavian period; in conjunction with the paucity of finds from between the 5<sup>th</sup> and 10<sup>th</sup> centuries elsewhere on the site, it seems likely that the site was not occupied, and the channel probably not utilised or maintained, during this period.

While the channel was the most substantial feature on the site, the most significant was the stone-built kiln in Area A1, which environmental sampling identified as a probable lime kiln; the presence of a known Roman villa in the immediate neighbourhood adds weight to the scanty dating evidence in suggesting that the kiln was of this date, as considerable quantities of mortar and plaster would have been required during the construction of the scheduled villa to the west of the Minster School, and it would have been practical to burn the lime close by rather than to transport it, since suitable raw material was present. Evidence for glass manufacture on the site in the Roman period, although ambiguous, may also be associated with the construction of the villa (Appendix 5).

The status of the site as being on the periphery of the Minster School Roman villa is broadly borne out by the finds assemblages. The majority of the Roman pottery can be dated to the late Roman period, possibly continuing until the end of Roman pottery production in the 5<sup>th</sup> century AD, and other recorded pottery assemblages from the vicinity suggest that many villa type buildings in this region continued to use Roman ceramics into the 5<sup>th</sup> century (Appendix 4). The presence of possible fallow deer remains among the animal bone assemblage is also potentially significant, as fallow deer was a sufficiently rare commodity during the Romano-British period that it has only recently been identified in the record at all. This species is now thought to have been very occasionally present, either traded as cuts of meat, or deriving from a small number of live animals kept in possible deer parks (Appendix 14), which would, in either case, have indicated the presence of residents of considerable wealth and status in the immediate area.

The second burial found on the site, dated to the mid-2<sup>nd</sup> century AD, is highly unusual, as it was a joint human and canine burial. The burial of dogs in conjunction with inhumation burials is generally considered a Saxon practice (Appendix 14); ritual burials of dogs alone are known from the Iron Age to Roman periods in Britain, but there are few examples of inclusions of dogs with human inhumations. While it is possible that this represents a disinclination to separate the dead master from a faithful and beloved pet, it is not certain whether sentimental attachments between human and dog were formed or thought of in the same way by the Romans as for instance by the Victorians. Where joint human and dog burials have been encountered, the burials have usually been of infants, and the inclusion of the dog may have had a ritual purpose, to protect and escort the soul of the deceased on its journey to the afterlife: the presence of the dog here may indicate that this individual was considered to merit additional support and protection, either because he was of high status or was not competent to look after himself (Appendix 13). The burial of a person of potential high social standing on the site may also be relevant to its proximity to the villa.

Evidence for Saxon and early medieval activity was extremely sparse on the site, being represented only by a few potsherds that were unlikely to have been in their original place of deposition and a possible grave cut containing a small assemblage of undated human bone that was probably associated with the Saxon cemetery previously encountered in Area B. The Minster School excavation on the opposite side of Church Street also recorded a hiatus in occupation during this period, with only funerary activity being recorded, which was confined to the western side of the site, furthest from the Potwell Dyke. This was speculatively attributed to a deliberate withdrawal from marginal land at a time when sea levels are known to have risen and wetland encroached on land that had temporarily become habitable and cultivable during the Roman period (Savage and Sleep, 2015): as both sites are bordered to the east by the Potwell Dyke, it is possible that the Platts Orchard site suffered the same effect, although the few late Saxon sherds retrieved here suggest that the limited activity associated with this period took place in Area A1, on the eastern side of the site (Appendix 5).

The site appears to have been reoccupied in the medieval period, and the channel reopened slightly to the north of its earlier course, although there was no evidence of a network of subsidiary drains such as the Roman channel displayed. The presence of a well indicates habitation on or near the site, but the features that could be ascribed to this period were too few and scattered to present a coherent picture of any activity taking place at this time. Reoccupation in the late to post-medieval period appears to have been more vigorous, with deep ditches and large pits, from which substantial finds assemblages and palaeoenvironmental deposits were retrieved, suggesting that the area was being more fully utilised. The faunal assemblage from the post-medieval deposits presents more than the common domestic species, possibly suggesting that the diet of the inhabitants was supplemented by fish, fowl and the hunting of wild species; the inclusion of several species of deer, rabbit and even cetacean suggests that the site enjoyed a relatively rich diet, which may suggest a higher status of living during these periods (Appendix 14). The presence of fig

seeds in an environmental sample from pit **404/433** also indicates sufficient wealth to grow or import exotic fruit (Appendix 17). It seems likely that these indications of a well-to-do lifestyle are associated with Southwell Minster, which is known to have received visits from wealthy and important personages throughout the Middle Ages and into the post-medieval period, some of high enough status to have been accompanied by considerable retinues, all of whom would have required provisioning and accommodation in the immediate neighbourhood; they may also be associated with the Archbishop of York's palace, located on the south side of the Minster and built in the 14<sup>th</sup> and 15<sup>th</sup> centuries.

## 9.0 Effectiveness of Methodology

The methodology employed during the scheme of archaeological mitigation was effective in ascertaining the presence, scale and nature of archaeological remains on the site, and in preserving the remains by record prior to the impacts of construction work.

## 10.0 Acknowledgements

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## 11.0 Site Archive

There is currently no appointed museum of record for Newark and Sherwood District. Following the completion of the full report, the ordered and indexed project archive will remain in the custody of PCAS until transference to a suitable receiving museum can be arranged.

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