STUDLEY ROYAL LAKE OUTLET WEIR AND CASCADE, FOUNTAINS ABBEY & STUDLEY ROYAL, NORTH YORKSHIRE.

REPORT ON A PROGRAMME OF ARCHAEOLOGICAL MITIGATION (LEVEL 1 BUILDING RECORDING AND WATCHING BRIEF)

OSA REPORT NO; OSA24WB20

September 2024

OSA

ON SITE ARCHÆOLOGY LTD

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Report Summary

REPORT NO: OSA24WB20

SITE NAME: Studley Lake Outflow Walls, Studley Park, Studley Roger,

North Yorkshire

NATIONAL GRID REFERENCE: SE 28176 69273

PLANNING REF. NOs: ZC23/01443/LB

ON BEHALF OF: National Trust

North Region Goddards

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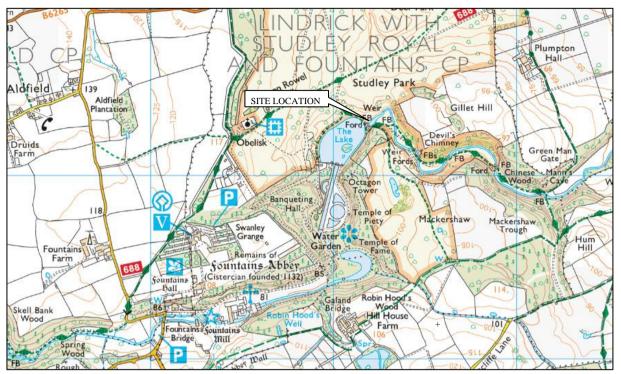
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1.0 Abstract

A two-staged archaeological investigation was undertaken by On-Site Archaeology Ltd during repairs to a section of the flanking walls of the weir and cascade outlet from the Studley Royal Water Garden lake. Initially the investigation comprised a Level 1 historic building survey of both the north and south walls in their pre-development form. Development works then consisted of stabilisation of the north bank through installation of gabion baskets to be dressed with existing stonework. At present there are no plans to repair the south wall in the near future.

The first stage of investigation comprised a programme of historic building recording that consisted of a Level 1 photographic survey of the north and south outflow walls. This was undertaken according to the "Understanding Historic Buildings: A Guide to Good Practice" (English Heritage 2016).

The second stage of investigation consisted of an archaeological Watching Brief that was carried out during the removal of a section of the north wall and excavation of the bank behind this to enable the installation of the gabion baskets.



Figure~1.~Site~Location~NGR~SE~28176~69273 Reproduced from the 2000 Ordnance Survey 1:25 000 maps with the permission of The Controller of Her Majesty's Stationery Office. © Crown copyright. OSA Licence No: AL 52132A0001

2.0 Site Location & Summary

Fountains Abbey & Studley Royal World Heritage Site, which is currently under the stewardship of the National Trust, lies approximately 4km to the southwest of the city of Ripon, North Yorkshire. The archaeological investigation is located at the northeast end of the lake as it outlets into the River Skell. The site is centred at National Grid Reference SE 28176 69273 (Figures 1 and 2)

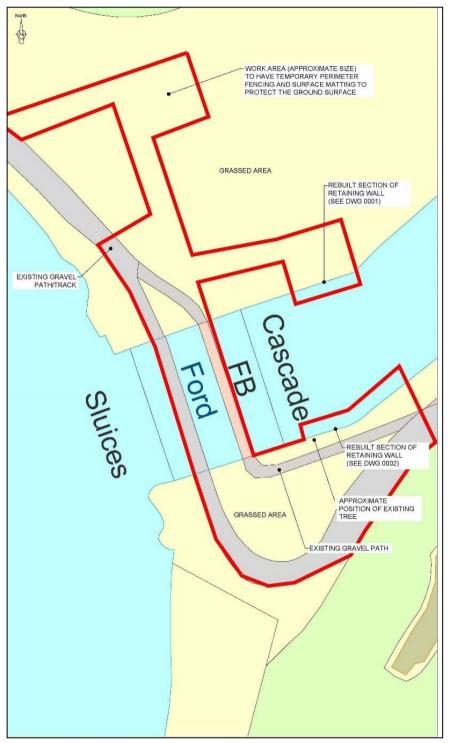


Figure 2. Detailed site location (nb no intrusive works took place on the south bank).

