University of Leicester

Archaeological Services

An archaeological investigation by trial trenching at Grace Dieu Priory Pond, Belton, Leicestershire

(SK 434 182)

Mathew Morris

ULAS Report No 2014-155

An archaeological investigation by trial trenching at Grace Dieu Priory Pond, Belton, Leicestershire

(SK 434 182)

Mathew Morris

With contributions from Nicholas J. Cooper

For: Friends of Grace Dieu Priory

Scheduled Monument No. 17074 [SMC Case No. S00086043]

Approved by:

Signed:

Date: 2 September 2014

Name: R. J. Buckley

University of Leicester

Archaeological Services

University Rd., Leicester, LE1 7RH

Tel: (0116) 2522848 Fax: (0116) 2522614

ULAS Report No 2014-155

X.A106.2014

CONTENTS

Summary 1
Introduction 1
Site Location, Geology and Topography 1
Archaeological and Historical Background 2
Context of the Project 3
Archaeological Objectives 3
Methodology 4
Results 6
Trench A1 6
Trench A2 7
Trench B1 9
Trench B2 10
Finds 11
Introduction 11
Methodology 11
Results 11
Discussion 12
Archive 13
Publication 13
Acknowledgements 13
Bibliography 13

FIGURES

Figure 1: Location Plans with project area highlighted 2
Figure 2: Photos showing the area of work. Left: the site of trenches A1 and A2, looking west. Right: the site of trench B2, looking south 4
Figure 3: Grace Dieu priory pond and outfalls A & B east of priory ruins (6). 4
Figure 4: Plan of the pond bank showing the four areas of investigation. 5
Figure 5: Plan of Trench A1 6
Figure 6: Left: Trench A1, looking west. Right: Brickwork (12) in Trench A1, looking north 7
Figure 7: Plan of Trench A2 7
Figure 8: Left: Trench A2, looking west. Right: Trench A2, looking east 8
Figure 9: Plan of Trench B1 8
Figure 10: Left: Trench B1, looking east. Right: Trench B1, looking north-east 9
Figure 11: Left: Trench B2, looking west. Right: Trench B2, looking south 9
Figure 12: Plan of Trench B2 10
Figure 13: Wall (21) in Trench B2, looking west 11

TABLES

Table 1: Medieval and later pottery and other finds from Grace Dieu Priory 12
Table 2: Summary of OASIS information 13

An archaeological investigation by trial trenching at Grace Dieu Priory Pond, Belton, Leicestershire (SK 434 182)

Mathew Morris

Summary

An archaeological investigation by trial trenching was carried out at Grace Dieu Priory Pond, Belton, Leicestershire (SK 434 182) by University of Leicester Archaeological Services (ULAS) between 14-22 July, 2014. Work was undertaken for the Friends of Grace Dieu Priory prior to planned repairs to a medieval fish pond and associated works connected with the installation of a spillway at a second location in order to regulate water levels. Scheduled Monument consent was granted for the excavation of 40 square metres of the pond's northern retaining bank (case no. S00086043). This was excavated as four 5m x 2m trenches placed to answer specific questions about two suspected historic outfalls (A and B) believed to discharge beyond the pond bank into two ditches to the north.

Excavations identified a complex sequence of development inside the pond bank with a possible medieval core built up into the present earthwork in the post-medieval period. Inside the pond, deposits of freshwater mussels covering the pond lining may be the remains of medieval mussel beds whilst a possible medieval building was tentatively identified buried beneath the north edge of the earthwork. Overall, the pond bank appeared largely intact and in good condition and water loss from the pond was apparently occuring beneath the bank, not through an old culvert as previously suspected, but by exploiting sand and gravel beds beneath the pond and weaknesses in the internal structure of the pond bank, notably the unbonded foundation of a wall which is now acting as a new spring.

The archive will be held by Leicestershire Museum Service under the accession number X.A106.2014.

Introduction

In July 2014, University of Leicester Archaeological Services (ULAS) carried out an archaeological investigation at the ruins of Grace Dieu Priory, Belton, Leicestershire (SK 434 182 - Figure 1). The work was undertaken for the Friends of Grace Dieu Priory Trust prior to planned repairs to a medieval fish pond and associated works connected with the installation of a spillway at a second location in order to regulate water levels.

Archaeological investigation, in the form of archaeological trial trenching and recording of structures to an extent that form and function can be interpreted and a repair strategy devised, was requested by the Inspector of Ancient Monuments, English Heritage, as advisor to the Secretary of State for Culture, Media and Sport (Scheduled Monument Consent case no. S00086043).

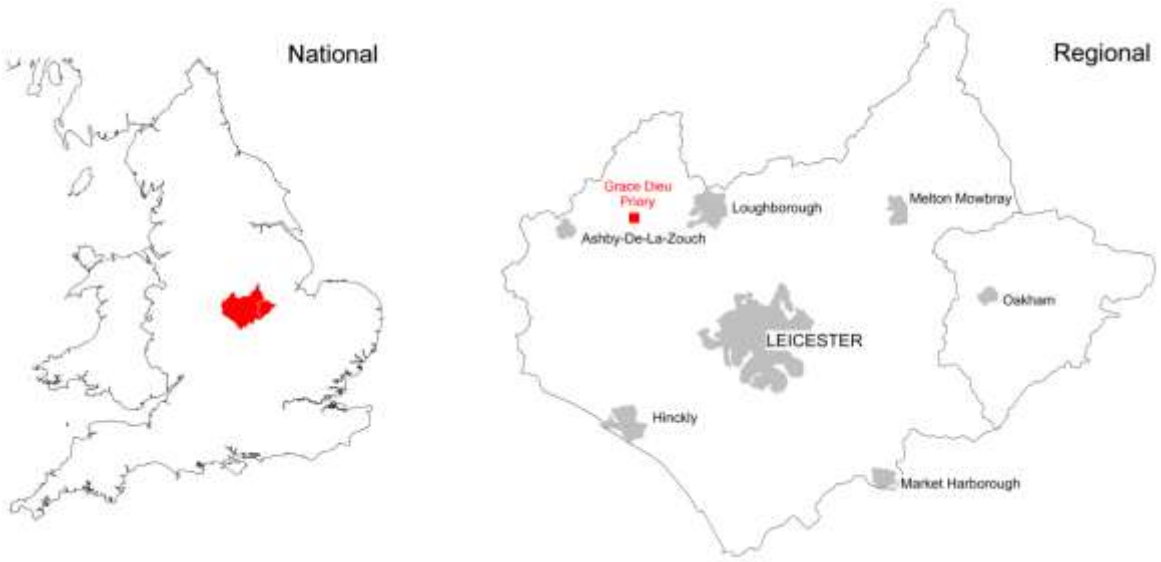
Archaeological work was carried out between 14-22 July, 2014 by staff of ULAS. This report presents the final results of the archaeological investigation.

