

SHUGBOROUGH WALLED GARDEN, STAFFORDSHIRE

Phase 1 Archaeological Watching Brief
Prepared for: Speller Metcalfe

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Appendix 01: Context Register

Status of report: FINAL

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The investigation was designed by Tim Malim (SLR). Fieldwork was undertaken by John Winfer.

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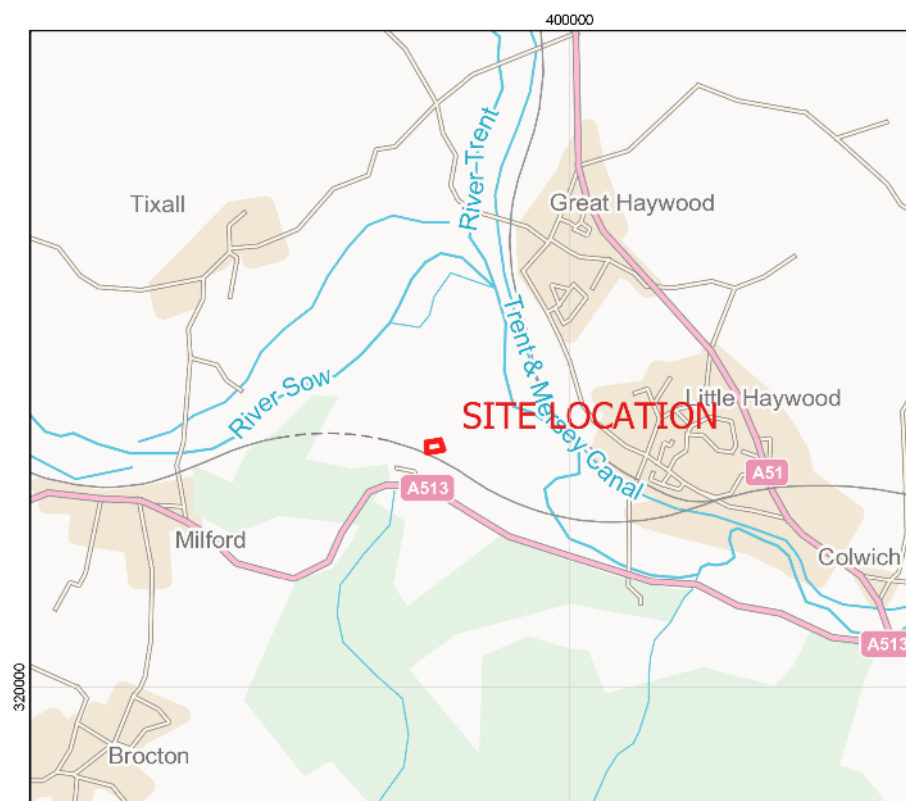
1.0 Introduction

1.1 Planning background

Listed Building Consent (Application No. 17/26873/LBC) was granted on 27th October 2017 by Stafford Borough Council for remediation works within the southern walled garden at the Shugborough Estate. In compliance with this consent to address Condition 3 SLR Consulting was commissioned by Speller Metcalfe (the Client) to produce a Written Scheme of Investigation for an archaeological programme to monitor the remediation works at the Grade II* listed building of the southern walled garden within the Shugborough Estate, Milford, ST18 0ST, itself a Grade I Registered Park and Garden, and within the Great Haywood and Shugborough Conservation Area (Figure 1-1). Staffordshire Council's Archaeological Advisor recommended that archaeological work was required, in the form of a watching brief monitoring programme to occur during the groundworks phase of remediation. This has been made a pre-commencement condition on listed building consent and planning permission for a programme of work to remediate the walled garden by removing the current contaminated soil to a depth of 500mm and replacing it with fresh topsoil. The proposed programme of work should comply with the CIFA Standard and Guidance for an Archaeological Watching Brief December 2014, and Staffordshire County Council's Specification for an Archaeological Strip, Map and Sample Exercise and an Archaeological Watching Brief August 2016.

No development approved by this permission shall commence until the applicant, or their agent or successors in title, has secured the implementation of a programme of archaeological work in accordance with a written scheme of investigation (WSI). This written scheme shall be approved in writing by the Local Planning Authority prior to the commencement of works.