3.0 Historical Background

The section below is predominantly drawn from the Heritage Impact Assessment and Design and Access Statement, prepared by JBA Consulting and National Trust Archaeological Consultant Mark Newman (JBA Consulting, August 2023).

Studley Royal Park including the remains of Fountains Abbey World Heritage Site (1000094) was inscribed in 1986 under the criteria of 'a masterpiece of human creative genius', one of the ten WHS selection criteria. The WHS includes a water garden incorporating the ruins of Fountains Abbey, one of the largest Cistercian abbey ruins in the country. The WHS covers 822 acres and also lies within the Nidderdale Area of Outstanding Natural Beauty.

The water garden and pleasure grounds were originally laid out by John Aislabie in 1718-1742 and are considered to be an outstanding example of the 'English' Garden Style. In 1768 John's son, William Aislabie, extended the gardens to encompass Fountains Abbey whilst maintaining the earlier designs at its core.

Fountains Abbey was founded in 1132 and is one of the few 12th century Cistercian houses to survive. The abbey survives as well preserved standing ruins, which are designated as a Scheduled Monument and Grade I listed (1149811). The WHS also encompasses Fountains Hall, St Marys Church, Fountains Mill and the deer park. The WHS also holds potential to contain a vast archaeological resource, evidenced by prehistoric remains, Romano-British occupation and medieval settlement remains.

The essential nature and significance of a World Heritage Site is described within the Statement of Outstanding Universal Value (SOUV), The SOUV for Studley Royal reads:

"Situated in North Yorkshire, the 18th century designed landscape of Studley Royal water garden and pleasure grounds, including the ruins of Fountains Abbey, is one harmonious whole of buildings, gardens and landscapes. This landscape of exceptional merit and beauty represents over 800 years of human ambition, design and achievement.

Studley Royal Park is one of the few great 18th century gardens to survive substantially in its original form and is one of the most spectacular water gardens in England. The landscape garden is an outstanding example of the development of the 'English' garden style throughout the 18th century, which influenced the rest of Europe. With the integration of the River Skell into the water gardens and the use of 'borrowed' vistas from the surrounding countryside, the design and layout of the gardens is determined by the form of the natural landscape, rather than being imposed upon it. The garden contains canals, ponds, cascades, lawns and hedges, with elegant garden buildings, gateways and statues. The Aislabies' vision survives substantially in its original form, most famously in the spectacular view of the ruins of Fountains Abbey itself.

Fountains Abbey ruins is not only a key eye catcher in the garden scheme, but is of outstanding importance in its own right, being one of the few Cistercian houses to survive

from the 12^{th} century and providing an unrivalled picture of a great religious house in all its parts.

The remainder of the estate is no less significant. At the west end of the estate is the transitional Elizabethan/Jacobean Fountains Hall, partially built from reclaimed abbey stone. With its distinctive Elizabethan façade enhanced by a formal garden with shaped hedges, it is an outstanding example of its period.

Located in the extensive deer park is St Mary's Church, a masterpiece of High Victorian Gothic architecture, designed by William Burges in 1871 and considered to be one of his finest works."

Attributes of OUV are direct tangible (or sometimes intangible) expressions of the OUV of the designated asset. Heritage impact assessment for WHS primarily considers impacts on these attributes, and the overarching qualities of integrity and authenticity. The stakeholder parties for the Studley Royal Park including the ruins of Fountains Abbey WHS agreed and adopted a list of five key attributes in September 2021:

- A: A landscape garden of exceptional beauty and harmony;
- B: The ruins of Fountains Abbey;
- C: Accretion of designed landscape which enhances the natural landscape;
- D: Immaculately designed views and vistas using the landscape both within and

beyond the boundaries of the garden; and

• E: Range of buildings illustrating patronage, status and influence.

Studley Royal lake sits atop the River Skell, which has been heavily altered by the landscaping works that took place during the early 18th century. To the south of the lake the Skell was canalised in 1718 with construction works continuing until 1727-28.