Site Location, Geology and Topography

The ruins of Grace Dieu Priory lie in the parish of Belton in North-West Leicestershire, approximately 3 miles north of Coalville and 6 miles west of Loughborough. The ruins lie at the southern end of the parish, south of Ashby Road (A512) close to the village of Thringstone (Figure 1).

The area of work, a large pond which is thought to have been in use since the priory's foundation in AD 1239, is located immediately south-west of the priory ruins at *c.*85m aOD. Land rises gently in all directions around the pond except the north-east, where ground drops gradually away along the line of the Grace Dieu Brook which passes along the pond's western side.

The British Geological Survey shows that underlying the pond is the northern extremity of a small limestone inlier of the Carboniferous Ticknall Limestone Formation largely surrounded by sandstone of the Triassic Shepshed Sandstone Member. Noted to the west of the pond, along the line of the Grace Dieu Brook, are superficial deposits of alluvium (clay, silt, sand and gravel) (BGS OpenGeoscience).



Local

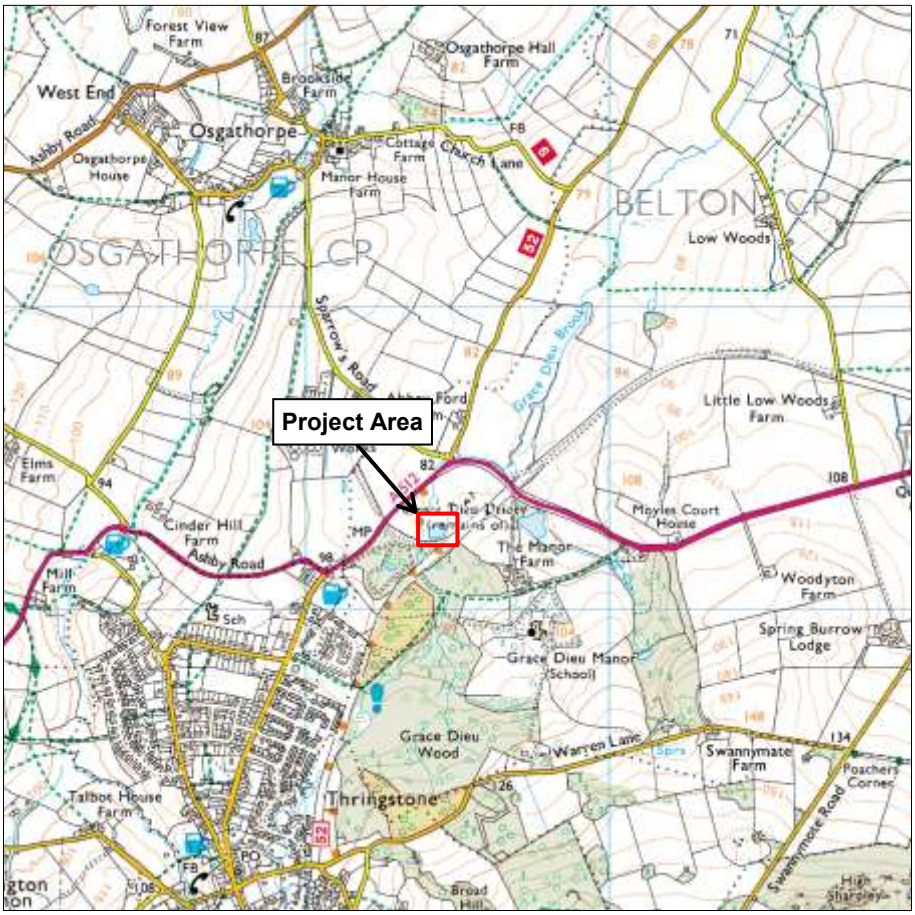


Figure 1: Location Plans with project area highlighted

Archaeological and Historical Background

Grace Dieu Priory with two ponds and a fishpond has statutory protection as a Scheduled Monument (No. 17074) whilst the ruins of the priory are also a Grade II listed building. The Scheduled Monument entry describes the priory's significance:

> *The Priory at Grace Dieu is one of only two nunneries in Leicestershire. Its buildings survive reasonably well and are accompanied by an extensive range of earthworks and*

buried deposits. The surviving remains illustrate how it was converted into a Tudor mansion after the Dissolution.

Grace Dieu Priory was an Augustinian nunnery which later became a Tudor mansion. It includes extensive ruins of the priory buildings, which are a Grade II listed building, surrounded by a complex of earthworks. These include two ponds, a fishpond, and a substantial section of boundary ditch and wall situated alongside the Grace Dieu Brook running on the western side of the site.

The priory buildings occupy an area of 90m x 50m, the ruined walls of which stand to an average height of 8m-10m. The cloister measures roughly 25m square and has a large arch leading into the chapter house which measures 14m x 8m and is located to the east with a dorter (dormitory) adjoining it to the south. A kitchen and prominent 16th century chimney lie to the west of the cloister. The aisleless church measuring 60m x 10m lay to the north and fragments of the west porch, tower, nave and chancel remain upstanding. To the south-west of the buildings is a large, roughly square, embanked pond measuring about 75m across and 2m-3m deep, part of which still contains water. West of the pond, on the opposite bank of the Grace Dieu Brook, are the truncated earthworks of a further pond defining a roughly triangular area extending for approximately 50m from the brook. Some 50m to the north of the priory is a crescent-shaped fishpond measuring 55m x 20m and 1.5m deep containing three islands. Beyond this is a large boundary ditch 10m wide and over 2m deep containing an inner bank. Several sections of the boundary wall of the priory, about 1m wide, are situated on the eastern bank of the Grace Dieu Brook.