Figure 1-1
Site Location



OpenData Mapping. Contains Ordnance Survey data © Crown copyright and database right 2018

This programme of mitigation work falls within the remit of the National Planning Policy Framework (NPPF; sections addressing archaeology and cultural heritage; DCLG 2012). The extent of permitted work is shown on Figure 1-2.

The remediation contractor's requirements which needed archaeological monitoring are being carried out in two phases. The first phase includes:

- Removal of the central spoil heap(s) within the southern walled garden
- Removal of the brick and timber lean-to buildings and other free-standing structures
- Replacement of unstable section of garden wall
- Identify extents of central dipping pond
- Soil testing

The fieldwork in this phase of works was carried out between 9th and 16th October 2018 in accordance with the Written Scheme of Investigation (WSI) previously produced by SLR Consulting and approved by the monitoring authority.¹

This document forms the report of the investigation and recording required by the Condition for the first phase of the works.

1.2 Location, topography and geology

The site lies 7km east of Stafford and is located within the southern part of the Shugborough estate, north of the A513 Lichfield Road and adjacent railway line (central point at approximately NGR SJ 99125 21586 (Figure 1). The surrounding land consists of a rectangular field to the east, an area of rough land bordering the railway to the south, access and visitor car parking to the west, and the northern walled garden (now restored) to the north. The Sherbrook has been canalised to cross the railway line and then run northwards past the western side of the walled garden.

The Park lies to the south of the confluence of the rivers Sow and Trent, and the underlying geology consists of sand and gravel terrace deposits. The natural geology is Sandstone of Kidderminster Formation.

1.3 Ground investigation

A report on ground conditions was produced in February 2017² which identified the following baseline situation:

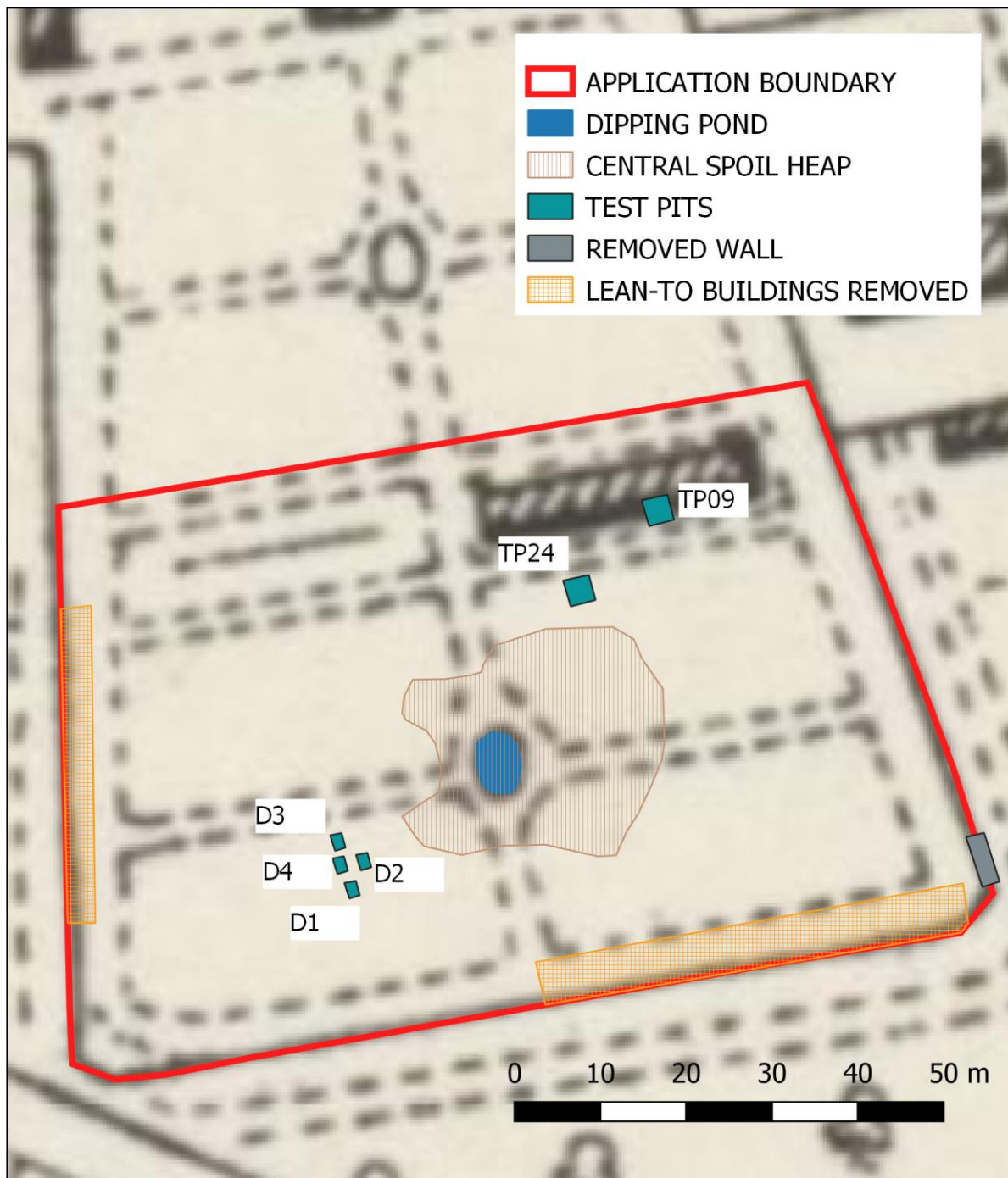
- Depth of overburden: entire surface of the site is covered with imported granular "hardstanding" (sandy clay gravel with low cobble content) made ground with an average depth of 0.30m and a maximum depth of 0.90m;
- Spoil heaps: there are two stockpiles on site. Both contain a large proportion of waste materials comprising metal, rubber, plastic, wood and brick. The stockpiles have been placed directly on the hardstanding gravel horizon recorded across the entire site;
- Contamination: assessment of the in-situ ground indicate that the deposits are unsuitable to be reused in the restoration works. The majority of the deposits are classified as a non-hazardous waste with two hot spots of hazardous material;
- Asbestos: present within the Museum Store and green house;
- Himalayan Balsam (HB): the soil within the walled garden is highly likely to contain HB seeds and therefore should be treated as contaminated; and