Where the canal meets the lake an ornamental cascade featuring piers, fishing pavilions and a wall to the west was constructed beginning in 1718 and remade, following flooding damage, in 1726-1728. Paintings dated to the 1750s by Balthasar Nebot depict the lake, canal, cascade, as well as a carriage drive running around the edge of the lake. In addition, two islands are shown situated in a symmetrical fashion either side of the lake and a fountain is depicted close to the centre of the lake. The weir and cascade outfall can just be glimpsed on the north-east side of the lake. A further painting by Nebot illustrates the lake outflow, with the cascade and footbridge clearly visible, together with riverside walks set amongst mature trees (Figure 3). This painting does not show the inner face of the north bank, but the south bank appears to include a wall, extending downstream from the weir cascade, towards a second cascade. The NT also hold a poor quality, unattributed, black and white image of a related painting showing the lake outflow in more detail, at a similar date. This shows the main weir and crossing (including a footbridge) in much its present form, below which the

river flows between (seemingly) informally built river walls, similar in character to those which are the subject of the present application.

According to the Historic England listing description, the grade II listed weir (1173726) was built circa 1720 by John Simpson as part of the wider works being undertaken by John Aislabie. National Trust research demonstrates that this is not the case. In Simpson's lifetime, the lake was referred to as being of four and later eight acres in extent. The present 12 acre extent is only referenced in 1741 (Simpson died in 1729).

In its present, engineered, form the surface "skin" of the weir and the outflow walls beside it, with their coped tops, are most likely to date to 1890/1 when a hydroelectric turbine was installed to provide power for domestic appliances at Studley Royal House. Water was drawn off the lake just north of the weir to run by buried conduit to a turbine house on the next bend in the river to the east. The weir, which reflects its 18th century form, stands at a height of around 3m and is approximately 20m across.

The weir is crossed by a ford which is approximately 3m wide and connects the path running around the lake with that which extends along the Seven Bridges Valley. Repairs in 2018, which were subject to archaeological recording, indicated a complex structural history implying that the present surface embraces earlier structural remains beneath. The listing includes the ford of stone setts and flanking walls comprising large stone blocks. Two sphinxes and pedestals (1173645, 1150604) located on the north and south side of the cascade are separately grade II listed, but are considered to be part of the overall outfall structure in this assessment. They were probably moved to this location in the early 20th century.

Downstream of the outfall the course of the river has been influenced by modern flood defence walls constructed of medium sized limestone blocks with concrete repairs (MNA143671, MNA144020) as well as a ford and weir (MNA144091) built to serve the hydro-electric scheme (MNA144381). A culvert used to feed the Old Turbine House is also known to run, below ground, parallel to the north bank of The Skell. This culvert is set back from the river.

The outfall sits at the start of the Seven Bridges Valley, which follows The Skell eastwards downstream. The Seven Bridges Valley was designed as a distinctive character area of the pleasure gardens. John Aislabie's unachieved plans for a new mansion overlooking the lake would have embraced views over this stunningly wild landscape, at an extraordinarily early date for such an approach. Unlike the water gardens area, this section of the valley could never have been "tamed by art". In the event not only was the replacement house never built, but John only really turned his attentions to gardening this part of the property in his last years. The work would be mainly progressed by his son, William, after inheritance in 1742. Early design themes were inspired by supposed Roman antiquity, though this would soon give way to chinoiserie. The valley boasted at least one Chinese wooden bridge (and very likely had more); these were removed by the later 18th century and were replaced by the present rustic stone bridges probably in the second quarter of the 19th century (contrary to the listing description).

The outfall sits at a junction which represents a change from the more formal designed gardens to the west to the more naturalistic open landscapes to the east, which also form part of the deer park mainly located to the north. The weir and cascade outfall are not visible from the ornamental cascade flowing into the lake or the south side of the lake due to the topography of the lake and the surrounding landscape. The damaged walls are located lower than the water level of the lake and therefore not in view from most of the lakeside walk and water gardens. The walls are only visible from close to the weir, on the footbridge crossing, and the northern section of walks along the Seven Bridges Valley.

The basin in which the lake is set was a central node of the Aislabie designed landscape around which much else was set. For a period of time it was intended that a new mansion would command the whole scene from atop the slopes to the north. At an early stage the periphery of the lake was rather formally presently, relict architectonic earthworks from which survive to the west. This style appears to have been abandoned by the time the lake reached its present form and no such dressing exists to the east. There was, though, a significant circulation around the whole lake; this continued around the lake's south-east flank into the main water gardens, though this has not been open to visitors since before the mid nineteenth century.