The Priory was founded between 1239 and 1242 by Roesia de Verdun. In 1377 there were 16 nuns and a hospital for 12 poor people, as yet unlocated. At the Dissolution it was converted into a Tudor mansion by John Beaumont at which time many hearths were added. Most of the buildings were pulled down by Sir Ambrose Phillips in 1696. Extensive ruins are shown on an engraving by Buck of 1730. An archaeological survey, including some test pits, was carried out by the Loughborough and District Archaeological Society in 1967.

The site today occupies a piece of land that was truncated on the south side by the former Charnwood Forest Canal which was later itself partly overlaid by the now disused Coalville-Loughborough railway.

Context of the Project

The proposed development is for the restoration of a medieval fish pond associated with the priory and manor house at Grace Dieu. The Friends of Grace Dieu Priory Trust are keen to explore options to maximise the potential of the site for the benefit of future generations. One such aspect is the study and sympathetic restoration of hydrological features which were once an integral part of the priory and later manor house.

The focus of the project, a large pond which is thought to have been in use since the priory's foundation in AD 1239, is located immediately south-west of the priory ruins. The pond broadly forms a parallelogram, measuring approximately 100m x 60m. It is partly contained by a substantial earth bank to the north and west and is dug into rising ground to the south and east. Evidence suggests that it may have originally formed part of a clean water supply for downstream fishponds. However, it has been subject to several phases of use since the priory's dissolution, most recently as a possible head of water for a nearby mill (SWCM 2014). Today it suffers from low water levels and is reverting to soil and scrub.

Hydrological research conducted during winter 2013 suggests that water is being lost from an historic outfall which apparently breached during a flood in 2002, destroying parts of the pond's northern retaining bank (SCWM 2014). Works are needed to repair this structure to retain water inside the pond, and also to install a spillway at a second location in order to regulate water levels.

Due to the site's statutory protection, archaeological support is needed to excavate and record these structures, such that at the same time the form and function can be interpreted and a repair strategy can be devised.

Archaeological Objectives

The principle aims of the archaeological excavation were:

- To identify the presence/absence of archaeological deposits
- To establish the character, extent and date range for any archaeological deposits to be affected by the prosed ground works.

- To record any archaeological deposits to be affected by the ground works.
- To produce an archive and report of any results.

All archaeological work will be considered in light of the following East Midlands Research Agenda and Strategy topics (Knight *et al.* 2012):

- **HIGH MEDIEVAL (1066-1485):** *Religion*, 7.5.2. Can we discern significant differences in the planning, economy and landscape impart of the different monastic orders? *The agrarian landscape and food-producing economy, 7.7.5*. What may fish bones and other environmental data contribute to studies of the exploitation and distribution of freshwater and marine fish?
- **POST-MEDIEVAL (1485-1750):** *Ecclesiastical structures, estates and burials, 8.6.1*. What was the impact of the Reformation upon ecclesiastical buildings and monastic estates?

Figure 2: Photos showing the area of work. Left: the site of trenches A1 and A2, looking west. Right: the site of trench B2, looking south

Figure 3: Grace Dieu priory pond and outfalls A & B east of priory ruins (6).

Methodology

Scheduled Monument consent has been granted for the excavation of 40 square metres of the pond's northern retaining bank (case no. S00086043). This was excavated as four 5m x 2m trenches placed to answer specific questions about two suspected historic outfalls (A and B) believed to discharge beyond the pond bank into two ditches to the north (Figure 3) (Kipling & Buckley 2014).

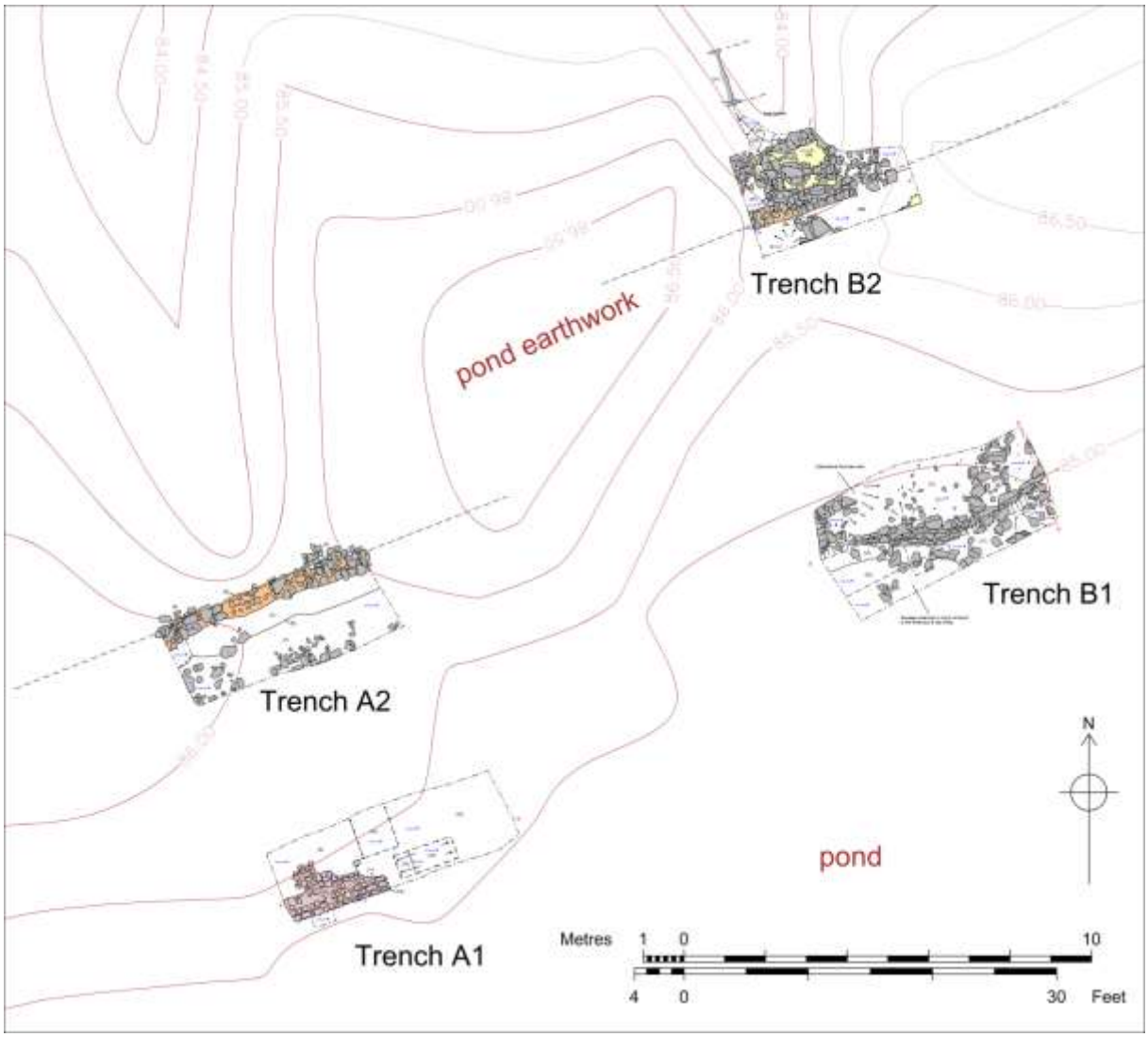


Figure 4: Plan of the pond bank showing the four areas of investigation.