¹ SLR Consulting August 2018 *Shugborough Walled Garden, Staffordshire; Written Scheme of Investigation for an Archaeological Watching Brief*

² *Shugborough Estate, South Walled Garden: Risk Assessment Job No 5680, Entrust Property Services, February 2017 version 1*

- Redeposited natural: slightly gravelly sandy clay and rare cobbles beneath the “hardstanding” generally to a depth of 0.60m but locally to a maximum depth of >1.60m. this material represents a reworked/impacted natural clay, with base of material slowly merging in to the natural superficial deposit; and
- Natural geology: Sandstone of Kidderminster Formation was encountered in four locations between 0.90m and 1.30m.

Figure 1-2
Site showing with 1888 OS mapping showing areas of archaeological monitoring



Contains mapping Copyright National Library of Scotland 2018

1.4 Archaeological and historical background

A walled garden survey was undertaken in 1984 (Bates 1984) and various other assessments and surveys have been conducted over the years (see references below). Two previous phases of archaeological investigation have been carried out at the site or within close proximity, (both by Birmingham Archaeology) in 2005 and 2009.

Evaluation work carried out by Birmingham Archaeology in 2005 on the site of the new ticket office immediately west of the walled gardens confirmed the presence of structural remains to do with the western walled garden and also prehistoric occupation with well preserved middle Bronze Age ceramics of a type rarely found in the region. These were recovered from a feature sealed by alluvium (Halsted 2005, 10). The 2009 report included a desk-study which identified a background of prehistoric activity within the park, seen as cropmarks on aerial photography “*These appear to represent a double ring-ditch (SMR 04075), a further ring-ditch, enclosure and pit alignment (SMR 04612) and a trackway (SMR 04076). Further undated cropmarks represent a probable early field system and associated trackways (SMR 04074).*”

In relation to the walled garden the desk-study reported that “ the Walled Garden originated in 1805 forming part of extensive works at Shugborough by the architect Samuel Wyatt, undertaken under the patronage of Thomas Anson II. Anson had married Anne-Margaret Coke, daughter of the renowned agricultural reformer Thomas Coke of Holkham, Norfolk, in 1794 and it may be that this family connection had an influence on the horticultural developments undertaken at Shugborough.