The site appears on extant manuscript plans from 1831, and Ordnance Survey map coverage from 1854. Known cartographic sources add nothing extra to understand the site or the walls, beyond confirmation that they are found in their historic location.

Current condition - The flanking walls of the weir terminate with sections of drystone wall that differ in form and material from the dressed ashlar that make up the rest of the flanking walls. The mortared sections of wall likely date to around 1891 when a hydropower plant was installed at the outflow. These drystone sections of walls are likely residual sections of the original outfall and were retained when the upgrading work was implemented, meaning they likely pre-date the 19th century weir and cascade outlet. The extant sections of dry-stone wall are a single face and have been constructed against the river banking. The lower section of the walls are formed of larger but evenly sized rounded stones. The upper courses are formed of stones that are generally slightly flatter and wider in nature. Some smaller stones have also been used as 'packing' behind and between the larger stones to help stabilise the wall. This style of dry-stone wall is common across Yorkshire and in this location is considered to represent a reliable and stable form intended to retain the riverbank. Given their disharmony and poor bond with the weir work, their retention is considered to be functional rather than aesthetic. The sections of wall under consideration are currently in poor condition and both are in the process of collapsing into the river. On both sides of the river the facing stones and fill material have started to fall into the river.



Figure 3. Painting by Nebot, mid 18th century.

4.0 Methodology

The archaeological investigation was undertaken in accordance with methodologies detailed in a Written Scheme of Investigation (OSA, July 2024), which had been prepared in consultation with the National Trust Archaeological Consultant and had been approved by the North Yorkshire Council Principal Archaeologist.

The investigation initially comprised a Level 1 Building Recording survey of the existing outlet walls prior to any repair works taking place. A total of 145 images were captured during the survey. The Level 1 record was to include 1) general photographs of the building / structure within the overall setting of the landscape and, 2) the building / structure external appearance, including oblique and right angle views of the elevation (OSA, July 2024, section 5.1).

The locations of the photographs were marked on a site plan and indicating from where the viewpoints or details were taken. The photographs include 2m or 1m scales. Images were captured using a digital SLR camera Canon EOS 2000D fitted with an 18-55mm lens with a resolution of 24.1 mega pixels. A list of images taken is presented in Appendix 1.

The second stage of the investigation comprised archaeological monitoring and recording during the initial stages of the repair programme. Although the written scheme of investigation had included for potential works to both the north and south outlet walls the development programme has been modified so no works have been undertaken to the south wall.

The first stage of the repair programme comprised hand removal of vegetation from the north wall. Additional photographs were taken at this point to enhance the pre-commencement survey. This was followed by a shallow topsoil strip extending back from the north wall, covering an area approximately $10m \times 10m$ to create a level safe working area. The section of the existing north wall that required replacement was then dismantled, predominantly by hand, with assistance of a machine as appropriate. The masonry was retained for reuse and was inspected by the attending archaeologist. Following removal of the existing drystone wall the north bank was then excavated to provide sufficient space for the insertion of gabion baskets. The excavation was carried out under archaeological supervision and the attending archaeologist was then afforded the opportunity to hand clean and record the sections of the excavated area. Following completion of the archaeological recording the excavation area was handed over to the main contractor to commence construction activities.

5.0 Results – Archaeological Building Recording

General views. (Figure 4; Plates 1-2).

Plate 1 provides a general view of the site looking southwest (upstream) along the River Skell, towards the site, showing the cascade and footbridge, within the wider landscape. The outlet walls are not visible on this image. Plate 2 provides a closer view of the setting with the outlet walls visible, again looking southwest.

North Wall. (Figure 4, Plates 3 - 8).

The North wall of the outlet comprises two elements. Immediately downstream from the weir cascade this consists of well-dressed regular coursed ashlar blocks, and gently slopes down from west to east under horizontal copping stones (Plate 3). This section is believed to date from the 1890s refurbishment of the outlet and was not to be impacted upon by the proposed repair works. The second element comprises the drystone section immediately to the east (downstream) of the higher ashlar build, which is to be subject of the current repair work (Plate 4). At the time of the initial pre-commencement recording the main elevation of this drystone section was partially obscured by vegetation (Plates 5 and 6). The drystone element consisted of a combination of water worn cobbles / small boulders, together with roughly squared quarried limestone blocks and thick flags. No tool marks were observed on any of the masonry. Whilst no bonding material was evident between the majority of the individual stones the lower courses (approximately 0.50m height above the river water level) included hard grey cement render, presumably as a recent attempt to protect the wall from river erosion (Plate 7).