- **Trench A1** was placed to expose the southern end of a brick and stone structure which was partly exposed within the pond area, and was suspected to have channelled water through the bank to the north.
- **Trench A2** was placed to expose the construction and condition of the north face of the pond bank at outfall A, and also to allow for some excavation at the foot of the bank to expose the possible presence of any structures relating to water management.
- **Trench B1** was placed to identify a subsurface feature identified during a GPR survey which was suspected to be the cause of water leakage from the pond (SWCM 2014).
- **Trench B2** was placed to expose the construction and condition of the north face of the pond bank at outfall **A**, and also to allow for some excavation at the foot of the bank to expose the possible presence of any structures relating to water management.

Initial work was carried out using a mini-360° mechanical digger using a *c.*1.6m and a *c.*0.6m wide toothless ditching bucket. Substrata deposits were removed by hand in level spits under continuous archaeological supervision down to the uppermost archaeological deposits or the natural substratum, depending on which was reached first, or to a depth which would answer the above objectives without unduly damaging the scheduled monument.

Archaeological deposits encountered were recorded and excavated using standard procedures as outlined in the ULAS recording manual (Beamish 2007), as appropriate to the investigation. Individual descriptions of all archaeological strata and features excavated or exposed was entered onto prepared pro-forma recording sheets where necessary. Plans/sections were drawn at appropriate scales and tied into the Ordnance Survey National Grid. A photographic record of the excavation was prepared, illustrating in both detail and general context the principal features and finds discovered. Colour digital and 35mm black and white photographs were taken throughout the excavation. The photographic record also included 'working shots' to illustrate more generally the nature of the archaeological operation mounted.

All work followed the approved written scheme of investigation (Kipling 2014) and the Institute for Archaeologists (IfA) *Code of Conduct* and adhered to their *Standard and Guidance for Archaeological Excavation* (2008) and the *Guidelines for Archaeological Work in Leicestershire and Rutland* (LMARS).

Results

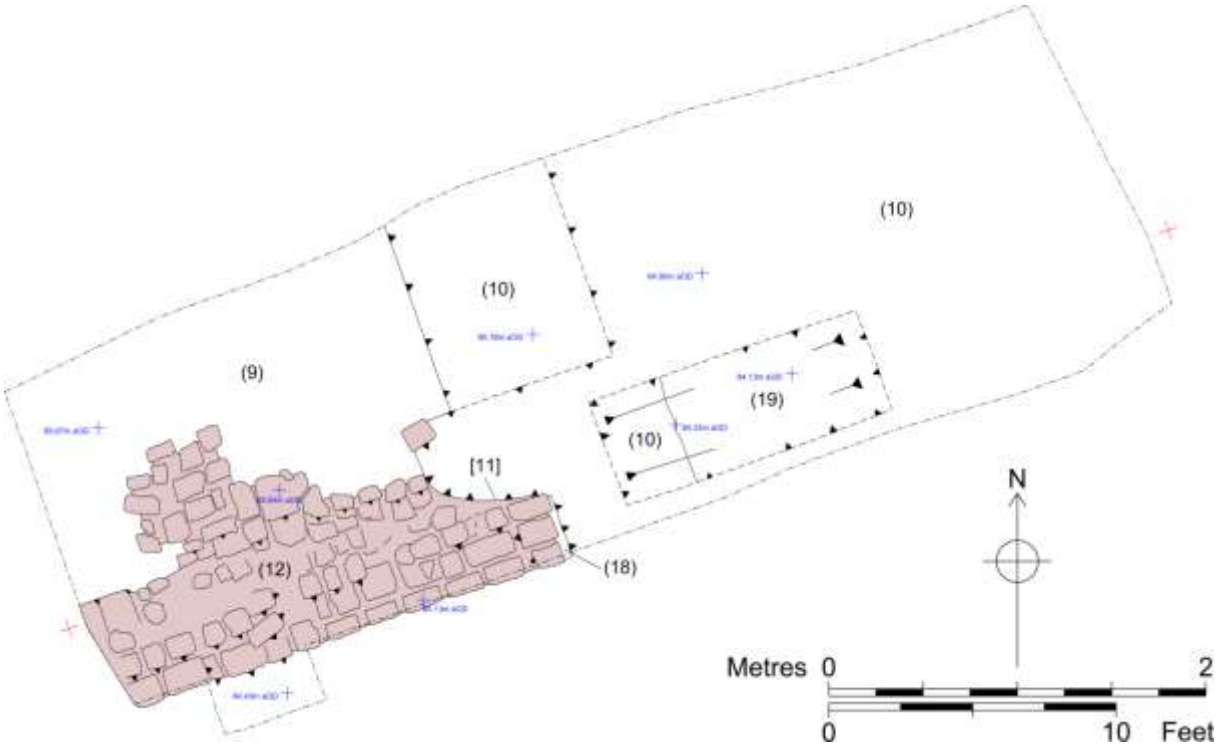


Figure 5: Plan of Trench A1

Trench A1

Trench A1 (Figure 5 & Figure 6), orientated broadly north-east to south-west, measured *c.*5.92m x *c.*2m (11.54 sq m) - the additional 1.54 sq m being opened due to soil displacement from root disturbance. Approximately 0.2m of turf and dark greyish-brown sandy-loam topsoil **(8)** was removed from across the trench by mechanical digger, exposing a *c.*0.1m thick layer of compacted greyish-brown silty-sand and gravel **(9)** overlying brickwork **(12)** in the south-western half of the trench. This brickwork was eroding out of the southern slope of the pond bank and had previously been observed during a site visit in autumn 2013 (SWCM 2014) when it was thought to be a potential culverted sluice or a brick-lined channel.