The southern walled garden measures 92m west-east across the north, widening to 110m at the southern boundary, and 60m north-south, enclosing an area of c.0.6ha (Figure 2). The original surrounding walls and entranceways survive, although a variety of different brickwork and mortar suggests repairs and re-use of bricks has occurred in a number of locations. Within the northern wall details of the heating system and the brick stack are visible, including an iron ‘bin’ with slate capping set into the brickwork of the wall, presumably a ‘stoke hole’, while a number of loose bricks revealed the existence of wall heating voids or ducts. A late 19th-century glasshouse (the ‘Apricot House’) formerly backed onto the eastern section of the wall, c.32m long x 3m wide; a single lever mechanism for a longitudinal ridge vent, by Messenger and Co. of Loughborough, survives in the central part of the wall, while the fittings for further levers survive to the east and west.

Where visible, the eastern, southern and western walls were noted to comprise 14in. (1½ brick) brick-built walls (brick dimensions: 9¼ x 4½ x 3in.) standing c.3.5m (11½ ft) tall, in orange-red brick laid principally to Flemish stretcher bond with three courses of stretchers between Flemish courses, topped throughout by sandstone coping. At the south-eastern and southwestern corners, the bounding walls curve gently to meet the line of the southern wall.

The southern wall includes a c.2.80m (9ft) wide gateway flanked by dressed ashlar piers with chamfered quoins and low pyramidal capstones, located on the central north-south axis of the garden. At the southern end of the west wall, a secondary gateway, 4.7m (15½ ft.) wide, has been forced through the boundary wall, with plain jambs formed in rebuilt section of wall in purple brick.

Historic plans and photographs indicate that the southern garden was originally laid out in a similar fashion to that to the north, with quadrant planting beds defined by axial and perimeter pathways and a central dipping pool. None of these features survive at the surface within the garden, though the 2009 programme of archaeological trenching has revealed traces of both the dipping pool and the former path routes.

Although the enclosing walls still survive, archaeological evidence for buried remains produced variable results. Section 10.2.2 in the 2009 report stated that “*Structures in the southern annex garden are likely to be well preserved as none have been exposed in its current form. However, our understanding of survival of these structures is limited as the majority are still located below ground and further archaeological work would be required to further our understanding.*” However, some trenches (11 and 17 and test-pit 15) were excavated and the following text from section 7.4.8 of the report seems to contradict the previous statement “*Remains of the Apricot House appear to have been almost entirely removed and the suggestion is that floor surfaces and some*

internal structures could survive but the outline of the cill wall has been removed. The Nectarine House appears to be well preserved, but the exposure of the southern cill wall has led to collapse that may require remedial work." These two structures were of late Victorian construction and may have included imported materials and internal plinths to raise levels.

Excavation by Birmingham Archaeology in 2009 of the path routes in the southern walled garden revealed that the latest resurfaces survived in places. They were visible as a thin layer of crushed brick and stone in Trench 12, and in Trench 13 there was a similar rubble layer, which was lined by hand-made red bricks and the path was narrower than in the northern garden at 7'10" (2.4m). The earlier 19th century paths should survive buried beneath these Victorian or early 20th century resurfacings, as at least three phases have been identified by the 2009 investigation.

Trench 23 was sited to investigate the dipping pond. The line of the dipping pool in the southern walled garden was located as a single curvilinear course of bricks (2303) in its south-eastern corner at a depth of c.2m below the current ground level. It survives only as a single course of brick width, of unknown depth (it was not fully excavated). Examination of the size and alignment of the north dipping pool suggests that the remains uncovered relate to the internal elliptical brick-built element of the dipping pool. Stonework may also survive but was not found within Trench 23.

2.0 Aims, Objectives and Methodology

The project aim set out in the WSI for this phase of the works was:

- to investigate and record archaeological remains within the southern walled garden
- to assess significance and analyse the results of the investigation, interpret, report and disseminate the results at a standard proportional to their heritage significance

The objectives for this phase of the works were:

- Monitoring of the removal of spoil heaps and hard standing, foundations and lean-to structures to record sub-surface archaeological features;
- uncover extent of dipping pond and preserve;
- to record foundations for the Apricot House and other structures if encountered;
- to record and retain any historic architectural fragments that are recovered during the remediation programme;
- to recover and record significant metalwork of fixtures & fittings from the walled garden;
- to investigate and record archaeological remains that might pre-date the walled garden; and
- to report and interpret the results of the archaeological work to assist in restoration of the walled garden, disseminating knowledge as appropriate to both specialist and public audiences

2.1 Methodology

All fieldwork was carried out as outlined in the WSI for this work.³

The spoil heap removal was observed. A metal detector was not used due to the amount of modern metal pieces within the soil. The spoil was sifted through using a garden fork. The removal of the spoil heaps, the stripping to identify the extent of the dipping pond, and the excavation of test pits for soil testing were all carried out using a tracked excavator with a toothless bucket, under the supervision of an experienced archaeologist.