The first stage of the repair works involved careful removal of some of the vegetation by hand, providing an opportunity to further inspect and record the wall prior to any physical intervention (Plate 8). Whilst this revealed slightly more of the wall, it did not add any significant information regarding its construction.

South Wall. (Figure 4, Plates 9 - 16).

Although the project had originally included for repairs to the south wall the works programme was amended so no physical intervention to the south wall is planned for the immediate future. The Level 1 pre-commencement recording was, however, undertaken. As with the north side, this section of the riverbank wall comprises two distinct elements, the well dressed ashlar section closest to the weir cascade, presumed to date to the later 19th century, and the drystone section immediately to the east (downstream) of this (Plate 9). As there had never been any intention to carry out any repairs to the ashlar element, the recording was concentrated on the drystone section (Plates 10 to 12). Some elements of the south wall were again partially obscured by vegetation. Whilst this prevented detailed recording of the entire wall elevation it did not prevent an assessment of the overall construction method from being made. As with the north wall the drystone section of the south wall was constructed with a combination of water rounded cobbles / boulders, and sub-rectangular blocks and flags of limestone. No bonding material was evident. The westernmost section of the drystone

wall was the best preserved, and highest, continuing the gradual slope downstream, from the adjacent ashlar portion (Plate 13). Further to the east the south wall was less well preserved and lower, with individual blocks having been displaced (Plate 14). In places the lower part of the wall had lost substantial portions of the facing sones (Plate 15). The most significant area of damage was located immediately below a substantial (sycamore) tree, where roots had caused the complete loss of a section of the wall, in excess of 1m across (Plate 16).

6.0 Results – Archaeological Investigation: Watching Brief

The watching brief initially consisted of monitoring the machine stripping of a works area, approximately 10m x 10m square, immediately to the north of the north bank wall (Plate 17). This involved the partial removal of the modern turf and mid brown clay sand silt topsoil (100). The topsoil was 0.15m thick. Within parts of the stripped area the underlying firm yellow brown sandy clay, with cobbles (101) was observed, which is believed to be a natural glacial deposit. Within the part of the stripped area closest to the river the full depth of the topsoil was not stripped as the ground here was raised to form a level, safe working area.

The level working area was then utilised to provide machine access to assist with the careful dismantling of the wall (Plate 18). The reclaimed stone was carefully placed to allow the attending archaeologist to inspect it for any reused masonry or tool marks (Plate 19). None of the stonework included any toolmarks and none of the fragments included any features that suggested reuse from elsewhere on the estate. This was notable in its contrast with elements of the canal walls located closer to the Abbey ruins where numerous fragments of medieval masonry were present (see for example JB Archaeology Ltd, 2016 and Newman, 2017).

Following the removal of the drystone wall, the bank behind was mechanically excavated to provide sufficient space for the insertion of the new gabion baskets and to rebuild the external face of the wall. At its base this excavation extended to a maximum of 2m back from the original wall face, with the northern limit of excavation being sloped for safety reasons so at the top of the bank the excavation was around 3m back from the original face of the wall (Plate 20). The exposed vertical sections were rapidly cleaned and recorded to enable an understanding of the archaeological sequence impacted upon by the excavation (Plates 21 and 22 and Figure 5).

Throughout the excavated area the earliest recorded deposit comprised a soft mid grey sandy clay silt (108) containing frequent pebbles. This deposit was a maximum of 0.40m thick within the excavated area but clearly extended to the east, north and west, and below the basal limit of excavation. This was sealed by a loose, pale yellow brown coarse sand and gravel (107). These two deposits both appear to represent natural river deposits, pre-dating the construction of the formal walled channel. Although no dating evidence was collected or observed they are therefore likely to pre-date the early 18th century when works to this area of the estate were commenced for John Aislabie.