On excavation, **(12)** proved to form a large platform of brickwork built into or against the pond bank (Figure 6). The bricks measured *c.*240mm x *c.*120mm x *c.*90mm, typical of handmade late 19th-century 'Imperial' bricks, and were laid in at least sixteen courses. The platform was orientated north-east to south-west, parallel with the pond bank, and measured at least *c.*2.26m in length by *c.*1.5m, continuing beyond the trench to the south-west but appearing to stop within the trench to the north-east where the brickwork butted up against greenish-brown sandy-clay **(18)**. The platform's core was roughly built and only partially bonded with lime mortar, also incorporating some sandstone and slate, but its south-eastern side, along the pond edge, the platform was once neatly faced, most likely using a simple 'stretcher bond' although the brickwork is now too badly damaged from bank erosion and root displacement to make this certain. No evidence was found to suggest that this platform was associated with water management and it seems more likely that it was constructed to reinforce the pond bank.

Erosion of this part of the bank may have been an ongoing issue. The north-eastern end of brickwork **(12)** was truncated by a large irregular cut **[11]** filled with layers of poorly-sorted sand and gravel **(10)**. This appeared to have partially worked behind the platform's facing brickwork to remove part of its core before being filled with sand and gravel, which may have been imported to reinstate the pond bank. The gravel was *c.*1.34m thick, beneath which was firm greyish-pink clay **(19)** – seen at the base of a machined slot through the gravel – which is probably pond lining similar to **(16)** in Trench B1.

Figure 6: Left: Trench A1, looking west. Right: Brickwork (12) in Trench A1, looking north

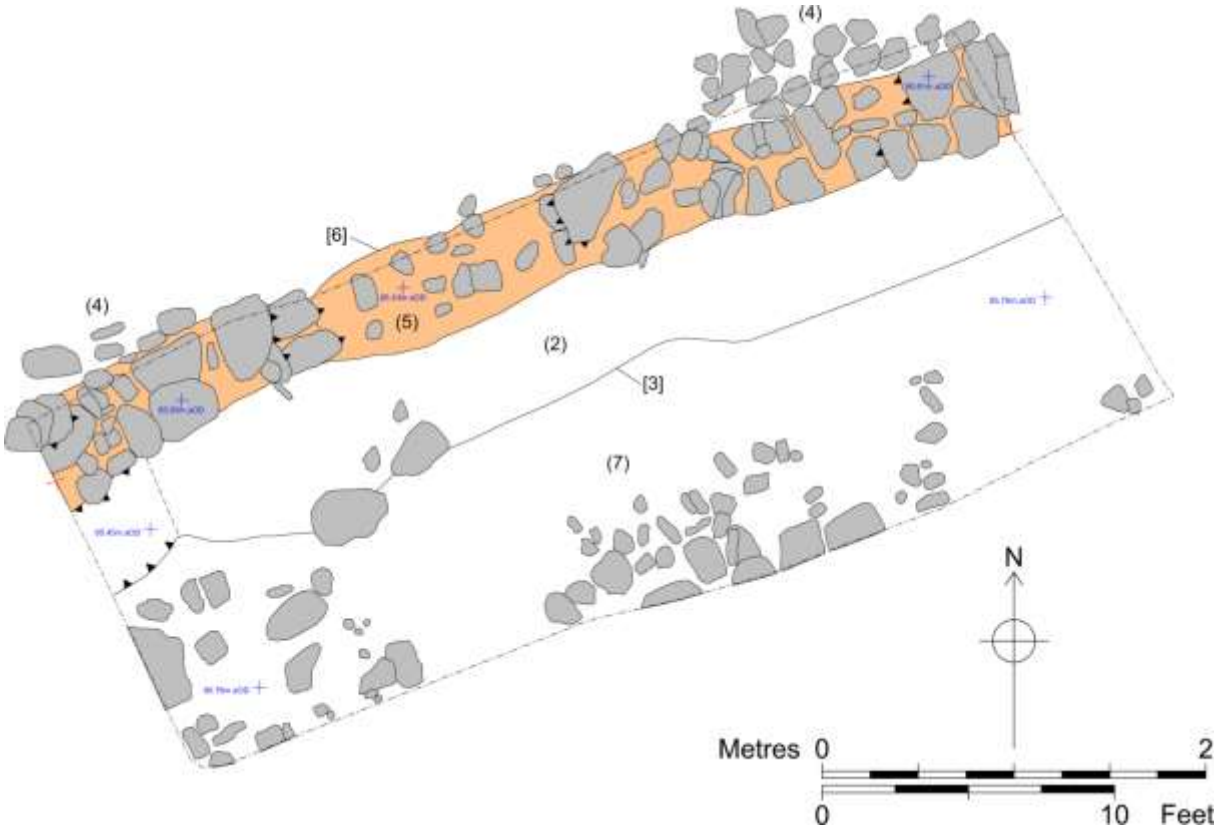


Figure 7: Plan of Trench A2

Trench A2

Trench A2 (Figure 7 & Figure 8), orientated broadly north-east to south-west, measured *c.*5.3m x *c.*2.2m (11.65 sq m) - the additional 1.65 sq m being opened due to soil displacement from root disturbance. Approximately 0.16m of turf and dark greyish-brown sandy-loam topsoil **(1)** was removed from across the trench by mechanical digger, exposing pond bank material **(7)** on the southern side of the trench. This was reddish-brown sandy-clay mixed with abundant quantities of large granite stones, some with pale yellow mortar still adhering to them suggesting that they are recycled building rubble, perhaps from nearby priory buildings.

Built along the northern apex of the bank, on a north-east to south-west orientation was a narrow stone wall **(5)**. This extended beyond the extent of the trench, was *c.*0.4m wide and still survived to a height of *c.*0.6m, with some of its upper masonry partially protruding and exposed through topsoil **(1)**. The wall was constructed of roughly finished granite laid in crude courses and bound with pinkish-red sandy mortar. Butting up against its north face was a mixed deposit of loose building rubble and topsoil **(4)**, forming the northern slope of the pond bank; whilst cut down the wall's southern face was a deep linear trench **[3]** filled with greenish-brown sandy-clay **(2)**. This was *c.*0.4m wide and over *c.*0.75m deep and also truncated bank material **(7)** leaving the relationship between wall **(5)** and bank **(7)** unknown. Wall **(5)** had suffered badly from erosion of the pond bank

within the trench area, making it difficult to determine what it may have been originally built for but in section clay-filled trench **[3]** appeared to post-date it, perhaps representing a later attempt to reinforce or waterproof the wall. No clear evidence of structures associated with water management was found in this trench.