2.2 Monitoring

The Staffordshire County Council County Archaeologist (CA) and the National Trust have been advised of commencement and progress of the works.

2.3 Archive

An OASIS record has been set up under slrconsu1-331488. A copy of this report will be attached to the completed OASIS record. Deposition of the archive will depend on what is found; if artefacts relate specifically to Shugborough and the walled garden, then they will be retained and used by the National Trust for interpretation and public display at Shugborough.

³ SLR Consulting 2018 *Shugborough Walled Garden, Staffordshire; Archaeological Written Scheme of Investigation*

3.0 Results

The location of each aspect of the fieldwork carried out during this watching brief is shown on Figure 1-2.

3.1 Removal of central spoil heap

The central spoil heap was removed between 9th October and 15th October 2018. Spoil was moved by a tracked excavator with a toothless bucket to the south of the site where a haul road had been constructed to allow lorries to enter the site. The spoil was then deposited in the lorries by the tracked excavator. Door furniture, a tea pot and other metal objects of modern origin were recovered from the spoil.

Figure 3-1
Central spoil heap being removed looking south west



3.2 Removal of lean to structures

The removal of the lean-to structures took place on dates between 2th October and 12th October 2018. Supports attached to the surrounding garden wall were first cut to ensure no damage was done to the wall. The structures were then dismantled (Figure 5-2). No markings were observed on the wall behind any of the lean-to structures.

Figure 3-2
Removal of lean to structures at south east of site looking south east



3.3 Removal of unstable section of garden wall

The top ten courses of bricks in a section at the south east of the garden wall had to be taken down and rebuilt due to the wall leaning (Figure 5-3). This was carried out on 16th October 2018. The wall was topped with sandstone coping stones that measured 1.3m long by 0.45m wide and between 0.13m and 0.08m thick. The wall was three bricks thick. Below the coping stone were three courses of brick laid in a stretcher style. Below the top three courses the wall was constructed using a combination of the English Garden Wall and Flemish styles (Figure 5-4).