The coarse sand and gravel deposit (107) was sealed in both the east and west sections of the excavation area by a thick mid yellow brown silty clay with pebbles and cobbles (105). The interface between deposits (107) and (105) sloped significantly down from north to south

(from bank towards the river). Within the western edge of excavation this was likely to represent a construction cut [106] for the ashlar outlet wall (109), which extended to the west. Deposit (105) butted up against the rear (north) side of the wall confirming that it comprised construction backfill. Further to the east the interface was less well defined as a cut, but may have continued as a construction cut for the drystone element of the wall (102), which had been removed for repair. Two 19th century glazed drains (103) were observed within deposit (105). Fragments of one of these included a makers stamp "William Ingham & Sons. Wortley Nr Leeds" (Plate 23). This company had been founded in 1825 by William Ingham, trading from 1834 as "and Sons", and produced multiple fireclay items until 1889 when they formed part of the Leeds Fireclay Co.

The top of backfill deposit (105) extended up, almost to the modern ground surface. Within the western end of the trench it was overlain by a thin deposit of loose cream coloured lime mortar (104). Patches of similar mortar were observed on the eastern end of the ashlar wall (109), which appear to represent attempts to bond this wall with the earlier drystone element (102) to the east. No similar mortar was observed within the main body drystone wall (102) during its dismantling. The thin mortar deposit (104) is likely to be a construction deposit associated with the late 19th century building of the ashlar wall (109).

The final deposit recorded in the excavation sections was the modern turf and mid brown clay sand silt topsoil (100).

7.0 Discussion and Conclusion

The initial pre-intervention recording of the north outflow and subsequent watching brief suggested that the drystone element of wall had pre-dated the ashlar section, which is understood to date from the later 19th century. Although no artefactual dating evidence was present the drystone element is likely to have originated in the early to mid 18th century, potentially forming part of the works carried out under William Aislabie from the 1740s. There was no evidence that any of the stonework used within the north outflow wall had been reused from the medieval Abbey ruins, contrasting with the known situation within the 18th century canal walls alongside East Green further upstream. Presumably this is due to the distance from the ruins and the availability of other suitable material to the site.

The earliest deposits recoded during the watching brief appear to represent natural river deposits, formed before significant works took place to include this area of the estate into the designed landscape.

8.0 Resources consulted

Historic England, 2016. Understanding Historic Buildings: A Guide to Good Recording Practice.

JB Archaeology Ltd, 2016. East Green Canal, Fountains Abbey, Ripon, North Yorkshire. Archaeological Watching Brief.

- JBA Consulting, August 2023. Studley Royal Lake Weir Outlet and Cascade Outlet. Heritage Impact Assessment and Design and Access Statement. (JBA Project Code 2022s1527).
- Newman, M. 2017. Watching Brief Report: Repairs to East Green Canal, Fountains Abbey. Archive Report MNNTYR156.
- On-Site Archaeology, July 2024. Studley Royal Lake Outlet Weir and Cascade, Fountains Abbey & Studley Royal, North Yorkshire. Written Scheme of Investigation for a Programme of Archaeological Mitigation (Level 1 Building Recording and Watching Brief).

9.0 Appendix 1 ~ Archive Index

Photographic register

Frame No.	Description	Initials	Date		
Building Reco	Building Recording Digital download 01/08/24				
45-68	S wall from N bank	GB	01-08-24		
69-71	S wall from footbridge GB		01-08-24		
72-104	S wall, detail from riverside GB		01-08-24		
105-110	S wall construction detail	GB	01-08-24		
111-153	N wall from S bank	GB	01-08-24		
154-168	N wall detail from river	GB	01-08-24		
169-189	General views looking upstream towards lake	GB	01-08-24		
Watching Brie	f Digital download 05/08/24				
1-6	Pre-commencement	GB	05-08-24		
7-31	Initial topsoil strip and vegetation clearance	GB	05-08-24		
32-74	N wall views	GB	05-08-24		
75-135	Removal of N wall and reclamation of stone	GB	05-08-24		
136-141	Examples of reclaimed stone	GB	05-08-24		
142-178	Excavation of N bank, working shots	GB	05-08-24		
179-198	Tr 1, E fac section	GB	05-08-24		
199-209	Tr 1, W fac section	W fac section GB 05-08-24			
210-215	Tr 1 S fac section, including drain pipes	GB	05-08-24		
216-219	Detail of makers stamp on drain	GB	05-08-24		
220-221	Tr 1, S fac section	GB	05-08-24		
222-244	General location views	GB	05-08-24		