Figure 8: Left: Trench A2, looking west. Right: Trench A2, looking east

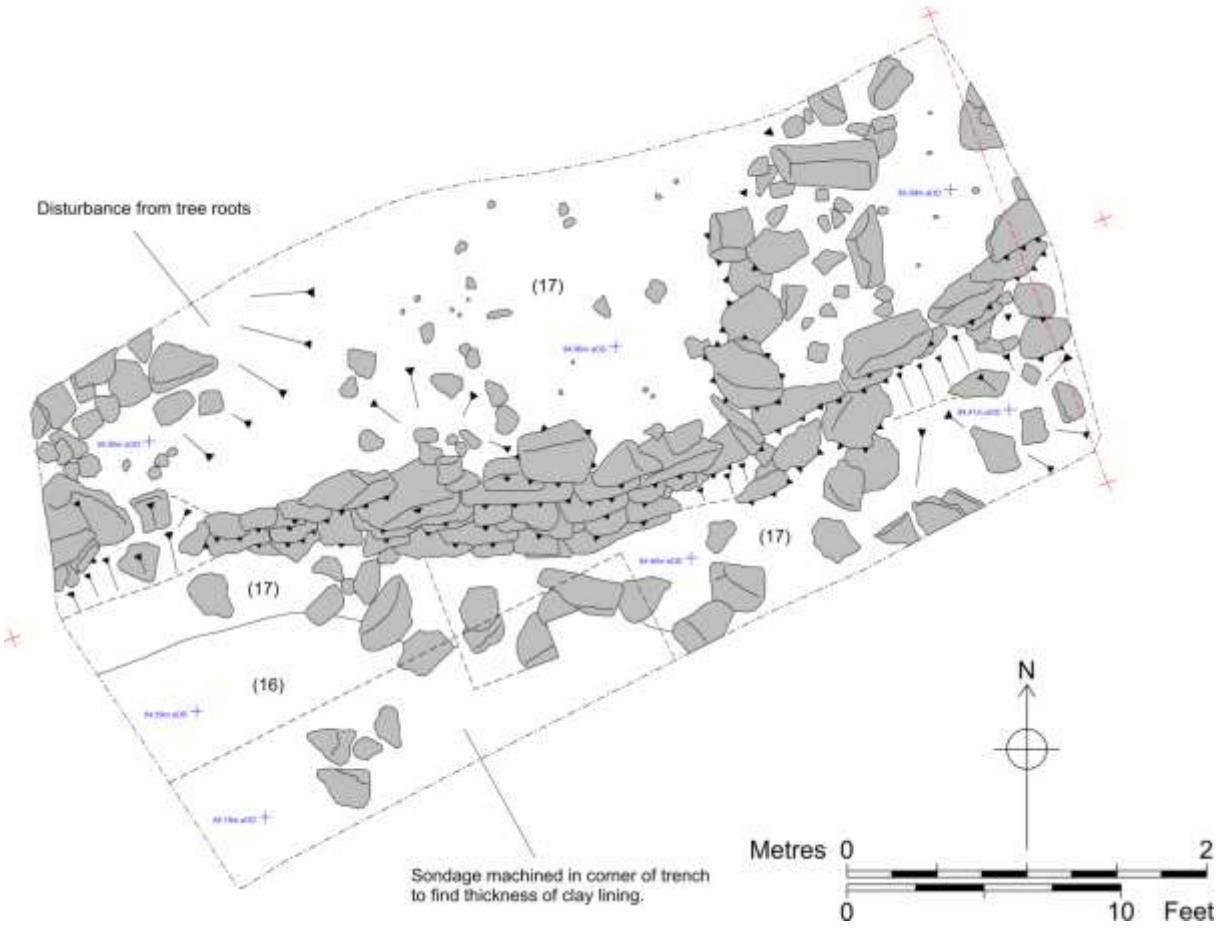


Figure 9: Plan of Trench B1

Trench B1

Trench B1 (Figure 9 & Figure 10), orientated broadly north-east to south-west, measured *c.*5.76m x *c.*2.99m (15.78 sq m) – the additional 5.78 sq m being partially due to soil displacement from removal of a tree stump and roots and partially due to an additional machined sondage on the pond edge to search for a potential subsurface culvert which was thought to be the cause of water lose from the pond.

Approximately 0.14m of turf and dark grey silt topsoil **(13)** and up to *c.*0.18m of dark reddish-brown sandy-silt subsoil **(14)** was removed from across the trench by mechanical digger, exposing the base of the pond bank and the edge of the pond lining.

The exposed area of bank in Trench B1 **(17)** showed it to be a substantial east-west orientated linear earthwork of dark greyish-pink silty-clay mixed with frequent pebbles and large rocks (very similar to bank material **(7)** recorded in Trench A2). The bank sloped down from north to south, loosing *c.*0.77m of height across the *c.*2m width of the trench. Much of this was lost in the centre of the trench where a near vertical break of slope was revetted with stonework, presumably representing the pond edge as the top of the stonework is broadly comparable with the modern pond level. The revetment was constructed from clay-bonded granite but also incorporated small quantities of sandstone, limestone and slate. In places the revetment was little more than a kerb along the top of the break in slope but in the centre of the trench it was built up in at least six rough courses of stonework creating a more solid facing. Notable, no bricks were found in bank material **(17)** and there was no evidence that the stone was recycled (no adhering mortar).

Covering the bank material at the base of the revetment was a thick layer of dark greyish-pink clay **(16)** which appeared to be pond lining. Impressed into the surface of the lining was large quantities of freshwater mussel shells which were covered with a thin layer of greyish-orange clayey-silt **(15)** mixed with domestic refuse (pottery, bone, charcoal). This was sealed beneath subsoil **(14)** and was only present 'inside' the pond along the southern edge of the trench.