Figure 3-3
Area of garden wall after bricks taken down prior to rebuilding



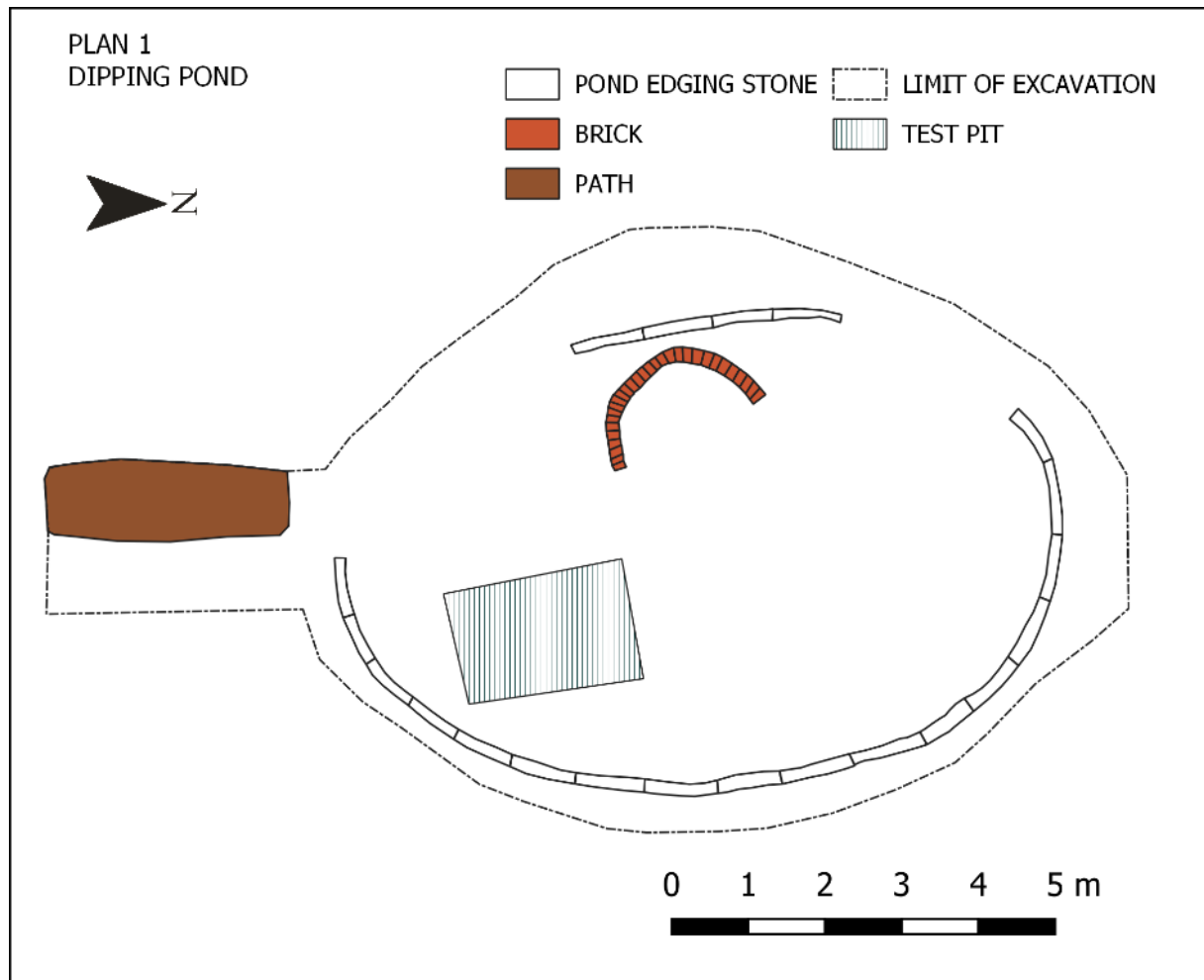
Figure 3-4
Section of wall garden



3.4 Identifying the extent of the dipping pond

The top of the central dipping pond was revealed using a tracked excavator with a flat ditching bucket on 15th October 2018 (Figures 5-5 and 5-6). It was identified at between 0.3m and 0.4m below the current ground surface (between 82.48 and 82.52m AOD)

Figure 3-5
Plan of dipping pond



The top of the outer wall of the pond is made up of rounded sandstone pieces measuring approximately 0.9m long by at least 0.15m wide. These are the same as those that line the extant pond in the northern walled garden. A semi-circular brick feature was identified at the western side of the dipping pond which may represent part of a fountain or other water feature (Figure 5-7). This had an internal diameter of 1.8m and was made up of bricks measuring 23cm x 12cm x 7.5cm. A large piece of metal identified at the centre of this feature did not appear to be related and sat within the made ground that filled it.

At least two portions of the top of the outer wall were missing in the western part of the pond. A test pit previously excavated by Birmingham Archaeology in 2009 was identified at the south-eastern end of the pond (Figure 5-5).

Figure 3-6
Dipping pond looking south



Figure 3-7
Brick feature at west of dipping pond, metal at centre of feature did not appear to be related



3.5 Soil testing test pits

The excavation of four soil testing pits (D1, D2, D3 and D4) was observed below and around a bunded diesel tank located towards the west of the site. Two further test pits (TP09 and TP24) were observed towards the north of the site.

In the three test pits excavated around the diesel tank red brown silt clay natural subsoil was observed between 0.5m and 0.6m below the current ground surface level (Figure 5-8). Dark grey silt clay containing occasional bits of rubble was observed in two of these test pits, above the natural subsoil, which may represent the original topsoil at the site. In each test pit a layer of crushed brick/ceramic was observed which may represent the remains of a path. This was between 0.05m and 0.2m thick and was covered by rubble and a layer of tarmac. The test pit excavated through the base of the diesel bund only identified the concrete and brickwork of the bund above the red brown silt clay natural subsoil.

Figure 3-8
Test pit D1 looking south east



Test pits TP09 and TP24 were both excavated to a depth of 0.5m below current ground level. In both test pit 0.4m of dark grey sandy silt was observed overlying the natural subsoil. In TP09 a brick wall was observed (Figure 5-9), orientated similarly to the garden wall to the north, made of bricks measuring 23cm x 11.25cm x 7.5cm. The wall was two bricks thick, appeared to be constructed using an English style bond and was held together with a lime mortar. It may be part of the Apricot House shown on 19th century OS mapping although it was not clear from the small area that was observed. No floor or other features were observed related to it. The wall was left *in situ* and re-covered with soil.