Watching Brief Contexts

Context No.	Description	Thickness	Extent
100	modern turf and mid brown clay sand silt topsoil	0.15m	Tr 1
101	firm yellow brown sandy clay, with cobbles (natural?)	-	-
102	drystone wall	Max 2.2m high	c. 0.50m wide
103	Two 19 th century glazed drains	-	-
104	loose cream coloured lime mortar	Max 0.15m	Max 2.50m
105	mid yellow brown silty clay with pebbles and cobbles	2.20m	Tr
106	wall construction cut	1.20m +	Tr
107	loose, pale yellow brown coarse sand and gravel	0.60m	Tr
108	soft mid grey sandy clay silt	0.40m	
			Tr
109	ashlar wall	2.5m high	0.50m wide

Drawing Register

Drawing No.	Description	Scale	Date	Initials
1	Tr 1, E fac section	1:20	05-08-24	GB
2	Tr 1, W fac section	1:20	05-08-24	GB

10.0 Appendix 2 ~ Plates.



Plate 1. Long distance view of site looking southwest.



Plate 2. Middle distance view of site looking southwest.

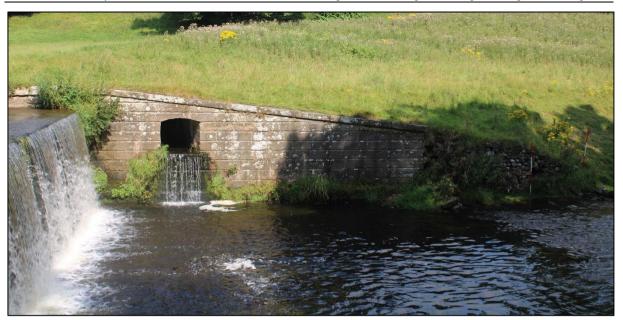


Plate 3. North wall including ashlar section.



Plate 4. North wall, drystone section relative to ashlar, before vegetation removal.



Plate 5. North wall, drystone section.



Plate 6. North wall, drystone section, oblique view.



Plate 7. North wall, detail of cement render.



Plate 8. North wall, oblique view after some vegetation clearance.



Plate 9. South wall, general oblique view, looking southwest.



Plate 10. South wall, drystone section, looking southeast.



Plate 11. South wall, drystone section, looking east.



 ${\it Plate~12.~South~wall,~drystone~section,~looking~southwest.}$



Plate 13. South wall, west section.



Plate 14. South wall, east section, looking southwest.

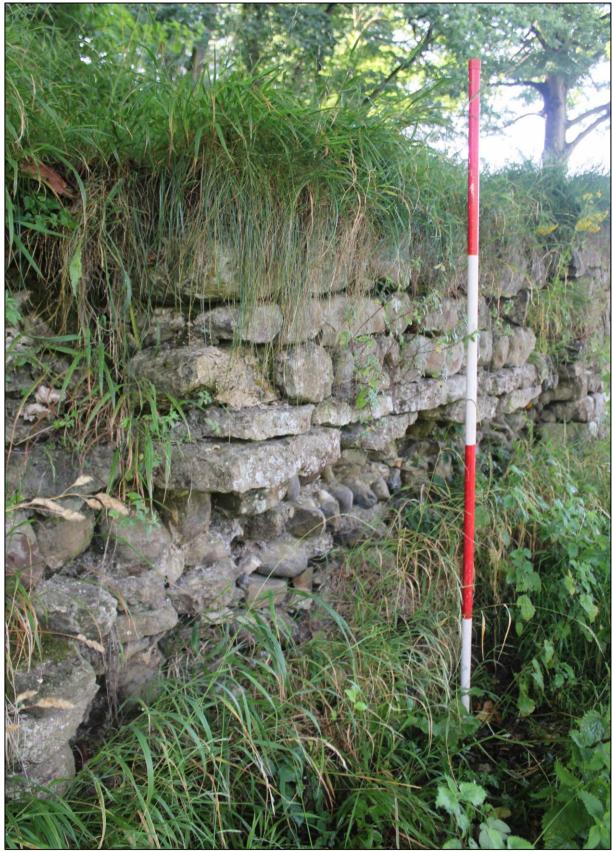


Plate 15. South wall, detail of damage / erosion.



Plate 16. .South wall, detail of tree root damage.



Plate 17. Topsoil strip.



Plate 18. Removal of North wall.



Plate 19. Reclaimed stone.