A sondage cut down through the clay lining and pond bank in the south-west corner of Trench B1 discovered that there was *c.*0.4m of clay covering water-saturated alluvial sand and gravel **(18)**. Little could be recorded successfully in this sondage as it flooded as soon as the clay was breached.

Figure 10: Left: Trench B1, looking east. Right: Trench B1, looking north-east

Figure 11: Left: Trench B2, looking west. Right: Trench B2, looking south

Figure 12: Plan of Trench B2

Trench B2

Trench B2 (Figure 11 & Figure 12), orientated broadly north-east to south-west, measured *c.*4.1m x >*c.*2.55m (14.52 sq m) – the additional 4.52 sq m being due to the clearing out and cleaning up of a large area of eroded bank north of the trench to better characterise the archaeological remains and search for a potential subsurface culvert which was thought to be the cause of water lose from the pond.

Approximately 0.1m of turf and dark grey silt topsoil **(27)** was removed from across the trench by mechanical digger, exposing the pond bank. Along the southern side of the trench, this was dark greyish-pink clay **(26)** mixed with occasional large stone fragments. Down the centre of the trench along the northern apex of the bank on a north-east to south-west orientation was a narrow stone wall **(25)**. This extended beyond the extent of the trench, was *c.*0.45m wide and still survived to a height of *c.*0.7m, with some of its upper masonry partially protruding and exposed through topsoil **(27)**. The wall was constructed of roughly finished granite laid in at least four crude courses and bound with pinkish-red sandy mortar. In places where the wall had been damaged or dismantled, clay **(25)** appeared to lie on top of the stonework. Elsewhere, the relationship between wall and clay was unclear.

To the north, excavation of the bank revealed that wall **(25)** was built on a massive deposit of unbonded stone rubble **(24)**, *c.*1.89m thick, predominately comprised of granite with small quantities of slate and sandstone mixed in too. This was retained behind the remains of a substantial stone wall **(21)** at the foot of the bank (Figure 13). In section, this was *c.*1.2m wide constructed of granite bound with pale lime mortar. The wall was roughly

faced with a loose rubble core and appeared to be on a north-east to south-west orientation. Similar pale mortar also adhered to many of the stones in rubble **(24)**, suggesting that much of the material was recycled, whilst the rubble appeared to tip down to the south 'into' the bank, suggesting it could have fallen or been thrown down from wall **(21)**.

Beneath rubble **(24)** was a layer of orangeish-grey silty clay mixed with rubble **(23)** covering greyish-orange sandy clay **(22)**. The foundation trench was wall **(21)** appeared to have been dug into sandy-clay **(22)**. Investigation of the area north of the trench, adjacent to wall **(21)**, where the bank had suffered severe erosion damage found no evidence for a culvert running beneath the bank. Rather, the rubble-filled foundation trench for wall **(21)** was waterlogged and as soon as its top course was cleared of soil the trench flooded.

Figure 13: Wall (21) in Trench B2, looking west

Finds

Nicholas J. Cooper & Deborah Sawday

Introduction

A total of 21 sherds (879g) of medieval and later pottery were recovered from four contexts.

Methodology

The material was classified with reference to the Leicestershire County Museums Medieval Pottery Fabric Series (Davies and Sawday 1999 Table 30) and quantified by sherd count and weight by context.

Results

Context (14) contained 11 sherds comprising a range of medieval and later medieval wares including examples from Notttingham (NO2, NO3) of 13th-14th century date and Midland Purple (MP2 1375-1550) and Cistercian Ware (CW1 and 2) of the 15th-16th century from Ticknall. However, the group also contained a single handle in a stoneware (SW4) probably 18th century in date. A similar range of earlier fabrics came from (15), the bed of the pond which also includes freshwater mussels shells. Context (21) was the only one to produce only medieval pottery of the 13th or 14th century, a single sherd of unclassified Nottingham ware Context (27) contained only post-medieval and modern earthenwares (EA2) indicating an 17th or 18th-century date. The entire quantified record is presented below (Table 1)

Table 1: Medieval and later pottery and other finds from Grace Dieu Priory

Context	Fabrics	Sherds	Weight g	Date	Other finds
A2 (2)				modern	Iron fitting ?modern
B1 (14)	NO2, NO3, MS3 MP2, CW1, CW2, SW4	11	315	13th-18th+	Bone, tile, coal
B1 (15)	NO, MS3, MP1, MP2	4	320	13th-16th+	Horse teeth, young cattle femur, freshwater mussels
B2 (21)	NO	1	4	13th-14th	
B2 (27)	EA2	3	70	18th+	Bone, floor tile, glass
US	EA2	2	170	18th+	Roof slate, med ridge tile
Total		21	879		

Discussion

Excavation of four small trial trenches into the northern bank of the priory pond has added new information to the site's history and has provided answers to specific questions about water loss from the pond.

Whether the pond bank was originally built during the site's priory phase (*c.*1239-1538) still remains unclear. No dateable material was recovered from the earthwork itself. However, soil and refuse tipping down the bank's southern side into the pond – (15) in Trench B1 – did contain pottery ranging from the 13th to 16th century which may suggest a late medieval date of deposition, potentially during the last decades of the priory or its early use as a post-dissolution mansion. Extensive deposits of freshwater mussels mixed in with this refuse and impressed into the pond lining beneath are a sure sign of consumption of the bivalves on site and may be evidence of cultivation in the pond. Little documentary evidence for fish rearing at the priory survives. A late medieval Account Book (1414-1418) makes one reference to fish being sold from 'the millpond of the mill at Belton' (f.41) but does not list the types of freshwater fish being reared. There is one reference to mussels being bought for the prioress in 1418 (f.97v) (Johnson 2013).

The lowest portion of the pond bank – (17) in Trench B1 – could well be medieval in date. It was noticeable that this part of the earthwork did not incorporate recycled building material in contrast to the upper levels of the bank – (7) in Trench A2 and (24) (26) in Trench B2 – which were almost entirely constructed using recycled stonework. The substantial wall (21) seen at the base of the bank in Trench B2 may also be medieval. Its size, fabric and construction are comparable with the nearby priory walls and the adjacent priory precinct wall from which it appears to project easterly at right-angles. One sherd of 13th-14th century pottery was recovered from the wall core and this could be the remains of a medieval building lost beneath a later pond earthwork. One possible sequence of activity could be a small medieval pond earthwork and adjacent building built into a more substantial bank in the post-medieval period using recycled material from the priory. Pottery from the topsoil and subsoil covering the pond bank was predominantly 17th and 18th century, contemporary with the site's use as a post-dissolution mansion.