Figure 3-9
Trial Pit 9 showing wall looking east



4.0 Discussion and conclusion

Five pieces of work were observed during Phase 1 of the works at Shugborough walled gardens. The results are summarised below:

- A number of modern artefacts were recovered during the removal of the central spoil heap.
- The removal of the lean-to structures did not uncover any remains on the surrounding garden walls.
- The taking down and rebuilding of a small section of the top of the garden wall has enabled us to record how the wall was constructed.
- The dipping pond at the centre of the site was successfully identified. The fill of the pond was not removed to help preserve the integrity of the pond structure. A semi-circular brick feature may represent a water fountain or other feature. It stands slightly proud of the top of the pond's outer wall. A small section of path was also recorded to the south of the pond. The path appears to be constructed of crushed brick/ceramic and overlies the original topsoil on the site.
- Excavation of test pits around a former diesel bund identified further areas of path identical to that observed to the south of the dipping pond. A wall orientated similarly to the garden wall identified in TP24 may represent part of the Apricot House although this will be confirmed in Phase 2 of the works.

This interim report provides an overview of the findings from the Phase 1 work, but further work during Phase 2 should reveal more on the specific features of the garden layout, if these survive beneath the existing overburden.

APPENDIX 01

Context Register

Context No		Type	Fill of	Length (m)	Width (m)	Depth (m)	Description	Interpretation
1	D1	Deposit	N/A	Test pit	Test pit	0.1	Tarmac	Tarmac
2	D1	Deposit	N/A	Test pit	Test pit	0.2	Crushed brick/ceramic	Path
3	D1	Deposit	N/A	Test pit	Test pit	0.2	Dark grey sandy clay occasional rubble	Topsoil
4	D1	Deposit	N/A	Test pit	Test pit	N/A	Red brown sandy silt	Natural subsoil
5	D2	Deposit	N/A	Test pit	Test pit	0.05	Dark brown silt clay	Imported topsoil
6	D2	Deposit	N/A	Test pit	Test pit	0.05	Tarmac	Tarmac
7	D2	Deposit	N/A	Test pit	Test pit	0.1	Crushed brick/ceramic	Path
8	D2	Deposit	N/A	Test pit	Test pit	0.4	Dark grey sandy clay occasional rubble	Topsoil
9	D2	Deposit	N/A	Test pit	Test pit	N/A	Red brown sandy silt	Natural subsoil
10	D3	Deposit	N/A	Test pit	Test pit	0.05	Dark brown silt clay	Imported topsoil
11	D3	Deposit	N/A	Test pit	Test pit	0.05	Gravel	Modern surface
12	D3	Deposit	N/A	Test pit	Test pit	0.02	Dark brown silt clay	Imported topsoil
13	D3	Deposit	N/A	Test pit	Test pit	0.05	Crushed brick/ceramic	Path
14	D3	Deposit	N/A	Test pit	Test pit	0.38	Dark grey sandy clay occasional rubble	Topsoil
15	D3	Deposit	N/A	Test pit	Test pit	N/A	Red brown sandy silt	Natural subsoil
16	D4	Deposit	N/A	Test pit	Test pit	0.4	Concrete/brickwork	Diesel bund
17	D4	Deposit	N/A	Test pit	Test pit	N/A	Red brown sandy silt	Natural subsoil
18	TP9	Deposit	N/A	Test pit	Test pit	0.4	Dark grey sandy silt	Topsoil
19	TP9	Deposit	N/A	Test pit	Test pit	N/A	Red brown sandy silt	Natural subsoil
20	TP9	Structure	N/A	Test pit	0.3	0.3	Concrete foundation of greenhouse	Foundation
21	TP9	Structure	N/A	Test pit	0.35	0.3+	Brick foundation. Bricks 23cm x 11.25cm x 7.5cm	Possible Apricot house wall

Context No		Type	Fill of	Length (m)	Width (m)	Depth (m)	Description	Interpretation
22	TP24	Deposit	N/A	Test pit	Test pit	0.4	Dark grey sandy silt	Topsoil
23	TP24	Deposit	N/A	Test pit	Test pit	N/A	Red brown sandy silt	Natural subsoil

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