Plate 20. General view of excavation area.



Plate 21. East facing section.



Plate 22. West facing section.



Plate 23. Stamped drainpipe.

OSA24WB20 – Studley Lake Outflow Walls

Report on Archaeological Building Recording and Watching Brief

12.0 Appendix 4 ~ Figures.



Figure 4. Locations of building recording plates

On-Site Archaeology. August 2024

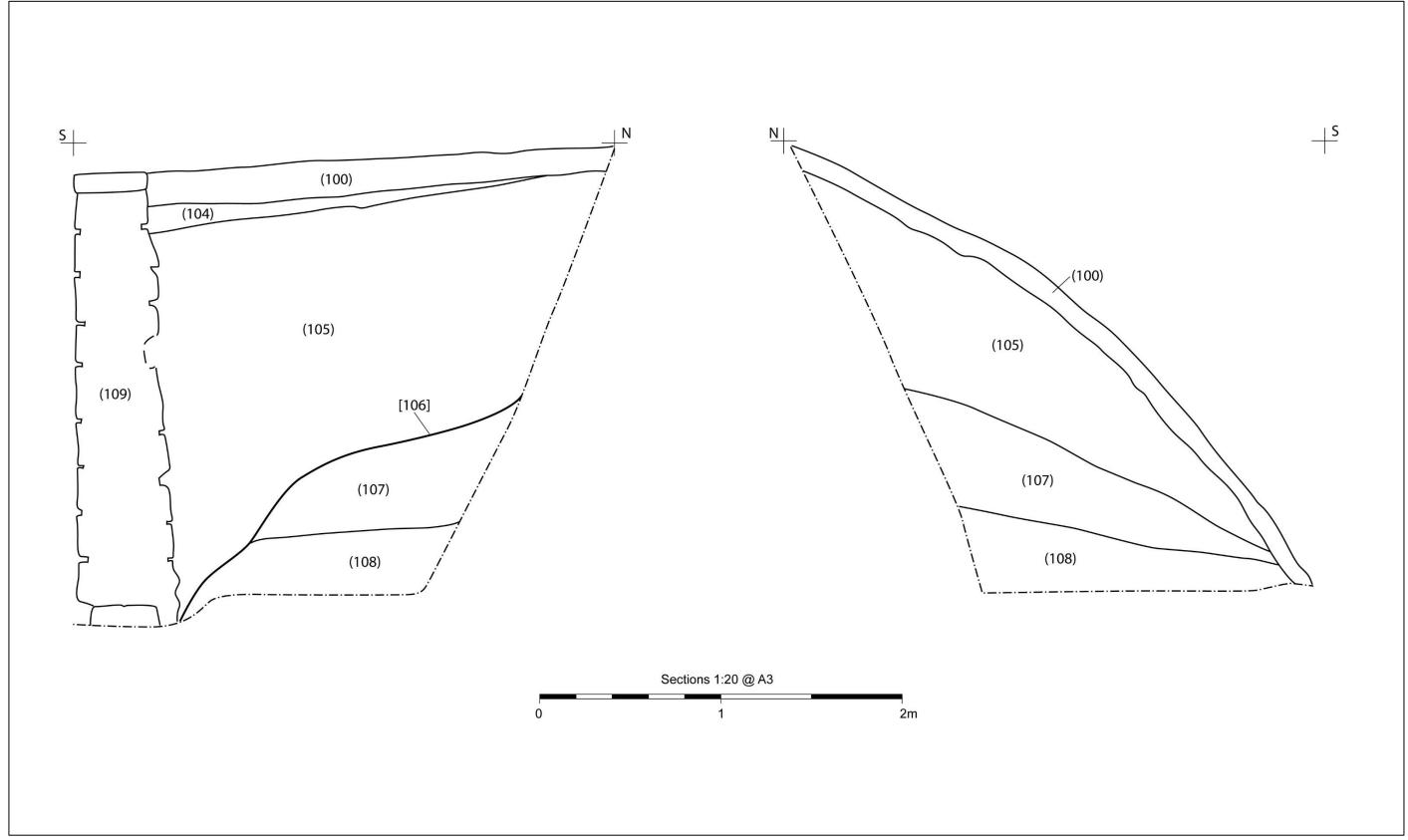


Figure 5. East (left) and West (right) facing sections.

On-Site Archaeology. August 2024