Wall (5) in Trench A2 and wall (25) in Trench B2 were both built into the top of the pond bank. Both were of comparable construction and width, and were running parallel with each other but were not on the same alignment – wall (5) being *c.*4m to the south of wall (25). Considering their similarity, it seems likely that they are contemporary but their purpose was not obviously apparent. Both use a much pinker mortar than seen in the priory walls suggesting that they are not contemporary with the priory and their late position in the stratigraphic sequence of the pond bank makes it likely that they are post-medieval in date, a wall running along the top of the pond bank, perhaps a garden feature associated with the post-medieval mansion.

Trench A1, placed to investigate a potential brick culvert or channel eroding out of the pond side of the bank found the brickwork to be the remains of a solid brick plinth projecting into the pond, perhaps the remains of a fishing platform or bank repair. Brickwork suggested it was of late 19th century date and it had no obvious water management role. Similarly, no evidence for a culvert or spillway was found in Trench A2.

Overall, the pond bank appeared largely intact and in good condition in Trenches B1 and B2. Although Ground Penetrating Radar (GPR) transects carried out inside the pond in the winter of 2013 tentatively identified a subsurface outfall (SWCM 2014), possibly a narrow culvert running beneath the bank at outfall B, the 2014 excavation discovered that water loss was apparently occuring beneath the bank, not through an old culvert, but by exploiting sand and gravel beds beneath the pond and weaknesses in the internal structure of the pond bank, notably the unbonded foundation of wall (21). Measurements of the water table in Trenches B1 and B2 showed that subsurface water beneath the pond was *c.*0.23m higher than surface water rising outside the pond to the north. Water pressure and damaged to the pond bank from flooding in 2002 has allowed a new gravity feed spring to rise through wall foundation (21) and form outside the pond.

Water level (m aOD)

Pond surface	85.76m aOD
Subsurface water, B2	84.98m aOD
Surface water, B1	85.21m aOD

Archive

The site archive consists of a site indices, context sheets, plan and section drawings, digital and monochrome photographs, pottery, bone, shell, building material and metalwork. The archive will be held by Leicestershire Museum Service under the accession number X.A106.2014.

Publication

Since 2004 ULAS has reported the results of all archaeological work to the *Online AccesS to the Index of archaeological investigationS* (OASIS) database held by the Archaeological Data Service (ADS) at the University of York (see Table 2).

Table 2: Summary of OASIS information

Project OASIS no.	universi1-189248
Project Name	Grace Dieu Priory Pond
Project Type	Trial Trenching
Project Manager	Richard Buckley
Project Supervisor	Mathew Morris
Previous/Future work	No/unknown
Current Land Use	Scheduled Ancient Monument
Development Type	Estate management
Reason for Investigation	Scheduled Monument Consent
Position in the Planning Process	N/A
Site Co-ordinates	SK 434 182
Start/end dates of field work	14-07-2014 to 22-07-2014
Archive Recipient	Leicestershire Museum Service
Study Area	40 sq m

A summary of the work will also be submitted for publication in the local archaeological journal, the *Transactions of the Leicestershire Archaeological and Historical Society*, in due course.

Acknowledgements

Thanks are extended to the all the Friends of Grace Dieu Priory for their assistance and enthusiasm throughout the project, and especially to John Dickinson who unlocked the site for us every morning. Thanks also to our digger driver, Peter Bagley from JoinPoint and to Jon Hillman of Soil, Water and Catchment Management for his advice and expertise.

Fieldwork was undertaken by Mathew Morris and Nathan Flavell with the voluntary assistance of Graham Coombs, the report was written by Mathew Morris, finds were process and examined by Heidi Addison, Nicholas Cooper and Deborah Sawday and the project was managed for ULAS by Richard Buckley.

Bibliography

BEAMISH, M. (ed.), 2007, *University of Leicester Archaeological Services Site Recording Manual*. Leicester: ULAS.

B.G.S OpenGeoscience, *Geology of Britain Viewer* [http://mapapps.bgs.ac.uk/geologyofbritain/home.html, accessed 01/09/14].

DAVIES, S. & SAWDAY, D., 1999, 'The post-Roman pottery and tile' in A. Connor and R. Buckley *Roman and Medieval Occupation at Causeway Lane, Leicester*. Leicester Archaeology Monograph **5**, 165-213. Leicester: University of Leicester School of Archaeological Studies.

JOHNSON, D. (trans.), 2013, *Grace Dieu Priory Leicestershire: the draft account book of the treasuresses, 1414-1418*. Ashby-de-la-Zouch: Ashby-de-la-Zouch Museum on behalf of the Grace Dieu Priory Trust.

KIPLING, R. & BUCKLEY, R., 2014, *Written scheme of investigation for archaeological work: Grace Dieu Priory Pond, Belton, Leicestershire*. Unpublished ULAS document **14-906**.

KNIGHT, D., VYNER, B. & ALLEN, C., 2012, *East Midlands Heritage: an Updated Research Agenda and Strategy for the Historic Environment of the East Midlands.* Nottingham Archaeology Monographs **6**.

SWCM, 2014, *Grace Dieu Priory Hydrological Study Final Report*. Newarke: Soil, Water and Catchment Management.

Mathew Morris MA AIFA
University of Leicester Archaeological Services (ULAS)
School of Archaeology and Ancient History
University of Leicester
University Road
Leicester LE1 7RH

Tel: 0116 252 2848
Fax: 0116 252 2614
Email: mlm9@leicester.ac.uk

04-09-2014

Contact Details

Richard Buckley or Patrick Clay
University of Leicester Archaeological Services (ULAS)
University of Leicester,
University Road,
Leicester LE1 7RH

T: +44 (0)116 252 2848
F: +44 (0)116 252 2614
E: ulas@le.ac.uk
W: www.le.ac.uk/ulas

REGISTERED ORGANISATION IfA

THE QUEEN'S ANNIVERSARY PRIZES FOR HIGHER AND FURTHER EDUCATION 2013

INVESTOR IN PEOPLE

University of Leicester

THE Awards Winner
2007, 2008, 2009, 2010, 2011, 2012, 2013